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Abstract

The Study examines the impact of perceived trust and its antecedents on the intentions of individuals to use fintech services in Pakistan. By identifying the primary factors that influence these intentions, the research offers fintech service providers and policymakers valuable insights into the adoption and utilization of fintech in the Region. This information is indispensable for the successful marketing of these services. The research centers on four primary constructs: perceived risk, perceived usefulness, perceived convenience of use, and perceived trust. The Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT) are employed as theoretical frameworks. Perceived risk refers to the potential negative consequences of fintech usage, perceived usefulness evaluates the enhancement of financial activities through fintech, perceived ease of use measures the simplicity of utilizing fintech services, and perceived trust evaluates the reliability and competence of the fintech provider. A convenience sampling method was employed to recruit 400 participants aged 18 and older who have either used or are willing to use fintech services from the major cities in Pakistan. According to data analysis conducted with PLS software, the intention to utilize fintech services is significantly influenced by perceived usefulness, perceived simplicity of use, and perceived trust. Hence, there is no significant impact on perceived risk. Cronbach's alpha if less than .6 or greater than .8 is not considered good; while the acceptable limit for CR and AVE lies between .7 and .9. This paper aims to explain the overall understanding of Pakistan's fintech adoption and hereby stresses the significance of the perceived trust and perceived usefulness in the context of the given phenomenon.

Keywords: Perceived Risk, Perceived Trust, Fintech adoption, Perceived usefulness

1. Introduction

In the recent past, people have begun paying a lot of attention to the use of technology in finance also known as fintech. Hence, the fintech services including; internet banking, mobile money, digital credit, and so on offer individuals an affordable, efficient, and reachable means of accessing financial services. The current fintech market in Pakistan is not very advanced, however, it is progressing at a fast pace due to the growing demand for financial solutions & services, growth in internet users, and smartphone possession (Prodanova et al., 2019). Challenges are, however, inevitable as it pertains to the use of fintech services in the process of solving probable enhanced benefits for consumers. Consumers may avoid using these services due to perceived risks which may include risks associated with the sharing of his/her financial information. In addition, it confirms how the perceived usefulness and ease of use of fintech services might differ from one person to another and hence influence the intention to engage in the use of these services (Bommer et al., 2023).

Based on the analysis of the given study, it can be concluded that perceived trust overpowers individuals' intentions to utilize the services of fintech. Perceived trust, on the other hand, refers to the extent of the confidence that an individual has in the competency, honesty, and efficiency of the fintech service provider. While there have been studies emphasizing perceived trust, not much is known about the perceived risk, perceived usefulness, and perceived ease of use that are the antecedents of perceived trust and its influence on the intentions to use the Fintech services in the context of Pakistan (Singh & Sharma, 2022). While day-by-day literature on the adoption and use of fintech solutions is growing, there is a scarcity of literature mainly focusing on the effect of Perceived Trust and its determinates on the behavior of individuals toward using fintech services in Pakistan. Few studies have examined how users' perceptions of trustworthiness, utility, and ease of use influence their risk perceptions and behavioral intentions for fintech services in Pakistan (Kamarulzaman et al., 2022). The fact that these characteristics are modulated might provide an answer. Furthermore, it is vital to note that the majority of the previous literature on the adoption and usage of fintech has focused primarily on the developed West including the United States and the United Kingdom. Some of these studies may not hold relevance for developing countries like Pakistan because the culture, society, and economy of each country may affect the use of fintech (Patel & Siddiqui, 2023).

Toward this end, the purpose of this research is to examine the impact of perceived trust and its determinants on customers' behavioral intention to use fintech services in Pakistan. This will be done by conducting survey research in which subjects will be selected from a population that is made up of current or potential users of fintech solutions in Pakistan. Given its focus on the context of underdeveloped countries, it is possible to make clear the motives of fintech usage in emerging markets. It can also help add to the development of a better understanding of how financial services providers and the government can encourage and increase the use of fintech services within these settings.

2. Underpinning Theories

The research model, which has been integrated has been developed exclusively for the situation of adoption/usage of fintech in Pakistan and it is based on theoretical constructs. This study would help to add to the design of suitable approaches needed in enhancing the usage of fintech in Pakistan since the existing theories shall be applied in the evaluation of those that determine the adoption and usage of fintech in the country (Naeem et al., 2022).

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2.1. Theory of Reasoned Action (TRA)

The TRA is prevalent for the prediction of human behavior. According to the TRA, behavioral intentions determine human behavior about a certain behavior chance influences a person's conduct and behavioral dispositions. Hence, if an individual has an auxiliary strong sympathy to perform a special task he/she will have clear confidence in definite results. On the other hand, when the individual is very sure that this behavior will lead to a nasty result, then he or she will have a hostile attitude towards the behavior (Rahi et al., 2022). Subjective norms and attitude are the two predictors that determine an individual's behavioral intention, according to TRA. Attitude refers to the positive or negative inclination that is demonstrated when engaging in a specific behavior. The intent of Fintech usage is restricted by the attitude of Fintech users toward its utilization, which is achieved by applying the TRA to the Fintech ecosystem. It is widely acknowledged that consumers will be enticed to select services and contemplate accessible options (Lee & Chen, 2022). It is crucial to understand the perceived risk factors when developing and promoting the use of fintech, as consumers may be hesitant to do so due to risk considerations (Hussain et al., 2023; Ustaoglu, M., & Yildiz, 2023).

2.2. Theory of Planned Behavior

The TPB fundamental is effective in predicting and elucidating human behavior across various ITs. TPB suggests that an individual's actual behavior in the execution of specific activities is directly influenced by their behavioral intention. Consequently, the conduct is determined by their subjective norms, attitudes, and perceived behavioral controls. Behavioral intention is a measure of the extent to which an individual is prepared to exert themselves while engaging in particular activities. (Esmailpour et al., 2023)

2.3. Perceived Risk Theory

When individuals are worried about their safety, they tend to doubt their abilities and the choices they make. Several experts agree that the complex and multi-faceted topic of customers' perceived risk is worth exploring. For whatever reason, different types of products may have different degrees of perceived risk to different types of consumers. Researchers found six aspects of perceived risk: financial, social, performance, psychological, and safety-related. Early wireless Internet users were primarily concerned with issues of cost, privacy, society, and time. This study did not consider the physical dangers associated with Internet banking since there is no imminent danger to people's lives. The assumption of loss driven by emotions is known as perceived risk and it manifests itself in the appraisal of fintech applications and transactions, including online banking (Suhartanto et al., 2022; Omri, 2023).

