

## FINTECH AND BANKING: DETERMINANTS OF CUSTOMER SATISFACTION IN PAKISTAN

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### Abstract

This paper discusses the determinant of customer satisfaction of fintech services in the banking industry in Pakistan, and specifically, the moderating role of trust. Based on the Technology Acceptance Model (TAM) and the perceived risk theory, the study determines the use of information technology platforms, the perceived ease of use, risk associated with the service, and social influence as the important antecedents of trust, which in effect influence the overall customer satisfaction. Quantitative survey was conducted and analysed on 250 employed fintech users in the major Pakistani cities using SPSS 20.0. Structural regression and mediation analyses proved the significance and the positive effect of all four antecedent factors on trust ( $p < 0.01$ ) and the strength of the influence of trust as a predictor of customer satisfaction. In addition, trust was confirmed as a strong partial mediator in all four antecedent-satisfaction pathways. These results have significant implications for Pakistani banks aiming to enhance fintech adoption, regulating bodies crafting enabling policy landscapes, and academics transferring belief systems to additional settings in emerging markets.

**Keywords:** Financial Technology (Fintech), Customer Satisfaction, Trust, Perceived Ease of Use, Social Influence, Information Technology Platform, Technology Acceptance Model (TAM) and Pakistan.

### 1. Introduction

Financial technology: FinTech has radically changed the way people and organisations engage with financial services, as a result of the convergence of finance and technology (Hu et al., 2019; Gomber et al., 2017). The concept of fintech is quite a wide range of digital innovations, including mobile banking apps and peer-to-peer lending platforms, blockchain-based payment systems, and robots that provide advice. The fintech market has raised more than US 100 billion over the last decade, and in 2018 the industry capitalised more than US 127 billion (Arner et al., 2015).

The example of Pakistan is an especially interesting case of fintech adoption. The population of the country is over 207 million, and in 2018, the State Bank of Pakistan reported that the number of citizens who have bank accounts was only around 50.6 million: such penetration is only 24.34 per cent. Financial inclusion has increased moderately in recent years, shifting the level between 13 and 21 per cent (Rizvi et al., 2017), and approximately 93 per cent of adults have never used formal financial services. Nevertheless, the banking regulators and policymakers in Pakistan have been increasingly interested in fintech as one of the mediums of expanding access (Ali and Hashim, 2015).

The paper explores the issue of information technology (IT) platform quality, perceived ease of use, perceived risk, and social influence as the four main variables in relation to customer satisfaction among fintech users in Pakistan and clarifies the role of trust as a focal force of mediation. The conceptual frame is based on the Technology Acceptance Model (TAM) (Davis, 1989) and the perceived risk theory developed by Bauer (1960), which has been found to be very effective in the situation of adoption of digital services. The empirical measurement of these pathways presented in the study makes a contribution to both the theoretical understanding of the technology adoption mediated by trust and the practical issue of implementing a fintech ecosystem that is both accessible and trusted within a developing-country context.

### **1.1 Research Objectives**

The study is guided by the following objectives: (i) to examine the influence of IT platform quality on trust; (ii) to determine whether perceived ease of use positively affects trust; (iii) to assess the impact of perceived service risk on trust; (iv) to evaluate the effect of social influence on trust; (v) to test the direct relationship between trust and customer satisfaction; and (vi)–(ix) to establish whether trust mediates each of the four antecedent–satisfaction links identified above.

### **1.2 Scope and Delimitations**

The study is confined to employed fintech users living in major Pakistani cities. Its cross-sectional, single-period design and reliance on self-reported survey data limit causal inference and generalisability to other national or cultural contexts. Nonetheless, as an initial empirical investigation within the Pakistani banking ecosystem, the work opens important avenues for comparative and longitudinal follow-up research.

## **2. Literature Review and Theoretical Framework**

The literature on fintech adoption converges on two broad theoretical pillars: the Technology Acceptance Model and perceived risk theory. Davis (1989) originally proposed TAM to explain why users accept or reject information systems, centring on perceived usefulness and perceived ease of use.

Subsequent extensions — most notably the Unified Theory of Acceptance and Use of Technology (UTAUT) by Venkatesh et al. (2003) — added social influence and facilitating conditions as explanatory variables. In the fintech domain, Fayad and Paper (2015) and Hu et al. (2019) have demonstrated that TAM remains a robust lens through which to analyse digital financial-service adoption, provided that trust and risk perceptions are incorporated as additional factors ties of the study are as follows: (i) to test the role of the quality of IT platform on trust; (ii) to test whether perceived ease of use positively influences trust; (iii) to test whether social influence positively influences trust; (iv) to test whether the trust mediates each of the four antecedent satisfaction links noted above; (iv)–(ix) to test whether each of the above four antecedent satisfaction links has a direct relationship with customer satisfaction.

