International Review of Management and Marketing

ISSN: 2146-4405

available at http: www.econjournals.com

International Review of Management and Marketing, 2026, 16(2), 144-149.

Personalization in Fintech: Dual Mediation Effects of Trust and Surveillance on Fintech User Retention

Hassan Alsaggaf*

Applied College, King AbdulAziz University, Saudi Arabia. *Email: hamalsaggaf@kau.edu.sa

Received: 22 August 2025 **Accepted:** 14 December 2025 **DOI:** https://doi.org/10.32479/irmm.22106

ABSTRACT

Personalization has become a cornerstone of financial technology (fintech) services, promising enhanced user experiences and long-term loyalty. However, personalization carries a paradox: while it can foster trust, it may also heighten perceptions of surveillance, thereby undermining retention. This study examines the dual mediation effects of digital trust and perceived surveillance in the relationship between perceived fintech personalization and user retention. Drawing on privacy calculus theory and trust–surveillance paradox perspectives, we develop and empirically test a structural model using survey data from fintech users. Results reveal that personalization has a positive influence on user retention through digital trust, but simultaneously triggers perceived surveillance, which weakens retention intentions. Furthermore, privacy concern moderates the surveillance–retention link, amplifying the negative pathway for privacy-sensitive users. By unpacking these competing mechanisms, the study advances understanding of the personalization paradox in fintech and provides actionable insights for balancing personalization with ethical data practices.

Keywords: Fintech Personalization, User Retention, Digital Trust, Perceived Surveillance, Privacy Concern
JEL Classifications: D91, G53, M31, O33

1. INTRODUCTION

The emergence of financial technology (fintech) has radically transformed the way individuals interact with financial services, enabling efficient, data-driven, and user-centric solutions. As fintech platforms compete to attract and retain users, personalization has become a key strategy for delivering relevant and customized experiences. Personalization involves tailoring digital content, recommendations, and services based on users' behaviors and preferences, thereby enhancing perceived value and engagement (Bleier and Eisenbeiss, 2015). In highly competitive and commoditized digital markets, retention rather than acquisition is a critical driver of profitability, since retaining existing users generates long-term loyalty and reduces churn (Reichheld and Schefter, 2000).

However, personalization introduces a paradox. On the one hand, personalization builds relevance, fosters user satisfaction, and signals platform attentiveness, which may strengthen trust (Bleier and Eisenbeiss, 2015). On the other hand, personalization can also raise concerns about pervasive data collection and monitoring, thereby increasing perceptions of surveillance (Aguirre et al., 2015; Xu et al., 2011). This tension between enhanced utility and heightened privacy risks is commonly referred to as the personalization–privacy paradox (Xu et al., 2011). For fintech providers, which operate with highly sensitive personal and financial data, this paradox becomes particularly acute. Trust plays a foundational role in mediating the relationship between personalization and continued usage. Trust has been consistently shown to influence customer loyalty in e-commerce and online services (Gefen, 2002). In digital contexts, trust is built when users perceive competence, benevolence, and integrity in service providers (McKnight et al., 2002). Personalization can reinforce these perceptions by signaling that the platform understands user needs and is committed to delivering relevant value (Bleier and

Eisenbeiss, 2015). As such, trust serves as a positive mechanism linking personalization to user retention in fintech.

At the same time, personalization may also activate negative mechanisms, particularly perceptions of surveillance. When users perceive that firms are overly intrusive in their collection and use of data, they experience breaches of the psychological contract, which undermines relationships (Aguirre et al., 2015). Marketing scholarship highlights that consumers weigh benefits against risks in making disclosure decisions, consistent with the privacy calculus framework (Malhotra et al., 2004). Within this calculus, perceived surveillance constitutes a critical risk, especially in fintech, where privacy and confidentiality are paramount. Such perceptions can discourage users from continuing their engagement, thereby weakening retention (Martin and Murphy, 2017). In addition, privacy concerns moderate how users evaluate the trade-offs between personalization and surveillance. Individuals with higher privacy concerns are more sensitive to data collection practices and interpret personalization as more invasive (Malhotra et al., 2004). Thus, for privacy-sensitive users, the negative effects of perceived surveillance on retention are expected to be amplified. This dynamic aligns with findings in digital privacy research showing that attitudes toward data sharing strongly influence the extent to which personalization is welcomed or resisted (Martin and Murphy, 2017; Rust et al., 2004).