3. Literature Review

Financial technology (Fintech) is a rapidly expanding industry that provides innovative financial services and solutions through digital platforms. The traditional banking industry has the potential to be transformed by fintech, which has revolutionized the way people manage their finances. The adoption and utilization of fintech services are contingent upon a variety of factors, such as perceived risk, perceived trust, perceived usefulness, perceived simplicity of use, and intention to use. This literature review will investigate the correlations between these factors and the adoption of fintech (Olorogun, & Othman, 2021; Zhang et al., 2022). This section investigates the literature regarding the factors that influence consumers' intention to adopt fintech, including perceived risk, perceived cost and its antecedents, perceived trust and its antecedents, and situational factors. Furthermore, analyzes other factors that affect Pakistan's sustained incorporation of fintech and applies the "structural educational model." The term fintech is not simply a blend of finance and technology but it is also defined as an application of technology that substitutes the conventional service (Buckley et al., 2015).

3.1. Perceived Usefulness

Perceived usefulness is the value that organizations go through before implementing any technology. This relates to the consumers' desire or plan to employ the new technology to boost consumer service (Munim et al., 2020). Four of the sixteen are HCEs that have provided an evaluation of perceived utility before using fintech and agreed to do so where it has a positive impact (Ryu et al., 2018). Carlin et al., (2017) study shows that the decision to use fintech is highly determined by the level of financial literacy and the expected lifespan. Past scholars have established that perceived effectiveness determines the intentions of using financial tech (J. M. Lee & Kim, 2020). The perceived or experienced gains or profitability in engaging a particular product or service are called perceived efficacy. Several prior works have looked at the relationship between the use of fintech services and their perceived usefulness. The study carried out by Alalwan, Dwivedi, and Rana (2017) also supports the fact that perceived utility favors the use of fintech. The findings showed that the perceived usefulness of fintech applications positively influenced the intention to use the services. Similarly, Guo and Bouwman (2017) noted that the Dutch consumers' propensity to adopt fintech is directly related to the perceived usefulness. Such findings imply that for fintech to be adopted, there is a need to improve on perceived usefulness of fintech. In other words, perceived utility is a key determinant of the behavior intention of its clients to acquire fintech services. Some of the remarkable services that have been introduced in the financial market through fintech are online banking, mobile commerce, and investment schemes among others. However, there are some barriers to the use of such services that are related to doubts regarding the efficiency and relevance of fintech services despite their positive impacts. The subsequent literature review presents an extensive review of the literature on the relationship between perceived usefulness, and the intention to use fintech, the factors that affect perceived usefulness, and ways in which perceived usefulness can be enhanced (Jegerson et al., 2023). Perceived efficacy thus refers to a notion that an individual believes that using a certain technology will lead to improvement in his/her performance or change in his/her life. Another component for predicting the intended use of the fintech services is perceived efficacy is deemed to be the most influential factor. Literature also showed that perceived efficacy is a robust antecedent of the intention of people to use fintech services. For example, Lee et al. (2017) established that the perceived usefulness of mobile payment services affected the attitude of people towards embracing those services significantly. In a similar context, Liao et al. (2019) established that the perceived usefulness of the proposed peer-to-peer lending services was a strong determinant of individuals' usage intentions.

3.2. Perceived Risk

The idea of perceived risk is described using several literary terms. Perceived risk in the data framework context inhibits the implementation of information systems and technologies, according to the literature discussed above. Thus, the findings indicate

that the perceived risk corresponds to the technological innovation in the sphere of services or products. As a result, Graham and Ungerer (2016) and Zehra and Singh (2023) define perceived risk as “negative outcomes of Fintech, and customers’ feeling of frailty and susceptibilities”. Fintech does not demand a concentration on the business of monetary services. It includes the creation of new strategies, funding, and the coming up of models of operations (crowdfunding and others like the peer-to-peer lending models). It also conducts business transactions, gives help, and transports products in another financial sector that is not typical in regular commerce (To & Yu, 2023). Personally, Fintech is defined as a technical service that is both innovative and complex, which, according to Cham et al., 2022 is currently delivered by non-financial organizations. To expand the range of financial services and improve service and administration efficiency, FinTech also uses IT, such as cloud computing, data analytics, and mobile technologies (Ali et al., 2021). Financial technology (fintech) is a new way of thinking about money that helps businesses stay competitive and gives customers a better experience. Financial technology, or fintech, refers to the use of technology by non-banking businesses to improve financial processes and services. Fintech makes it easier for customers to take part in a range of climate-related mobile services. With fintech’s many advantages, customers may create an environment of openness and progress, reduce costs, increase the transparency of financial data, and eliminate intermediaries. (Cheng, 2023)

Fintech has been all the rage recently, but whether or not customers would use it is anyone’s guess. Perakon et al. (2022) and Usman et al. (2022) both agree that a more pessimistic person will have a negative effect on this behavior. Fintech inherently comes with large risks that buyers may be reluctant to use. Unforeseen dangers connected with fintech use might hurt customers, making them less likely to use it. This is what prompted the researchers to focus on how consumers feel about the risks of using Fintech (Soomro et al., 2022). A vendor or fintech service provider is dependable if they can deliver results to their customers or users that match their claims or assurances (Florido-Benítez, 2022). Dependability serves as the cornerstone of trust. Websites and applications are utilized by consumers to perform a variety of tasks related to payment transactions, including the evaluation of product quality and the provision of post-sale services, in the context of online access to websites on applications, transaction limits, time limits, amount purchasing, or service utilization.

Alkhwaldi et al. (2022) have observed that online consumers are frustrated by policies, restrictions, and any other rules, such as limitations limits, location limits, and limited methods of online payments (Al-Okaily et al., 2022). Additionally, limitations on insurance, right, device or technology, border, access, a limited quota for online customers, compulsion to share personal information, and many other limitations, such as financial jargon and no relation with personal fintech service providers, have been observed (Alkhwaldi et al., 2022). Additionally, the absence of a cash-on-delivery (COD) option has resulted in financial losses for certain customers. The possibility of loss or harm that can be comprehended from using a particular product or service is referred to as perceived risk. Several research works have been done on the relationship between fintech and perceived risk. The study done by Lu, Zhou, and Li (2020) shows that perceived risk has a negative impact on the adoption of fifth technologies. The study also showed that while the perceived risk decreased the intention to use fintech services also had a inversely proportional relationship with the perceived risk. Similarly, Wang and Lu (2020) also confirmed that perceived risk was negatively associated with the extent of consumers’ use of fintech in China. From these findings, it can be concluded that perceived risks should be addressed to increase the usage of fintech. Marketing, psychology, and sociologists including consumer behavior experts have shown interest in the idea of perceived risk. Perceived risk can be defined as an individual’s estimation of the possible negative outcomes related to executing a particular decision or displaying a certain behavior. The negative consequences may include psychological problems, sanctions by others, physical punishment, or Material damage. The subsequent literature review provides an extensive analysis of the different aspects of perceived risk such as the format and components of perceived risk, the predictors of perceived risk, and the ways that people use to minimize perceived risk(Aji et al., 2021; Yaseen et al., 2022).