### **1.2 Scope and Delimitations**

The study is restricted to the working fintech users of the big Pakistani cities. It is cross sectional, single-period design, and it relies on self-reported survey data, which limits the capacity to draw causal conclusions and generalisation to other national or cultural contexts.

## **2. Literature Review/Theoretical Framework**

The literature on fintech adoption is coalesced around two broad theoretical approaches, including the Technology Acceptance Model and the perceived risk theory. To begin with, Davis (1989) introduced TAM as the cause of the adoption or rejection of information systems by users based on the perceived usefulness and perceived ease of use. Subsequent extensions - the most notable of them the Unified Theory of Acceptance and Use of Technology (UTAUT) of Venkatesh et al. (2003) - added social influence and facilitating conditions as the explanatory constructs. It has been demonstrated by the authors Fayad and Paper (2015) and Hu et al. (2019).

According to the theory of perceived risk as advanced by Bauer (1960), when a consumer is making a decision that can hurt them, there is a feeling of uncertainty experienced. Online and digital-financial environments add to this ambiguity the absence of physical contact, which means that trust, as the belief that the other party will perform what is intended or stated in his / her vow (Ert et al., 2016), is one of the variables that increased or reduced the perceptions of risk (Kim et al., 2008; Bonson Ponte et al., 2015). constructs. Perceived risk theory of Bauer (1960) assumes that when consumers realise that the results of making a decision can negatively affect them, they experience a sense of uncertainty. This ambiguity is further developed in online and digital-financial environments because of the lack of human contact, and therefore, trust as a belief in the other party to act in line with an

implied or explicit promise (Ert et al., 2016) becomes a critical variable that enhances or reduces the risk perceptions (Kim et al., 2008; Bonson Ponte et al., 2015).

### **2.1 Information Technology Platform and Trust**

IT platforms are both the infrastructural and application layers, which form the backbone of the fintech services, and they not only provide the service, but also indicate its reliability (Sun et al., 2016). Mehmood et al. (2015) established that the investments in information technology have a positive impact on the performance of the banking sector in Pakistan. Purwanto et al. (2020) and Purwanto and Loisa (2020) also determined that consumer trust in digital financial services is an antecedent of platform security, as well as the privacy and approachability of its design.

### **2.2 Trust and Perceived Ease of Use**

Higher trust in online spaces has repeatedly been associated with perceived ease of use, the extent to which a user perceives the system to be easily accessible (Davis, 1989; Jogiyanto, 2007). The researchers discovered that ease of use not only affects initial adoption but also continued engagement (Hanafizadeh et al., 2014). Lindenberg (2019) puts trust in context as being the cognitive evaluation that a system is expected to provide rewards predictably.

### **2.3 Risk and Trust**

Perception of risk and trust have a well-established relationship, although subtle. According to Kim et al. (2008), fintech risk perceptions are similar to e-commerce risk perceptions, and they include ethical and environmental aspects of risk. According to Bonson Ponte et al. (2015) and Ettlie et al. (2017), the key to dealing with this uncertainty is trust, which in turn makes the risk more acceptable since the service provider is regarded as honest when the risk is identified and presented openly. Oliveira et al. (2016) were able to support the existence of a strong positive association between risk awareness and trust-building procedures during mobile-payment interactions.

### **2.4 Social Influence and Trust**

Social influence refers to how the behaviour of an individual is influenced by the actions, thoughts, or suggestions of other people (Venkatesh et al., 2003; Wood and Hayes, 2012). Another example is Koksall (2016), who established that people tend to access financial services more when they see their peers use them. This observation was also supported by Kim et al. (2016) and Oliveira et al. (2016) in the context of mobile payment, as they revealed that social endorsement is also a trust signal, especially in the case of early-majority adopters.

### **2.5 Customer Satisfaction and Trust**

The role of trust plays a leading role in the service-quality literature as an intermediary between the service features and the result of the customers. De Visser et al. (2016) theorised that trust is what preconditions reliance on technology, whereas Kesharwani and Bisht (2012) demonstrated empirically that trust is a predictor of e-banking adoption in the South Asian setting, which has a positive correlation. These findings were further extended by Hanafizadeh et al. (2012) and Purwanto and Loisa (2020), who confirmed the presence of trust as a prerequisite followed by satisfaction as an active contributor in the case of mobile banking.

### **2.6 Research Gap**

Although Lien et al. (2020) have considered fintech adoption in the Vietnamese banking framework and hinted that their framework could be applied to other developing economies, no such empirical research was previously done in the Pakistani setting. The current paper thus fills a substantive gap by evaluating the trust-mediated model, based on TAM and perceived risk theory, on a representative sample of Pakistani fintech users, which provides confirmation of the same as well as context-specific information.