Despite the importance of these dynamics, limited empirical research has integrated both trust and surveillance as dual mediating mechanisms linking personalization to user retention in fintech. Prior studies have tended to examine trust-building or privacy risks in isolation (Gefen, 2002; Aguirre et al., 2015), while continuance research has focused on expectation-confirmation mechanisms rather than dual pathways (Bhattacherjee, 2001). By explicitly modeling these parallel mediators, this study provides a more comprehensive account of how personalization simultaneously drives and undermines retention. Accordingly, this paper develops and empirically tests a structural model where fintech personalization influences retention through two competing mechanisms: (1) A positive pathway via digital trust and (2) A negative pathway via perceived surveillance. Moreover, privacy concern is modeled as a moderator that strengthens the adverse effect of surveillance on retention. The theoretical foundation of this work draws from the personalization–privacy paradox (Xu et al., 2011) and privacy calculus (Malhotra et al., 2004), integrated with established theories of trust in digital environments (McKnight et al., 2002; Gefen, 2002).

The contributions of this study are threefold. First, it extends personalization literature by demonstrating how trust and surveillance function as dual mediators in fintech. Second, it advances privacy research by empirically confirming the moderating role of privacy concern on the surveillance–retention link. Third, it offers actionable insights for fintech managers: personalization strategies should be designed not only to maximize trust but also to minimize cues of surveillance, particularly for users with high privacy sensitivity. In doing so, this study contributes to both academic theory and managerial practice in digital financial services.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. Personalization in Digital Services and Fintech

Personalization refers to tailoring offerings, content, and services based on user data, preferences, and behaviors, intending to improve relevance and engagement (Bleier and Eisenbeiss, 2015). In digital contexts, personalization enhances perceptions of service quality and increases customer satisfaction by aligning offerings with individual expectations (Bleier and Eisenbeiss, 2015). From a retention perspective, personalization is considered a strategic tool to reduce switching intentions and create long-term loyalty (Reichheld and Schefter, 2000). In fintech, where trust and user experience are essential for adoption and continuance, personalization takes on heightened importance due to the sensitive nature of financial data and the need to create seamless digital experiences (Gefen, 2002).

The personalization–privacy paradox literature highlights that while personalization improves perceived value, it also raises privacy concerns that can reduce user willingness to engage (Xu et al., 2011). This paradox is particularly salient in financial services, where users weigh the benefits of personalization against risks of data misuse (Martin and Murphy, 2017). Thus, fintech personalization is inherently double-edged: it enhances user satisfaction but may simultaneously trigger concerns about intrusive surveillance (Aguirre et al., 2015). Based on these insights, it is reasonable to expect that personalization will directly improve user retention, despite potential risks. Therefore:

- H_1: Perceived fintech personalization has a positive influence on user retention.

2.2. Digital Trust as a Mediator

Trust represents a user's willingness to be vulnerable to a service provider based on expectations of competence, benevolence, and integrity (McKnight et al., 2002). Trust has long been recognized as a key determinant of e-commerce loyalty (Gefen, 2002), and personalization has been found to enhance trust by signaling attentiveness and reliability (Bleier and Eisenbeiss, 2015). In personalization contexts, users interpret tailored content as evidence that the provider understands their preferences, which strengthens perceptions of benevolence (McKnight et al., 2002). Moreover, studies consistently find that trust mediates the link between service quality perceptions and loyalty outcomes in online environments (Gefen, 2002). In fintech, where financial risks are high, digital trust is an even stronger determinant of retention because users must rely on platforms for secure management of their money (Bhattacherjee, 2001). By improving perceptions of platform competence, personalization reduces uncertainty and fosters trust (Bleier and Eisenbeiss, 2015). Thus, personalization is likely to build trust, which in turn enhances user retention. Accordingly:

- H_{2a}: Perceived fintech personalization positively influences digital trust
- H_{3a}: Digital trust positively influences user retention
- H_4: Digital trust mediates the relationship between fintech personalization and user retention.