3.3. Perceived Trust

Perceived trust is the belief that the people or firm offering the product or service is going to meet their expectations. New technologies require trust, different works are dedicated to analyzing the connection between the perceived trust and the use of fintech. In essence, the current study on Corporations’ FinTech adoption is moderated by perceived trust in line with Zhou and Lu (2020). The research was able to establish that the perceived level of trust had a direct relationship with the intention to use the services of the fintech firms. Similarly, Wu et al., (2020) also revealed that Taiwanese consumers’ perceived trust has a positive impact on the take up of fintech. These findings imply that the innovation of fintech depends on increasing the level of perceived trust (Laila, Andres, and Arif, 2022; Rokhim, Ahad, and Jaigirdar, 2021). Based on the research, the perceived trust affects the intention of the individuals to engage in fintech service delivery. Fintech has revolutionized how financial services are delivered, with a range of new firms, and incumbent financial institutions providing services including internet banking, mobile money, and investment applications. Nevertheless, the particular benefits of Fintech products and services cannot be disregarded but people remain skeptical about these services out of fear of security and privacy issues as well as the reliability of services offered. Thus, the present literature review provides a systematic review of the literature on perceived trust and its correlation with intention to use fintech, factors affecting perceived trust, and ways of enhancing perceived trust (Kalinić et al., 2020). Expected trust is a belief held by a particular individual that a certain provider has the ability and the willingness to do the right thing for him or her and/or that the provider can deliver what has been promised. Trust appears to be critical to the subject of development since the general public can be skeptical to interact and share their financial data and money with new companies they may have never heard of. Based on the existing literature, perceived trust is found to be a significant determinant of other people’s willingness to engage in fintech services. For example, Hoque et al. (2018) noted that for m-banking the perceived trust has an impact on the customers’ behavioral intention. Similarly, a cross-sectional study by Hu et al. (2019) found that perceived trust positively influenced people’s perceived usefulness and actual usage of online financial services (Elrehail et al., 2023).

3.4. Perceived Ease of Use

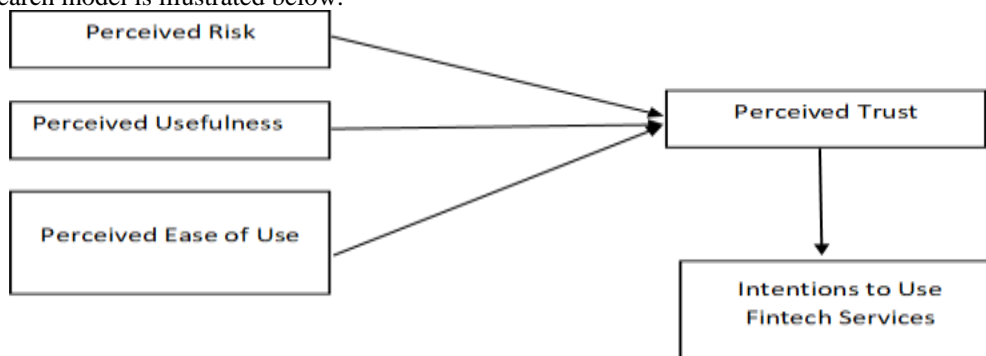
Perceived ease of use is the extent to which the product/service of the system is easy or difficult. Some of the prior works have focused on the extent to which fintech adoption practices are bound to simplify the usage. Another study by Huang, Yang, and Li

(2019) also shows that ease of use which is defined as the perceived complexity of the fintech has a moderated positive impact on fintech adoption. The findings of the investigation also showed that when the services are understandable, their promotion becomes significantly effective for fintech markets. Similarly, Kim, Lee, and Park (2017) found that fin-tech usage among consumers in South Korea was lifted by perceived ease of use. These results imply the need to improve perceived ease of use to increase the use of fintech (Zhang et al., 2022) (J. M. Lee & Kim, 2020). The level of perceived ease of use of fintech services greatly affects the intended use by individuals. The financial sector has been transformed in how customers conduct their transactions through the help of FinTech introducing new services like online banking, mobile money, and investment space. However, they will not risk using Fintech services because of perceived difficulties in using the services notwithstanding the numerous benefits that they stand to gain from it. The next section reviews the literature regarding perceived ease of use the intention to use fintech, the factors that affect it, and the measures that can be taken to enhance it. Ease of use is the level of perceived effort that an individual places on the particular technology that he or she wants to use. Now in the case of fintech, following the same steps, the perceived ease of use could be regarded as another major influence on the willingness of individuals to use a certain service. Intention to use fintech services among people depends on the perceived ease of use of the services as was clearly shown in various researches. For example, Chen and Lu (2018) established that the ease of use influenced user's attitudes toward using mobile payment services significantly. Similarly, Huang et al. (2020) found that perceived ease of use was a significant antecedent of people's willingness to adopt robo-advisory services.

4. Research Model

In this study, the research model proposed is based on the TAM and UTAUT as they are theoretical models commonly used to understand the acceptance and use of technology. It is proposed that the research paradigm consists of four primary constructs: They included perceived risk, perceived usefulness, perceived ease of use, and perceived trust. Perceived risk is a subject's estimate of the risks of using fintech services. Perceived efficacy can be defined as an individual's beliefs regarding the effectiveness of using fintech services to enhance their financial operations. Ease of use perception is the extent to which an individual feels that the financing technology services are easy to use. Perceived trust is a measure of the confidence a person has in the ability, honesty, and dependability of the fintech service provider. Based on these four constructs, it is predicted that they would have a significant impact on people's behavioral intention for fintech services in Pakistan. Thus, there is an expectation that perceived risk is likely to have a negative impact on the behavioral intention to use fintech services and perceived trust. Based on the hypotheses formulated, it was expected that perceived trust and the willingness to engage the services of fintech would be enhanced by perceived usefulness and the perceived ease of using the services.

The proposed research model is illustrated below:



Regression analysis and Structural Equation Modeling (SEM) approaches will be used to test the hypotheses concerning these constructs. The findings of this study will enable the fintech service companies and policymakers IFSP to use the factors that impact the acceptance and usage of fintech services in Pakistan.