### **3. Hypotheses**

Building on the theoretical and empirical foundations reviewed above, nine hypotheses are articulated. The first five concern direct effects; the remaining four address the mediating function of trust.

H1: Information technology platform quality has a significant positive impact on trust.

H2: Perceived ease of use has a significant positive impact on trust.

H3: Perceived risk when using fintech services has a significant positive impact on trust.

H4: Social influence has a significant positive impact on trust among fintech users.

H5: Trust plays a major role in influencing customer satisfaction among fintech users positively.

H6: Trust is an intermediary to the correlation between the quality of the IT platform and customer satisfaction.

H7: Trust mediates the relationship between perceived ease of use and customer satisfaction.

H8: Trust mediates the relationship between perceived risk and customer satisfaction.

H9: Trust mediates the relationship between social influence and customer satisfaction.



#### 4. Methodology

##### 4.1 Research Design and Data Collection

A quantitative, cross-sectional research design was adopted. Data were collected through a structured online questionnaire, distributed via Google Forms, to employed residents of major Pakistani cities who regularly use fintech services. Convenience sampling was employed. An initial pilot of 50 responses was used to verify distributional normality; the full usable dataset comprised 250 responses.

##### 4.2 Measurement Instrument

All constructs were measured on a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree), with items adapted from Lien et al. (2020). IT platform quality was captured by five items; perceived ease of use by five items; risk by four items; social influence by four items; trust by five items; and customer satisfaction by five items. The complete instrument is reproduced in the Appendix.

##### 4.3 Analytical Approach

IBM SPSS 20.0 was used for all analyses. To measure internal consistency, the alpha of Cronbach was calculated on each construct. Distributional properties were set using descriptive statistics, mean, standard deviation, skewness, and kurtosis. Bivariate associations were measured in Pearson correlation coefficients. The five direct hypotheses (H1-H5) were tested using simple linear regression. The four mediation hypotheses (H6 through H9) were checked with the help of the PROCESS macro bootstrapping, indicating the total effects, the direct effects, and indirect effects with the 95% confidence interval (LLCI and ULCI).

#### 5. Results

##### 5.1 Sample Demographics

The demographic profile of the 250 respondents is as illustrated in Table 1. The sample is disproportionately men (72) and centred on the age range of 2140 (87), which represents the demographics of working urban fintech users in Pakistan. Most of them possess a bachelor's degree (51 %), though 37 per cent of them have a Master's or an MPhil, making them appear well-educated, and thus their digital financial literacy is probably well above the national standard.

**Table 1.** *Sample Demographics*

| Category | Frequency | Percentage (%) |
|----------|-----------|----------------|
| Gender   |           |                |
| Male     | 179       | 72             |
| Female   | 71        | 28             |

|                      |     |    |
|----------------------|-----|----|
| Age                  |     |    |
| Less than 20 years   | 15  | 6  |
| 21–30 years          | 130 | 52 |
| 31–40 years          | 88  | 35 |
| 41–50 years          | 12  | 5  |
| Above 50 years       | 5   | 2  |
| Education            |     |    |
| Intermediate         | 18  | 7  |
| Bachelor's           | 128 | 51 |
| Master's / MPhil     | 91  | 37 |
| PhD / Post Doctorate | 13  | 5  |

Note. Total N = 250.

### 5.2 Reliability Analysis

The alpha values of all six constructs were above the generally accepted alpha of 0.70, which ascertained that there would be a satisfactory internal consistency throughout the board (Table 2). The highest reliability was in Trust (=0.839), whereas the lowest was in Social Influence (=0.770), which is quite high, as well.

**Table 2. Cronbach's Alpha Reliability Coefficients**

| Construct             | Cronbach's $\alpha$ | Number of Items |
|-----------------------|---------------------|-----------------|
| IT Platform           | 0.809               | 5               |
| Perceived Ease of Use | 0.819               | 5               |
| Risk                  | 0.810               | 4               |
| Social Influence      | 0.770               | 4               |
| Trust                 | 0.839               | 5               |
| Customer Satisfaction | 0.780               | 5               |

Note. All  $\alpha$  values exceed the 0.70 threshold (Fornell & Larcker, 1981).

### 5.3 Descriptive Statistics

The average scores of all constructs were 3.29 (Risk) to 3.48 (Customer Satisfaction), which represent moderate-positive agreement among the sample (Table 3). The values of skewness were also within the acceptable  $\pm 1.0$  range, and the values of kurtosis were also within the acceptable  $\pm 3.0$  range, which mocks the normality assumption needed in inferential tests based on regression.