2.3. Perceived Surveillance as a Mediator

While personalization can strengthen trust, it may also evoke perceptions of surveillance, defined as the sense of being constantly monitored due to extensive data collection (Aguirre et al., 2015). The personalization–privacy paradox demonstrates that users perceive personalization as simultaneously beneficial and risky, with surveillance concerns acting as a central risk (Xu et al., 2011). When users believe that personalization is achieved through intrusive monitoring, they interpret it as a breach of their psychological contract with the service provider (Aguirre et al., 2015). Research indicates that perceived surveillance undermines consumer–firm relationships by fostering suspicion and reducing the willingness to continue interactions (Martin and Murphy, 2017). In digital contexts, users often balance these risks using a privacy calculus, where surveillance is evaluated as a cost against the benefits of personalization (Malhotra et al., 2004). In fintech, this calculus is more pronounced because users deal with highly sensitive financial information (Martin and Murphy, 2017). Thus, even though personalization may increase relevance, it may simultaneously reduce retention by evoking surveillance concerns. Accordingly, we propose the following hypotheses:

- H_{2b}: Perceived fintech personalization positively influences perceived surveillance
- H_{3b}: Perceived surveillance negatively influences user retention
- H_5: Perceived surveillance mediates the relationship between fintech personalization and user retention.

2.4. Privacy Concern as a Moderator

Privacy concern refers to an individual's general apprehension about information disclosure and data misuse in digital environments (Malhotra et al., 2004). Research shows that privacy concern significantly shapes how users evaluate personalization and surveillance risks (Xu et al., 2011). Individuals with high privacy concerns are more sensitive to perceived surveillance, interpreting personalization efforts as intrusive and manipulative (Martin and Murphy, 2017). In marketing contexts, privacy concerns have been shown to amplify negative responses to personalization when it is perceived as invasive (Aguirre et al., 2015). Applying this logic to fintech, users with strong privacy concerns are expected to experience intensified negative reactions to perceived surveillance, reducing their likelihood of retention. This is consistent with the privacy calculus framework, which suggests that higher perceived risks weigh more heavily in decision-making when privacy concern is salient (Malhotra et al., 2004). Thus, we hypothesize:

- H_6: Privacy concerns strengthen the negative effect of perceived surveillance on user retention, such that the relationship is stronger for users with higher privacy concerns.

3. RESEARCH METHODOLOGY

3.1. Sample Selection

This study employed a survey-based quantitative design to investigate how fintech personalization influences user retention through the dual mediating mechanisms of digital trust and perceived surveillance (Bhattacherjee, 2001). Surveys have long been considered a reliable method for measuring user perceptions, attitudes, and continuance intentions in digital contexts (Gefen, 2002). The target population consisted of active users of fintech applications, including mobile payment systems, investment platforms, and digital wallets, which are increasingly central to consumer financial behavior (Reichheld and Schefter, 2000). To ensure relevance, purposive sampling was adopted, following best practices in information systems research where respondents are required to have prior experience with the technology under study (McKnight et al., 2002). The sample size exceeded 300, which aligns with recommendations for structural equation modeling (SEM), where a minimum of 200 participants is necessary to achieve stable and reliable model estimates (Gefen, 2002). A diverse demographic composition was sought to capture heterogeneous adoption patterns, reflecting prior research showing that fintech adoption varies across age, income, and education groups (Xu et al., 2011) (Table 1). This ensured the generalizability of results while maintaining methodological rigor (Bhattacherjee, 2001).

3.2. Sources of Data

Primary data were collected using an online questionnaire distributed through professional networks and fintech user communities (Aguirre et al., 2015). Online surveys are widely employed in personalization and privacy research because they

Table 1: Constructs, items, and factor loadings

Construct	Source	Measurement items	Factor loadings	Cronbach's alpha
Perceived Fintech personalization	Bleier and Eisenbeiss (2015)	1. The fintech platform provides services tailored to my needs 2. The fintech platform offers personalized recommendations 3. The fintech platform customizes information relevant to me.	0.78-0.87	0.83
Digital trust	McKnight, Choudhury, and Kacmar (2002); Gefen (2002)	1. I trust the fintech platform keeps my best interests in mind 2. I believe the fintech platform is reliable 3. I feel confident the fintech platform protects my information.	0.79-0.88	0.85
Perceived surveillance	Aguirre et al. (2017)	1. I feel the fintech platform excessively monitors my activities 2. I believe the platform collects more data than necessary 3. I feel constantly observed when using the fintech platform.	0.76-0.85	0.82
Privacy concern	Malhotra et al. (2004)	1. I am concerned about the privacy of personal information I provide online 2. I am worried that companies may misuse the information I disclose 3. I feel anxious when asked to share financial details on digital platforms.	0.77-0.86	0.84
User retention (continuance intention)	Bhattacherjee (2001); Reichheld and Schefter (2000)	1. I intend to continue using this fintech platform in the future 2. I will recommend this fintech platform to others 3. I prefer to use this platform rather than switch to alternatives.	0.80-0.88	0.87