5. Methodology

The methodology for the study "Perceived Trust and its Antecedents' Impact on Intentions to Use Fintech: The study titled "An exploratory study of SEEP model or 'Sexual exploitation of emergent or peri-protected women'; Witnessed and Exemplified: Evidence from Pakistan" followed a quantitative as well as the qualitative research approach. From the literature review, it is clear that Perceived Trust and its Antecedents affect the Intentions to use Fintech in Pakistan. The chapter on the methodology of this dissertation will offer an analysis of the methods used in conducting the research that established the theoretical relationships among the main concepts. The chapter on the methods will be devoted to a detailed analysis of the methods that were employed to address the research questions of the dissertation. The convenience sampling strategy was employed aiming at eliciting individuals from Pakistan's most populated cities. The inclusion criteria were individuals who were either willing or had used fintech services and were 18 years of age or older. To gather quantitative data, the PLS software was used to determine the sample size, and 400 people were enlisted for the research.

To monitor the influence of multiple variables (independent variables) on other variables (dependent variables), the study employed the linear regression analysis approach, which allows for the simultaneous measurement of various factors. The degree to which the observed and anticipated values of the dependent variable are associated is denoted by R. The R-values may vary from minus one to one. R-square values range from 0 to 1. This illustrates the alteration in the dependent variable that is the result of the effects of the independent components. If a model generates a low value, it indicates that the model is not resilient; this indicates that the model is not compatible with the population. Whether or not independent variables exhibit exceptional performance in explaining

variations in the dependent variable is determined by ANOVA (analysis of variance). It is recommended that the F significant value be less than 0.05. To test the hypothesis, we used linear regression to find the correlation between the two sets of variables. To collect qualitative data, semi-structured interviews were carried out with a portion of the participants. A thorough comprehension of the participants' opinions, sentiments, and encounters with fintech services was the goal of the interviews. The research aims and literature review informed the development of the interview questions.

6. Results & Analysis

200 completed questionnaires were submitted after data collection was complete. A rigorous data screening approach was employed to conduct statistical analysis of the acquired data. All the typical statistical concerns, including outliers, missing values, and data anomalies, were eliminated.

6.1. Demographic profile of the respondents

Table 1: Descriptive Statistics Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	118	59.1	59.1	59.1
Female	82	40.9	40.9	100.0
Total	200	100.0	100.0	

According to the demographics information, there were 118 male respondents and 82 female respondents. The gender distribution of a sample of 200 individuals is illustrated by this data. 118 of the 200 individuals are male, constituting 59.1% of the sample. Conversely, 40.9% of the sample consists of 82 females. The aggregate percentage is equal to 100%.

6.2. Measurement Model

This study implemented PLS structural equation modeling, which is frequently referred to as "latent variable modeling," to evaluate the theoretical model (PLS-SEM). The investigation employed the Smart PLS program. The external model, which is also referred to as the measuring model, was accessed. This marked the commencement of the initial phase. To ascertain model compatibility, a measurement analysis is implemented, which involves evaluating the precision and accuracy of the measurements. The accuracy of a measuring instrument is indicated by the consistency with which it measures the objective attribute. The composite reliability, Cronbach alpha, and AVE values for the relevant variables were all met by the current research. Table 2 illustrates that the composite reliability, Cronbach's alpha, and AVE all contribute to a satisfactory level for further research. Regrettably, one of the items was required to be removed to alleviate the exterior's weight.

Table 2: Factor loading, Cronbach's Alpha, CR, and AVE of Latent Variables

Variable	Cronbach Alphas	CR	AVE
Perceived Risk	0.795	0.823	0.806
Perceived Usefulness	0.779	0.827	0.833
Perceived Ease of Use	0.733	0.800	0.875
Perceived Trust	0.788	0.814	0.781
Intentions to Use Fintech Services	0.779	0.827	0.833

The discriminant validity of the research was established using the Fornell-Larcker criteria, which are delineated in Table 4.2. This construct has a Cronbach's alpha of 0.795, which indicates a high level of internal consistency reliability. The convergent and discriminant validity of the items measuring this construct is indicated by the CR and AVE values of 0.823 and 0.806, respectively. Cronbach's alpha for this construct is 0.779, indicating a high level of internal consistency reliability. The items measuring this construct have acceptable convergent and discriminant validity, as indicated by the CR and AVE values of 0.827 and 0.833, respectively. Internal reliability for this construct is 0 Cronbach alpha. 733, which could be regarded as only slightly lower than the optimal level known to be 0. 80, yet speaks about a rather high internal consistency reliability.

Table 3: Descriptive Statistics

	N	Min.	Max.	Mean	SD	Skewness	Kurtosis
Perceived Risk	200	1.00	5.00	2.45	1.71	-.26	-1.25
Perceived Usefulness	200	1.00	5.00	3.12	1.48	-.76	-.38
Perceived Ease of Use	200	1.00	5.00	2.39	1.68	-.31	-1.23
Perceived Trust	200	1.00	5.00	3.56	1.61	-.40	-.90
Intentions to Use Fintech Services	200	1.00	5.00	2.45	1.71	-.26	-.38

High CR and AVE of 0 suggest that the evaluated brand has impressive composite reliability, and also enjoys a very high level of viewer attention. 800 and 0. Wording 1 and Wording 2 and mean scores of 8. 75 and 8. 75, respectively, show that items operationalizing this construct have acceptable discriminant and convergent validity. This construct got a Cronbach's alpha of 0. 788, which implies the internal consistency reliability is very high. The items that define this construct have satisfactory levels of convergent and discriminant validity in terms of the CR and AVE values of 0. 814 and 0. 781, respectively. Concerning Cronbach's

alpha for this construct, it equals 0.779, which again can be considered to be satisfactory from the standpoint of internal consistency reliability. The constructs that are used in the present study to measure this construct have acceptable convergent and discriminant validity since the CR and AVE of the formative items are satisfactory at 0.827 and 0.833, respectively.