**Table 3. Descriptive Statistics**

| Variable              | Mean  | Std. Dev. | Skewness | Kurtosis |
|-----------------------|-------|-----------|----------|----------|
| IT Platform           | 3.458 | 1.162     | -0.504   | -0.844   |
| Perceived Ease of Use | 3.442 | 1.140     | -0.697   | -0.573   |
| Risk                  | 3.290 | 1.097     | -0.603   | -0.692   |
| Social Influence      | 3.476 | 1.196     | -0.507   | -0.817   |
| Trust                 | 3.440 | 1.174     | -0.520   | -0.690   |
| Customer Satisfaction | 3.480 | 1.120     | -0.559   | -0.764   |

Note. Likert scale range: 1–5. Acceptable skewness:  $\pm 1.0$ ; acceptable kurtosis:  $\pm 3.0$ .

#### 5.4 Correlation Analysis

The Pearson correlation matrix is presented in Table 4. The pairwise correlations are statistically significant at the level of  $p < 0.01$ , and the ranges are between 0.715 (Social Influence Customer Satisfaction) and 0.834 (Perceived Ease of Use Customer Satisfaction). These positive, strong associations are enough reason to go to the regression-based stage. hypothesis testing while also signalling the importance of controlling for multicollinearity through mediation analysis.

**Table 4. Pearson Correlation Matrix**

|                          | 1. ITP | 2. PEU | 3. Risk | 4. SI  | 5. Trust | 6. CS |
|--------------------------|--------|--------|---------|--------|----------|-------|
| 1. IT Platform           | 1.000  |        |         |        |          |       |
| 2. Perceived Ease of Use | .783** | 1.000  |         |        |          |       |
| 3. Risk                  | .717** | .750** | 1.000   |        |          |       |
| 4. Social Influence      | .753** | .761** | .737**  | 1.000  |          |       |
| 5. Trust                 | .731** | .798** | .788**  | .781** | 1.000    |       |
| 6. Customer Satisfaction | .755** | .834** | .742**  | .715** | .760**   | 1.000 |

Note. \*\*  $p < 0.01$  (two-tailed). ITP = IT Platform; PEU = Perceived Ease of Use; SI = Social Influence; CS = Customer Satisfaction.



### 5.5 Direct Hypothesis Testing (H1–H5)

Simple linear regression was used to test the five direct hypotheses. Table 5 reports the standardised coefficient ( $\beta$ ), t-value, significance level,  $R^2$ , and the overall F-statistic for each model. All hypotheses were supported at  $p < 0.01$ .

**Table 5. Direct Hypothesis Testing Results**

| Hyp. | IV → DV      | R <sup>2</sup> | F       | $\beta$ | t      | p      | Decision  |
|------|--------------|----------------|---------|---------|--------|--------|-----------|
| H1   | ITP → Trust  | 0.535          | 284.908 | 0.739   | 16.879 | < .001 | Supported |
| H2   | PEU → Trust  | 0.636          | 433.930 | 0.822   | 20.831 | < .001 | Supported |
| H3   | Risk → Trust | 0.621          | 405.957 | 0.843   | 20.148 | < .001 | Supported |
| H4   | SI → Trust   | 0.611          | 388.969 | 0.767   | 19.722 | < .001 | Supported |
| H5   | Trust → CS   | 0.578          | 338.985 | 0.725   | 18.412 | < .001 | Supported |

Note. ITP = IT Platform; PEU = Perceived Ease of Use; SI = Social Influence; CS = Customer Satisfaction. All  $p < .001$ .

Perceived ease of use (H2) showed the strongest individual explanatory power ( $R^2 = 0.636$ ), indicating that it accounts for nearly two-thirds of the variance in trust. Risk (H3) was the next strongest predictor ( $R^2 = 0.621$ ), while IT platform quality (H1) explained the smallest share ( $R^2 = 0.535$ ), still representing a substantial effect.

### 5.6 Mediation Hypothesis Testing (H6–H9)

The four mediation hypotheses were evaluated using bootstrapped confidence intervals. In each case, both the indirect effect (through trust) and the direct residual effect were statistically significant, indicating partial mediation. Tables 6–9 present the results in full.

**Table 6. Mediation Analysis — H6: IT Platform → Trust → Customer Satisfaction**

| Pathway                     | Effect ( $\beta$ ) | SE           | t      | p      | 95 % LLCI | 95 % ULCI |
|-----------------------------|--------------------|--------------|--------|--------|-----------|-----------|
| Total effect (ITP → CS)     | 0.728              | 0.040        | 18.122 | < .001 | 0.649     | 0.807     |
| Direct effect (ITP → CS)    | 0.413              | 0.052        | 7.901  | < .001 | 0.310     | 0.515     |
| Indirect effect (via Trust) | 0.315              | 0.048 (Boot) | —      | < .001 | 0.222     | 0.413     |

| SE)  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|
| Note. LLCI / ULCI do not include zero; mediation confirmed.                                    |  |  |  |  |  |  |  |
| <b>Table 7. Mediation Analysis — H7: Perceived Ease of Use → Trust → Customer Satisfaction</b> |  |  |  |  |  |  |  |