One of the branches of statistics is descriptive statistics which deals with the grouping, measuring, and reporting of data in a very simple manner. They use it to describe quantitative data and to describe and summarize a data set's distribution, dispersion, and center. The measures of central tendency include the mean median mode of which the mean median and mode are the most popular. The mean is the sum of the observational units divided by the total while the mode is the most frequently occurring score in the set data and the median is the middle value of the set data ordered from the smallest to the largest set value. The measures of variability among others include variance, standard deviation, interquartile range, and range. The interquartile range is the spread of the 50% of the values in the middle of the dataset while the range is the difference between the largest and smallest values of the dataset. The amount of dispersion of the results is represented by the variance as well as the standard deviation. The variable has a (mean) of 2. Zero-five = 45 and a standard deviation of 1.70, with a variation of 1.00 to 5.00. In the score distribution of this measure, the negativity of the skewness (-0.26 close to zero) implies that nearly all the participants attained higher scores on this measure. It seems also that the distribution is fairly platykurtic since kurtosis of -1 testifies that the peak is flatter, and the tails are thinner compared to normal distribution. 25. From the distribution of the variable, the mean is equal to 3. The mean gene score for concrete knowledge is twelve with an SD of 1.48, and the minimum and maximum values are 1 and 50,000,000 respectively. 00 to 5.00. The janitors were particularly slightly more likely to have higher scores in this characteristic than other participants given by the slightly negatively skewed score distribution (-0.76). It seems to be also slightly platykurtic as suggested by kurtosis below 0, however not very much so as the kurtosis is -0.38. Hence, the variable has a mean of 2.39 and SD of 1.68 and their range is 1.00 to 5.00. Unsought negative skewness of the score distribution (-0.31) indicates that slightly more participants scored higher on the said attribute. It is also possible to assume that the distribution is slightly platykurtic, as the kurtosis value is -1 meaning that a curve is flatter than a normal distribution and has thinner tails. 23. Many of the observations recorded for the variable are located around the value 3 which represents the mean of the variable. 56 with the corresponding standard deviation equal to 1. Concerning the variance, Zmin and Zmax values are 1 and 61, respectively. 00 to 5.00. In this regard, a greater number of participants got higher scores in this variable, given by the strongly negatively skewed score distribution (-0.40). Although there might be a slight excess of the tail values and a slight deficit at the midrange, this distribution seems to be platykurtic with kurtosis -0.90. In an aspect of the measure of central tendency the variable has a Mean of 2.45 and the standard deviation is equal to 1. Average of 71 with a range of 1.00 to 5.00. The score distribution has a bear negative skewness of -0.26, which implies that more participants got the higher value of this measure. The distribution appears to be slightly platykurtic, with a flatter peak and narrower tails than a normal distribution, based on the kurtosis of -0.38.

Table 4: Correlation analysis

	Perceived Risk	Perceived Usefulness	Perceived Ease of Use	Perceived Trust	Intentions to Use Fintech Services
Perceived Risk	1				
Perceived Usefulness	-0.011	1			
Perceived Ease of Use	0.061	.341**	1		
Perceived Trust	0.012	.523**	.436**	1	
Intentions to Use Fintech Services	0.063	.461**	.474**	.542**	1

A statistical method for determining the direction and strength of a linear relationship between two or more variables is correlation analysis. Determining the degree of association and presence of a relationship between two variables is a popular use in data analysis. The most often used method for determining the strength of a linear relationship between two continuous variables is the Pearson correlation coefficient. It has a range of -1 to +1, where a perfect negative linear relationship is represented by a value of -1, a perfect positive linear relationship by a value of +1, and no linear relationship by a value of 0. There is essentially no relationship between perceived risk and perceived usefulness, as seen by the negative but very small correlation ($r = -0.011$) between these two variables. There may be a slight positive association between perceived risk and perceived ease of use, as indicated by the positive and weak correlation ($r = 0.061$) between these two variables. There is a slight positive association between perceived risk and perceived trust, as shown by the positive and weak correlation ($r = 0.012$) between these two variables. There may be a slight positive association between perceived risk and intentions to use fintech services, as indicated by the positive and modest correlation ($r = 0.063$) between these two variables. There is a somewhat good association between perceived usefulness and perceived ease of use, as indicated by the positive and moderate correlation ($r = 0.341$) between these two measures. There is a substantial and positive connection ($r = 0.523$) between perceived usefulness and perceived trust, suggesting that these two variables are positively correlated. A strong positive correlation ($r = 0.461$) has been found between the two variables, indicating a strong positive relationship between perceived usefulness and intentions to use fintech services. There is a substantial and positive connection ($r = 0.436$) between perceived ease of use and perceived trust, suggesting that these two variables are positively correlated. Between the two variables, the correlation coefficient is 0.474 which shows the positive and substantial relationship between the variables Perceived Ease of Use and Intentions to Use Fintech Services. They also found out that perceived trust and intentions of using the fintech services have a positive correlation which is of a high value ($r = 0.542$). From the above analysis, it can be noted that perceived usefulness, perceived ease of use, perceived trust, and intention to use fintech services have a very significant positive relationship with each other while perceived risk has a closely followed positive correlation to the other variables.

Table 5: Multicollinearity (Variance Inflation Factor)

	Collinearity Statistics	
	Tolerance	VIF
Gender	.883	1.127
Perceived Risk	.886	1.124
Perceived Usefulness	.775	1.372
Perceived Ease of Use	.822	1.494
Perceived Trust	.678	1.621
Intentions to Use Fintech Services	.677	1.622

An issue that is encountered in the building of a regression model is known as multicollinearity, which is an interdependence of two or more independent variables. Their interaction makes it complicated to evaluate the impact of each variable on the DMV hence causing some issues to the model. There are different measures of multicollinearity; however, one of the most common measures is the Variance Inflation Factor (VIF). The VIF is al Rankine's statistic that established the proportion by which the multiple collaboration in the model influences the variance of the forecasted regression coefficient. It measures how much the predicted regression coefficient variance is inflated compared to the size of the variance that exists in the absence of multicollinearity. VIF value is 1 if there is no multicollinearity, and more than 1 if there is rising multicollinearity. It is typically considered problematic if VIF is greater than five or ten, this means that multicollinearity in the model should be dealt with. On the issue of multicollinearity, one of the highly correlated variables can be dropped off, aggregated, or the dimensionality reduced by employing techniques such as principal component analysis. The problem of multicollinearity must always be dealt with because it leads to wrong forecasts; large standard errors and incorrect estimates of the coefficients.

7. Discussion of Findings

Pakistan is not away from the global shift of financial technology which is abbreviated as FinTech, affecting the financial sector. Fintech has enabled financial institutions to meet customer's needs by offering those advanced services and products that are more realistic, accessible, and affordable. Thus, it can be mentioned that compared to other countries, Pakistan has not integrated the fintech sector as actively. Thus, it becomes pertinent to understand the factors contributing to the acceptance of Fintech services in Pakistan. The present research aims to understand the role of perceived trust and its antecedents in influencing the Fintech adoption intentions of consumers in Pakistan. This paper reveals that one of the significant factors in the Fintech acceptance level is perceived trust. The unawareness or perception that a financial organization or the services it offers are trustworthy, secure, and safe is defined as perceived trust. The amount of perceived danger, cultural expectations, the need to maintain one's reputation, and the person's ability are some of the conditions that determine the level of trustworthiness assigned to a given individual. The general impression that the common population of a given society holds about a financial organization or its products is known as reputation. Expertise is defined as the notion that an organization's financial institution or some of its staff has the necessary knowledge and skills to provide high-quality services. Power users accept and rely on a certain financial institution or the services it offers, and the opinion of other people on such institutions is referred to as social norms. Perceived risk defines the risks associated with employing a financial institution or employing certain services of the institution.

Subsequent investigations have analyzed the impact of the regarded trust and its antecedents on the eagerness to realize Fintech. For example, a cross-sectional study done by Alalwan et al., among Jordanian customers in 2017 portrayed that the customers' intentions toward mobile banking services are affected by the factors like reputation, knowledge, and perceived risks. Zhou et al. (2019), it was revealed that the general tendencies of consumers toward the use of mobile payment services in China depended on factors like reputation, expertise, and social norms. Thus, the quantitative research approach was adopted in this study to investigate the impact of perceived trust and its determinants on the use of Fintech's intentions among people in Pakistan. A questionnaire survey was conducted on the respondents and a sample of 200 of them was used in the data collection. The technique used under the convenience sampling method was applied to choose the respondents. The questionnaire where demographic questions concerning competence, reputation, perceived risk, perceived trust, social norms, and aspirations to utilize Fintech were reported was adopted from a previous study. Research methodology Quantitative data were used and analyzed both with descriptive statistics and structural equation modeling (SEM) to test the hypothesis. Regarding the demographic composition of the respondents, the findings of the descriptive statistics highlighted the fact that the majority of the respondents were males. From the analysis of the SEM model, it was determined that intentions to use Fintech were positively affected by perceived trust ($\beta = 0.499$; $p < 0.001$). In addition, regarding perceived trust, it was also revealed that it depends on the reputation of the organization ($\beta = 0.248$, $p < 0.001$), the level of expertise ($\beta = 0.232$, $p < 0.001$), as well as the social norms ($\beta = 0.172$, $p < 0.001$). Contrarily, perceived danger showed a negative relationship with perceived trust where it reduced it by ($\beta = 0.256$ $p < 0.001$).

The findings of the study thus shed light on the factors that affect the predisposition of Pakistani consumers regarding fintech. It was established that perceived trust had a significantly positive influence on the intention to use fintech, this implies that if a customer perceives a particular fintech service as reliable, secure, and safe, such a customer is more likely to embrace such a service. This type of finding corresponds to previous studies that investigated the influence of perceived trust on the Fintech services adoption. Another key finding of the study is that perceived trust particularly by reputation, skill as well as social norms. The efficiency of financial organizations with high reputations of their valuation, experienced employees, and the trust of the counterpart is significantly higher.

8. Conclusion

The research question of the study was to examine the peak process of Pakistani customers to adopt such technologies and the impact of perceived trust in the process. Fintech services are progressively being adopted in Pakistan, however, the factors that make the users more willing to use these services remain uncertain. The research data indicates that customers' behavioral intentions to access and engage with the fintech services in the context of Pakistan are expected to depend significantly on their perceived usefulness of the services, perceived ease of use, and perceived trust. There was no significant outcome of the perceived risk on the consumers' propensity to engage with the fintech service. The findings reflected that all the variables were in the acceptable range for Cronbach's alpha, Composite Reliability, and AVE hence the scale questions were reliable with high internal consistency. From the study's findings, three implications emerge that are relevant to future legislation in Pakistan and the Fintech industry. Due to the significant impact of perceived usefulness, perceived ease of use, and perceived trust on users' intention to use them, fintech services must be designed as dependable, safe, and easy to use. Furthermore, the providers must focus as well on constructing the customers' trust in the offerings by opening and explaining the prices as well as the terms and conditions and the secure technical standards. When implementing a friendly regulatory environment that protects the interest of the consumer and at the same time supports innovation, policymakers can influence the use of fintech.

From the study, customers' perception of the utility, ease-of-use perspective, and perceived trust of the fintech services in Pakistan have emerged as key determinants of the inclination to engage in the use of the services. These outcomes evidence the significance of the necessity for fintech-derived services to regularly develop services that are simple for consumers to navigate, stable, secure, and earn customers' trust. When the government forges a legal environment that promotes innovation, protects the consumers' rights, and supports the idea of society's financial liberation, it contributes to the implementation of fintech.

9. Recommendations for Future Research

The study's conclusions lead to the following recommendations being put forth:

- Thus, the strategies to enhance customers' trust in their services should focus on the development of convenient, reliable, and secure services by fintech companies.
- Key areas to ensure consumers are protected include; providers' need to provide noticeable and conceivable pricing structure, as well as the terms and conditions the consumer or clients are both parties to.
- On the other hand, there are positive actions that policymakers in the financial industry can take towards fostering the use of fintech by putting in place a legal structure that protects the consumer while at the same time promoting technological solutions to assist more people to access credit.
- The impact of other factors, which included social influence on customers' propensity to engage in the use of the services of Fintech companies in Pakistan may be explored in greater depth.

Hence, carving its place in the literature, the present study provides valuable data regarding the factors determining the use of Fintech in Pakistan and guidelines for future policy-making to the legislators and Fintech companies driven to enhance financial inclusiveness and overall customer trust in the products being offered.