| Pathway                     | Effect (β) | SE              | t      | p      | 95 % LLCI | 95 % ULCI |
|-----------------------------|------------|-----------------|--------|--------|-----------|-----------|
| Total effect (PEU → CS)     | 0.819      | 0.035           | 23.779 | < .001 | 0.752     | 0.887     |
| Direct effect (PEU → CS)    | 0.615      | 0.055           | 11.204 | < .001 | 0.507     | 0.723     |
| Indirect effect (via Trust) | 0.205      | 0.056 (Boot SE) | —      | < .001 | 0.112     | 0.326     |

|   |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|
| Note. LLCI / ULCI do not include zero; mediation confirmed.                   |  |  |  |  |  |  |  |
| <b>Table 8. Mediation Analysis — H8: Risk → Trust → Customer Satisfaction</b> |  |  |  |  |  |  |  |

| Pathway                     | Effect (β) | SE              | t      | p      | 95 % LLCI | 95 % ULCI |
|-----------------------------|------------|-----------------|--------|--------|-----------|-----------|
| Total effect (Risk → CS)    | 0.757      | 0.044           | 17.427 | < .001 | 0.672     | 0.843     |
| Direct effect (Risk → CS)   | 0.385      | 0.064           | 6.021  | < .001 | 0.259     | 0.511     |
| Indirect effect (via Trust) | 0.372      | 0.057 (Boot SE) | —      | < .001 | 0.268     | 0.496     |

|   |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|
| Note. LLCI / ULCI do not include zero; mediation confirmed.                               |  |  |  |  |  |  |  |
| <b>Table 9. Mediation Analysis — H9: Social Influence → Trust → Customer Satisfaction</b> |  |  |  |  |  |  |  |

| Pathway                 | Effect (β) | SE    | t      | p      | 95 % LLCI | 95 % ULCI |
|-------------------------|------------|-------|--------|--------|-----------|-----------|
| Total effect (SI → CS)  | 0.670      | 0.042 | 16.116 | < .001 | 0.588     | 0.752     |
| Direct effect (SI → CS) | 0.292      | 0.059 | 4.929  | < .001 | 0.175     | 0.409     |

|                             |       |                    |   |        |       |       |
|-----------------------------|-------|--------------------|---|--------|-------|-------|
| Indirect effect (via Trust) | 0.378 | 0.057<br>(Boot SE) | — | < .001 | 0.271 | 0.499 |
|-----------------------------|-------|--------------------|---|--------|-------|-------|

Note. There is no zero in LLCI / ULCI; mediation confirmed.

## 6. Discussion

The nine hypotheses were all accepted, providing a consistent and internally congruent image of the mediating role of trust between four service level antecedents and overall customer satisfaction within the Pakistani fintech environment.

### 6.1 Direct Effects

Next in the list of predictors of trust was perceived ease of use ( $= 0.822$ ,  $R^2 = 0.636$ ), which conforms to the initial focus of TAM on the cognitive simplicity of interacting with the system (Davis, 1989). Users tend to trust the outputs of a fintech application when they feel that the application is not demanding a lot of effort. Risk awareness was the second strongest predictor ( $\beta = 0.843$ ,  $R^2 = 0.621$ ). This result, which suggests that risk awareness can still be higher than trust, agrees with Oliveira et al. (2016) and hints at the possibility that the open attitude to risk disclosure can only strengthen consumer confidence instead of weakening it. Although the quality of the IT platform and social influence also play an important role, they were the ones that contributed a somewhat smaller (nonetheless, large) role.

As expected, trust by itself was found to be a powerful and important predictor of customer satisfaction ( $= 0.725$ ,  $\alpha = 0.578$ ), which is in line with Kesharwani and Bisht (2012) and extends their results to the fintech sector in Pakistan.

### 6.2 Mediation Effects

All four mediation tests supported partial mediation: trust mediated a significant percentage of the influence of each of the antecedents on satisfaction, though a substantial direct effect remained. Social influence had the highest indirect (mediated) impact ( $= 0.378$ ), indicating that peer-to-peer endorsement of a fintech service is the main psychological process by which the endorsement of that service can be converted into satisfaction. The least significant indirect effect was associated with perceived ease of use ( $= 0.205$ ), which suggests that ease of use has a very strong direct connection to satisfaction that does not go through trust - users who consider it easy to use a service may be satisfied despite their conscious trust in that service.

Risk mediation ( $= 0.372$ ) was almost as high as social influence, meaning that among risk-averse consumers, the association between perceived risk and satisfaction is significantly mediated by trust.

## **7. Conclusion**

This paper offers strong empirical data that customer satisfaction of fintech services in Pakistan is determined by the quality of the IT platform, perceived ease of use, service risk and social influence, all of which act significantly, though not solely, through the mediating variable of trust. The results have theoretical support based on the TAM and the perceived risk theory and methodological accuracy that fits within the framework of the selected design.

### **7.1 Managerial and Policy Implications**

Banks and fintech providers in Pakistan ought to put efforts into creating user-friendly and intuitive interfaces because the perceived ease of use exhibited the most significant correlation with trust. Meanwhile, open and active communication of risks, instead of minimisation of risk discourse, can reinforce consumer trust as well as undermine it. It can utilise the social endorsement channels (e.g. peer referral programmes and community-based marketing) to establish trust in prospective users. Lastly, good and safe IT platforms are foundational; investment in cybersecurity and user-facing transparency mechanisms is likely to yield disproportionate returns in trust and, consequently, in satisfaction and retention.

The legal and institutional context that regulates fintech in Pakistan should be made to ensure that it is in line with the development of the industry. Disclosure requirements that are standardised, consumer-protection laws, and innovation sandboxes can all be combined to produce the circumstances in which trust, as the most significant mediator and found in this research, most likely flourishes.

### **7.2 Limitations and Future Research**

The cross-sectional design precludes causal inference; a longitudinal or experimental follow-up would strengthen the evidence base. Self-report data are susceptible to response bias, and the convenience sample limits generalisability beyond employed urban Pakistanis. Future studies should consider expanding geographically — both within Pakistan and across comparable emerging economies — and incorporating qualitative methods (interviews, focus groups) to enrich interpretation. Additional constructs such as perceived usefulness, subjective norms, habit, and digital literacy may further refine the model. Mixed-method and panel-data designs are recommended for subsequent investigations in this space.

## **References**

- Ali, S., & Hashim, M. (2015). E-banking in Pakistan: Issues and challenges. *International Journal of Academic Research in Business and Social Sciences*, 5. <https://doi.org/10.6007/IJARBS/v5-i3/1498>

- Anderson, R. E., & Srinivasan, S. S. (2003). E-satisfaction and e-loyalty: A contingency framework. *Psychology and Marketing*, 20(2), 123–138. <https://doi.org/10.1002/mar.10063>
- Argo, J. J., & Dahl, D. W. (2020). Social influence in the retail context: A contemporary review of the literature. *Journal of Retailing*, 96(1), 25–39.
- Arner, D. W., Barberis, J. N., & Buckley, R. P. (2015). The evolution of fintech: A new post-crisis paradigm? *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2676553>
- Beldad, A., De Jong, M., & Steehouder, M. (2010). How shall I trust the faceless and the intangible? A literature review on the antecedents of online trust. *Computers in Human Behaviour*, 26, 857–869. <https://doi.org/10.1016/j.chb.2010.03.013>
- Berg, L., Sletteameås, D., Kjørstad, I., & Rosenberg, T. (2020). Trust and the don't-want-to-complain bias in peer-to-peer platform markets. *International Journal of Consumer Studies*, 44. <https://doi.org/10.1111/ijcs.12561>
- Bonsón Ponte, E., Carvajal-Trujillo, E., & Escobar-Rodríguez, T. (2015). Influence of trust and perceived value on the intention to purchase travel online: Integrating the effects of assurance on trust antecedents. *Tourism Management*, 47, 286–302. <https://doi.org/10.1016/j.tourman.2014.10.009>
- Bruner, G., & Kumar, A. (2005). Explaining consumer acceptance of handheld Internet devices. *Journal of Business Research*, 58, 553–558. <https://doi.org/10.1016/j.jbusres.2003.08.002>
- Bryce, J., & Fraser, J. (2014). The role of disclosure of personal information in the evaluation of risk and trust in young people's online interactions. *Computers in Human Behavior*, 30, 299–306. <https://doi.org/10.1016/j.chb.2013.09.012>
- Dapas, C., Sitorus, T., Purwanto, E., & Ihalauw, J. (2019). The effect of service quality and website quality of Zalora.com on purchase decision as mediated by purchase intention. *Quality – Access to Success*, 20, 87–92.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>
- De Visser, E., Monfort, S., McKendrick, R., Smith, M., McKnight, P., Krueger, F., & Parasuraman, R. (2016). Almost human: Anthropomorphism increases trust resilience in cognitive agents. *Journal of Experimental Psychology: Applied*, 22. <https://doi.org/10.1037/xap0000092>