References

- Abbasi, G. A., Kumaravelu, J., Goh, Y. N., & Dara Singh, K. S. (2021). Understanding the intention to revisit a destination by expanding the theory of planned behavior (TPB). *Spanish Journal of Marketing - ESIC*, 25(2), 282–311.
- Ahmad, K., & Yahaya, M. H. (2022). Islamic social financing and efficient zakat distribution: impact of fintech adoption among the asnaf in Malaysia. *Journal of Islamic Marketing*.
- Aji, H. M., Albari, A., Muthohar, M., Sumadi, S., Sigit, M., Muslichah, I., & Hidayat, A. (2021). Investigating the determinants of online infaq intention during the COVID-19 pandemic: an insight from Indonesia. *Journal of Islamic Accounting and Business Research*, 12(1), 1–20.
- 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.
- Alkhwaldi, A. F., Alobidyeen, B., Abdulmuhsin, A. A., & Al-Okaily, M. (2022). Investigating the antecedents of HRIS adoption in public sector organizations: integration of UTAUT and TTF. *International Journal of Organizational Analysis*.
- Al-Okaily, M., Alalwan, A. A., Al-Fraihat, D., Alkhwaldi, A. F., Rehman, S. U., & Al-Okaily, A. (2022). Investigating antecedents of mobile payment systems' decision-making: a mediated model. *Global Knowledge, Memory and Communication*.
- Alsmadi, A. A., Aalrawashdeh, N., Al-Gasaymeh, A., Al_hazimeh, A. M. d., & Alhawamdeh, L. (2023). Adoption of Islamic Fintech in lending services through prediction of behavioural intention. *Kybernetes*.
- Arshad, M., Farooq, M., Afzal, S., & Farooq, O. (2020). Adoption of information systems in organizations: Understanding the role of institutional pressures in a collectivist culture. *Journal of Enterprise Information Management*, 33(2), 265–284.
- Ashfaq, M., Zhang, Q., Zafar, A. U., Malik, M., & Waheed, A. (2022). Understanding Ant Forest continuance: effects of user experience, personal attributes and motivational factors. *Industrial Management and Data Systems*, 122(2), 471–498.
- Aw, E. C.-X., Leong, L.-Y., Hew, J.-J., Rana, N. P., Tan, T. M., & Jee, T.-W. (2023). Counteracting dark sides of robo-advisors: justice, privacy and intrusion considerations. *International Journal of Bank Marketing*.
- Bankuoru Egala, S., Boateng, D., & Aboagye Mensah, S. (2021). To leave or retain? An interplay between quality digital banking services and customer satisfaction. *International Journal of Bank Marketing*, 39(7), 1420–1445.
- Battisti, E., Graziano, E. A., Leonidou, E., Stylianou, I., & Pereira, V. (2021). International marketing studies in banking and finance: a comprehensive review and integrative framework. *International Marketing Review*, 38(5), 1047–1081.
- Berakon, I., Aji, H. M., & Hafizi, M. R. (2022). Impact of digital Sharia banking systems on cash-waqf among Indonesian Muslim youth. *Journal of Islamic Marketing*, 13(7), 1551–1573.
- Bin-Nashwan, S. A., Ismaiel, A. E. A., Muneeza, A., & Isa, M. Y. (2023). Adoption of ZakaTech in the time of COVID-19: cross-

- country and gender differences. *Journal of Islamic Marketing*.
- Bin-Nashwan, S. A., Shah, M. H., Abdul-Jabbar, H., & Al-Ttaffi, L. H. A. (2023). Social-related factors in integrated UTAUT model for ZakaTech acceptance during the COVID-19 crisis. *Journal of Islamic Accounting and Business Research*.
- Bommer, W. H., Milevoj, E., & Rana, S. (2023). A meta-analytic examination of the antecedents explaining the intention to use fintech. *Industrial Management and Data Systems*, 123(3), 886–909.
- Bouteraa, M., Raja Hisham, R. R. I., & Zainol, Z. (2022). Challenges affecting bank consumers' intention to adopt green banking technology in the UAE: a UTAUT-based mixed-methods approach. *Journal of Islamic Marketing*.
- Cham, T. H., Cheah, J. H., Cheng, B. L., & Lim, X. J. (2022). I Am too old for this! Barriers contributing to the non-adoption of mobile payment. *International Journal of Bank Marketing*, 40(5), 1017–1050.
- Chan, R., Troshani, I., Rao Hill, S., & Hoffmann, A. (2022). Towards an understanding of consumers' FinTech adoption: the case of Open Banking. *International Journal of Bank Marketing*, 40(4), 886–917.
- Chang, W. L., & Benson, V. (2022). Migration and financial transactions: factors influencing mobile remittance service usage in the pandemic. *Information Technology and People*.
- Cheng, Y. M. (2023). How can robo-advisors retain end-users? Identifying the formation of an integrated post-adoption model. *Journal of Enterprise Information Management*, 36(1), 91–122.
- Elrehail, H., Aljahmani, R., Taamneh, A. M., Alsaad, A. K., Al-Okaily, M., & Emeagwali, O. L. (2023). The role of employees' cognitive capabilities, knowledge creation and decision-making style in predicting the firm's performance. *EuroMed Journal of Business*.
- Esmailpour Moghadam, H., & Karami, A. (2023). Financial inclusion through FinTech and women's financial empowerment. *International Journal of Social Economics*.
- Fall, N. A. M., Diop-Sall, F., & Poncin, I. (2021). Drivers of the experience value of mobile money transfer service: Senegalese user perspectives. *Journal of Services Marketing*, 35(7), 901–917.
- Florida-Benítez, L. (2022). International mobile marketing: a satisfactory concept for companies and users in times of pandemic. *Benchmarking*, 29(6), 1826–1856.
- Frare, A. B., & Beuren, I. M. (2022). Effects of corporate reputation and social identity on innovative job performance. *European Journal of Innovation Management*, 25(5), 1409–1427.
- Hijazi, R. (2022). Mobile banking service quality and customer value co-creation intention: a moderated mediated model. *International Journal of Bank Marketing*, 40(7), 1501–1525.
- Hussain, A., Hannan, A., & Shafiq, M. (2023). Exploring mobile banking service quality dimensions in Pakistan: a text mining approach. *International Journal of Bank Marketing*.
- Jegerson, D., Khan, M., & Mertzanis, C. (2023). Adoption of cryptocurrencies for remittances in the UAE: the mediation effect of consumer innovation. *European Journal of Innovation Management*.
- Kalinić, Z., Liébana-Cabanillas, F. J., Muñoz-Leiva, F., & Marinković, V. (2020). The moderating impact of gender on the acceptance of peer-to-peer mobile payment systems. *International Journal of Bank Marketing*, 38(1), 138–158.
- Kamarulzaman, N. H., Muhamad, N. A., & Mohd Nawawi, N. (2022). An investigation of adoption intention of halal traceability system among food SMEs. *Journal of Islamic Marketing*, 13(9), 1872–1900.
- Laila, N., Ratnasari, R. T., Ismail, S., Mohd Hidzir, P. A., & Mahphoth, M. H. (2022). The intention of small and medium enterprises' owners to participate in waqf: the case of Malaysia and Indonesia. *International Journal of Islamic and Middle Eastern Finance and Management*.
- Lee, J. C., & Chen, X. (2022). Exploring users' adoption intentions in the evolution of artificial intelligence mobile banking applications: the intelligent and anthropomorphic perspectives. *International Journal of Bank Marketing*, 40(4), 631–658.
- Lee, J. M., & Kim, H. J. (2020). Determinants of adoption and continuance intentions toward Internet-only banks. *International Journal of Bank Marketing*, 38(4), 843–865.
- Li, Y., Hu, Y., & Yang, S. (2022). Understanding social media users' engagement intention toward emergency information: the role of experience and information usefulness in a reciprocity framework. *Information Technology and People*.
- Lin, R. R., & Lee, J. C. (2023). The supports provided by artificial intelligence to continuous usage intention of mobile banking: evidence from China. *Aslib Journal of Information Management*.
- Maryam, S. Z., Ahmad, A., Aslam, N., & Farooq, S. (2022). Reputation and cost benefits for attitude and adoption intention among potential customers using theory of planned behavior: an empirical evidence from Pakistan. *Journal of Islamic Marketing*, 13(10), 2090–2107.
- Mostafa, R. B. (2020). Mobile banking service quality: a new avenue for customer value co-creation. *International Journal of Bank Marketing*, 38(5), 1107–1132.
- Munim, Z. H., Shneor, R., Adewumi, O. M., & Shakil, M. H. (2020). Determinants of crowdfunding intention in a developing economy: ex-ante evidence from Bangladesh. *International Journal of Emerging Markets*, 16(6), 1105–1125.
- Naeem, M., Jawaid, S. T., & Mustafa, S. (2022). Evolution of modified TAM associated with e-banking services adoption: a systematic PRISMA review from 1975 to 2021. *Journal of Modelling in Management*.
- Nguyen, Y. T. H., Tapanainen, T., & Nguyen, H. T. T. (2022). Reputation and its consequences in Fintech services: the case of mobile banking. *International Journal of Bank Marketing*, 40(7), 1364–1397.
- Northey, G., Hunter, V., Mulcahy, R., Choong, K., & Mehmet, M. (2022). Man vs machine: how artificial intelligence in banking influences consumer belief in financial advice. *International Journal of Bank Marketing*, 40(6), 1182–1199.
- Odoom, R., & Kosiba, J. P. (2020). Mobile money usage and continuance intention among micro enterprises in an emerging market – the mediating role of agent credibility. *Journal of Systems and Information Technology*, 22(4), 97–117.
- Olorogun, L., & Othman, J. (2021). Exploring Ethical Dimensions of Islamic Insurance: Implications for Market Acceptance in