- Ert, E., Fleischer, A., & Magen, N. (2016). Trust and reputation in the sharing economy: The role of personal photos in Airbnb. *Tourism Management*, 55, 62–73. <https://doi.org/10.1016/j.tourman.2016.01.013>
- Ettlie, J. E., Tucci, C., & Gianiodis, P. T. (2017). Trust, integrated information technology and new product success. *European Journal of Innovation Management*.
- Fayad, R., & Paper, D. (2015). The Technology Acceptance Model e-commerce extension: A conceptual framework. *Procedia Economics and Finance*, 26, 1000–1006. [https://doi.org/10.1016/S2212-5671\(15\)00922-3](https://doi.org/10.1016/S2212-5671(15)00922-3)
- Gomber, P., Koch, J.-A., & Siering, M. (2017). Digital finance and FinTech: Current research and future research directions. *Journal of Business Economics*, 87(5), 537–580. <https://doi.org/10.1007/s11573-017-0852-x>
- Hanafizadeh, P., Behboudi, M., Abedini Koshksaray, A., & Jalilvand Shirkhani Tabar, M. (2014). Mobile-banking adoption by Iranian bank clients. *Telematics and Informatics*, 31(1), 62–78. <https://doi.org/10.1016/j.tele.2012.11.001>
- Ho, C.-W., Chan, L.-K., & Tsai, C.-C. (2017). An integrated framework for online trust. *Internet Research*.
- Hoffman, D., Novak, T., & Peralta, M. (1998). Building consumer trust in online environments: The case for information privacy. *Communications of the ACM*, 42, 80–85.
- Hu, Z., Ding, S., Li, S., Chen, L., & Yang, S. (2019). Adoption intention of fintech services for bank users: An empirical examination with an extended Technology Acceptance Model. *Symmetry*, 11(3), 340. <https://doi.org/10.3390/sym11030340>
- Hult, G. T. M., Sharma, P. N., Morgeson, F. V., & Zhang, Y. (2019). Antecedents and consequences of customer satisfaction: Do they differ across online and offline purchases? *Journal of Retailing*, 95(1), 10–23. <https://doi.org/10.1016/j.jretai.2018.10.003>
- Jogiyanto, H. M. (2007). Structuring and Writing a Systematic Literature Review. Andi.
- Kaabachi, S., Mrad, S. B., & Fiedler, A. (2019). The moderating effect of e-bank structure on French consumers' trust. *International Journal of Bank Marketing*.
- Kesharwani, A., & Bisht, S. (2012). The impact of trust and perceived risk on Internet banking adoption in India. *International Journal of Bank Marketing*, 30, 303–322. <https://doi.org/10.1108/02652321211236923>
- Kim, D., Ferrin, D., & Rao, R. (2008). A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk,

- and their antecedents. *Decision Support Systems*, 44, 544–564.  
<https://doi.org/10.1016/j.dss.2007.07.001>
- Kim, Y., Park, Y.-J., Choi, J., & Yeon, J. (2015). An empirical study on the adoption of "fintech" service: Focused on mobile payment services.  
<https://doi.org/10.14257/astl.2015.114.26>
- Koksal, M. H. (2016). The intentions of Lebanese consumers to adopt mobile banking. *International Journal of Bank Marketing*, 34(3), 327–346.  
<https://doi.org/10.1108/IJBM-03-2015-0025>
- Kotler, P., & Keller, K. L. (2016). *Marketing Management* (15th ed.). Pearson.
- Li, Y.-H., Huang, J.-W., & Tsai, M.-T. (2009). Entrepreneurial orientation and firm performance: The role of the knowledge creation process. *Industrial Marketing Management*, 38, 440–449.  
<https://doi.org/10.1016/j.indmarman.2008.02.004>
- Lien, N. T. K., Doan, T.-T. T., & Bui, T. N. (2020). Fintech and banking: Evidence from Vietnam. *The Journal of Asian Finance, Economics and Business*, 7(9), 419–426.  
<https://doi.org/10.13106/JAFEB.2020.VOL7.NO9.419>
- Lindenberg, S. (2019). Trust as a social dilemma. In *Trust in Sociology*. De Gruyter.
- Masrek, M. N., & Khairuddin, I. I. (2012). Trust in mobile banking adoption in Malaysia: A conceptual framework. *Journal of Mobile Technologies, Knowledge and Society*, 2012, 1.
- McKnight, D. H. (2005). Trust in information technology. In *Encyclopedia of Management Information Systems*. Sage.
- Mehmood, B., Nisar, A., & Rehman, H. ur. (2015). Technology matters: Evidence from the Pakistani banking sector using a flexible transcendental logarithmic production function. *Pakistan Economic and Social Review*, 53(2), 203–224.
- Oliver, R. L. (1999). Whence consumer loyalty? *Journal of Marketing*, 63, 33–44. <https://doi.org/10.2307/1252099>
- Oliveira, T., Thomas, M., Baptista, G., & Campos, F. (2016). Mobile payment: Understanding the determinants of customer adoption and intention to recommend the technology. *Computers in Human Behavior*, 61, 404–414. <https://doi.org/10.1016/j.chb.2016.03.030>
- Pavlou, P. A. (2003). Consumer acceptance of electronic commerce: Integrating trust and risk with the Technology Acceptance Model. *International Journal of Electronic Commerce*, 7, 101–134.
- Pine, B. J., Gilmore, J. H., & Davis, M. (1999). Making experiences pay. *Harvard Business Review*.

- Purwanto, E., Deviny, J., & Mutahar, A. M. (2020). The mediating role of trust in the relationship between corporate image, security, word of mouth and loyalty in M-banking using among the millennial generation in Indonesia. *Management & Marketing: Challenges for the Knowledge Society*, 15(2), 255–274. <https://doi.org/10.2478/mmcks-2020-0016>
- Purwanto, E., & Loisa, J. (2020). The intention and use behaviour of the mobile banking system in Indonesia: UTAUT model. *Technology Reports of Kansai University*, 62.
- Rashotte, L. D. (2007). Social influence processes. In *The Blackwell Encyclopedia of Social Psychology*. Wiley.
- Razmak, J., & Bélanger, C. H. (2017). Comparing Canadian physicians and patients on their use of e-health tools. *Technology in Society*, 51, 102–112. <https://doi.org/10.1016/j.techsoc.2017.08.007>
- Rizvi, S. K. A., Naqvi, B., & Tanveer, F. (2017). Mobile banking: A potential catalyst for financial inclusion and growth in Pakistan. *The Lahore Journal of Economics*, 22, 251–281. <https://doi.org/10.35536/lje.2017.v22.isp.a11>
- Shams, R., Dubey, R., Gupta, H., & Chcitations, M. (2020). Customer satisfaction and firm performance. *Journal of Service Management*, 31(5), 861–886.
- Sridhar, S., & Srinivasan, R. (2012). Social influence effects in online product ratings. *Journal of Marketing*, 76(5), 70–88.
- Stewart, H., & Jürjens, J. (2018). Data security and consumer trust in FinTech innovation in Germany. *Information & Computer Security*, 26(1), 109–128. <https://doi.org/10.1108/ICS-06-2017-0039>
- Sun, R., Gregor, S., & Keating, B. (2016). Information technology platforms: Definition and research directions. *ArXiv*.
- Tiwana, A. (2013). Platform ecosystems: Aligning architecture, governance, and strategy. *Newnes*.
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the Technology Acceptance Model: Four longitudinal field studies. *Management Science*, 46(2), 186–204. <https://doi.org/10.1287/mnsc.46.2.186.11926>
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478. <https://doi.org/10.2307/30036540>
- Wood, W., & Hayes, T. (2012). Social influence on consumer decisions: Motives, modes, and consequences. *Journal of Consumer Psychology*, 22, 324–328. <https://doi.org/10.1016/j.jcps.2012.05.003>

Wonglimpiyarat, J. (2017). FinTech banking industry: A systemic approach. Foresight, 19(6), 590–603. <https://doi.org/10.1108/FS-07-2017-0026>

### **Appendix — Survey Instrument**

All items were rated on a 5-point Likert scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree.

#### **A. Information Technology Platform (5 items)**

1. Fintech services delivered via the IT platform are reliable.
2. In my opinion, fintech services keep their promises.
3. Information technology has significantly increased the market share of fintech services.
4. Information technology has been used to differentiate among fintech services and products.
5. I like to experiment with new fintech services.

#### **B. Perceived Ease of Use (5 items)**

1. Tasks performed through fintech services are quite easy and simple.
2. The fintech service system instructions are easy to understand and clear.
3. Fintech service systems can be accessed by customers everywhere.
4. Work efficiency increases through fintech services.
5. Fintech services save a lot of time for customers.

#### **C. Risk When Using the Service (4 items)**

1. There is less risk involved when using fintech services.
2. There is less potential for loss when using fintech services.
3. My decision to use fintech services is safer.
4. There is no risk involved when I carry out transactions using fintech services.

#### **D. Social Influence (4 items)**

1. People often recommend the use of fintech services.
2. My work and social environment supports the use of fintech services.
3. Fintech services are aligned with current societal trends.
4. Most people I know support me in using fintech services.

#### **E. Trust (5 items)**

1. The information-security capability of fintech services is good.
2. I am confident when using fintech services.
3. I trust the fintech services that keep my best interests in mind.
4. Based on my past experience with fintech services, I know they provide good service.
5. Based on my past experience, I know fintech services are trustworthy.

#### **F. Customer Satisfaction (5 items)**

1. Overall, I am happy with the fintech services provided.

2. I am satisfied with the thoroughness and competence of fintech services.
3. I strongly recommend fintech services to others.
4. It was easy for me to obtain the product or service of my choice through fintech.
5. I am satisfied with the overall experience of using fintech services.