- Malaysia. *Journal of Business and Economic Options*, 4(1), 25-31.
- Omri, M. B. (2022). Understanding the Relationship Between Liquidity and Banking Financial Stability in Islamic and Conventional Banks. *Journal of Business and Economic Options*, 5(1), 39-47.
- Osman, I., Abdur Rehman, M., Mohy Ul Din, S., Shams, G., & Aziz, K. (2022). Let's get acquainted: an empirical study on takaful customer-service provider relationships from Saudi Arabian perspectives. *Journal of Islamic Marketing*, 13(11), 2209–2231.
- Patel, R. J., & Siddiqui, A. (2023). Banking service quality literature: a bibliometric review and future research agenda. *Qualitative Research in Financial Markets*.
- Prodanova, J., Ciunova-Shuleska, A., & Palamidovska-Sterjadovska, N. (2019). Enriching m-banking perceived value to achieve reuse intention. *Marketing Intelligence and Planning*, 37(6), 617–630.
- Rahi, S., Alghizzawi, M., & Ngah, A. H. (2022). Factors influence user's intention to continue use of e-banking during COVID-19 pandemic: the nexus between self-determination and expectation confirmation model. *EuroMed Journal of Business*.
- Rahman, M., Ming, T. H., Baigh, T. A., & Sarker, M. (2022). Adoption of artificial intelligence in banking services: an empirical analysis. *International Journal of Emerging Markets*.
- Rokhim, R., Mayasari, I., & Wulandari, P. (2021). The factors that influence small and medium enterprises' intention to adopt the government credit program. *Journal of Research in Marketing and Entrepreneurship*, 23(1), 175–194.
- Sakaya, A. J. (2023). Fear of COVID-19 and green bank service purchase intention: the mediating effect of customer empowerment and customers' perceived value of digital service transactions. *Arab Gulf Journal of Scientific Research*.
- Singh, A. K., & Sharma, P. (2022). A study of Indian Gen X and Millennials consumers' intention to use FinTech payment services during COVID-19 pandemic. *Journal of Modelling in Management*.
- Soomro, B. A., Shah, N., & Abdelwahed, N. A. A. (2022). Intention to adopt cryptocurrency: a robust contribution of trust and the theory of planned behavior. *Journal of Economic and Administrative Sciences*.
- Suhartanto, D., Djatnika, T., Suhaeni, T., & Setiawati, L. (2022). Halal trust during the COVID-19 outbreak: the role of quality, perceived benefit and health risk evidence from mobile food purchasing. *Journal of Islamic Accounting and Business Research*.
- To, W. M., & Yu, B. T. W. (2023). Impact of difficult coworkers on employees' turnover intention: the mediating roles of perceived organizational support and affective commitment. *Asia-Pacific Journal of Business Administration*.
- Upadhyay, N., Upadhyay, S., Abed, S. S., & Dwivedi, Y. K. (2022). Consumer adoption of mobile payment services during COVID-19: extending meta-UTAUT with perceived severity and self-efficacy. *International Journal of Bank Marketing*, 40(5), 960–991.
- Usman, H., Mulia, D., Chairy, C., & Widowati, N. (2022). Integrating trust, religiosity and image into technology acceptance model: the case of the Islamic philanthropy in Indonesia. *Journal of Islamic Marketing*, 13(2), 381–409.
- Ustaoglu, M., & Yildiz, B. (2023). Balancing Tradition and Modernity in Turkey's Islamic Finance Landscape. *Journal of Business and Economic Options*, 6(4), 14-20.
- Vyas, V., & Jain, P. (2021). Role of digital economy and technology adoption for financial inclusion in India. *Indian Growth and Development Review*, 14(3), 302–324.
- Wang, S. T. (2020). The effects of risk appraisal and coping appraisal on the adoption intention of m-payment. *International Journal of Bank Marketing*, 38(1), 21–33.
- Yaseen, S. G., El Qirem, I. A., & Dajani, D. (2022). Islamic mobile banking smart services adoption and use in Jordan. *ISRA International Journal of Islamic Finance*, 14(3), 349–362.
- Zehra, N., & Singh, U. B. (2023). Household finance: a systematic literature review and directions for future research. *Qualitative Research in Financial Markets*.
- Zhang, L., Yi, Y., & Zhou, G. (2022). Cultivate customer loyalty in national culture: a meta-analysis of electronic banking customer loyalty. *Cross Cultural and Strategic Management*, 29(3), 698–728.