allow efficient access to technology users while preserving anonymity (Malhotra e al., 2004). The questionnaire items were adapted from established scales to guarantee construct validity and reliability (Table 2), an approach emphasized in methodological research on e-commerce and trust (McKnight et al., 2002). Specifically, personalization items were adapted from Bleier and Eisenbeiss (2015), trust items from McKnight et al. (2002) and Gefen (2002), surveillance items from Aguirre et al. (2015) and Martin and Murphy (2017), privacy concern from Malhotra et al. (2004), and retention from Bhattacherjee (2001). Using validated scales ensured comparability with prior studies and strengthened the empirical foundation of the research (Martin and Murphy, 2017).

Responses were recorded on a seven-point Likert scale ranging from strongly disagree to strongly agree, consistent with earlier studies in personalization, trust, and privacy (Malhotra et al., 2004). Participants were assured of confidentiality to reduce social desirability bias, which is critical in studies addressing sensitive issues such as privacy and surveillance (Aguirre et al., 2015; Podsakoff et al, 2003).

3.3. Tools Used in the Study

The data were analyzed using SEM, which is particularly suited for testing models with multiple mediators and moderators (Gefen, 2002). SEM allows simultaneous estimation of measurement and structural models, a method widely applied in information systems continuance research (Bhattacherjee, 2001). Before testing hypotheses, a confirmatory factor analysis (CFA) was conducted to evaluate the measurement model, following standard procedures in trust and personalization research (McKnight et al., 2002). Reliability was assessed using Cronbach's alpha and composite reliability, both of which are recommended benchmarks for internal consistency (Malhotra et al., 2004; Hair et al., 2010). Convergent validity was established through factor loadings and average variance extracted (AVE), aligning with the methodological framework of Bleier and Eisenbeiss (2015). Discriminant validity was tested using the Fornell–Larcker criterion, ensuring that theoretically distinct constructs such as trust and surveillance were empirically separable (Xu et al., 2011; Fornell & Larcker, 1981; Nunnally, 1978).

Table 2: Sample demographics

Variable	Percentage
Gender	
Male	49
Female	51
Age	
18-27	59
28-37	29
38-47	12

Mediation effects were tested through bootstrapping procedures, which provide robust estimates of indirect effects (Aguirre et al., 2015). Moderation by privacy concern was analyzed using interaction terms within the SEM framework, extending approaches used in earlier privacy calculus studies (Malhotra et al., 2004). The integration of mediation and moderation testing ensured a comprehensive examination of the personalization–privacy paradox in the fintech context (Martin and Murphy, 2017). Proposed framework is presented in Figure 1.

4. DATA ANALYSIS AND INTERPRETATION

The structural equation modeling (SEM) results demonstrated strong support for the hypothesized relationships between personalization, trust, surveillance, and user retention in the fintech context. The measurement model first confirmed construct reliability and validity, with Cronbach's alpha values for all constructs exceeding 0.80, in line with the thresholds recommended by Malhotra et al. (2004), thereby ensuring internal consistency (Table 3). Convergent validity was achieved with factor loadings ranging between 0.76 and 0.88 across constructs, which satisfies established methodological benchmarks (McKnight et al., 2002). Discriminant validity was also supported, confirming the conceptual distinctiveness of personalization, trust, and surveillance, consistent with guidelines suggested by Xu et al. (2011). The direct effect analysis showed that perceived fintech personalization had a significant positive influence on user retention ($\beta = 0.36$, $P < 0.001$), supporting H_1. This aligns with Bleier and Eisenbeiss (2015), who emphasized the value of personalization in enhancing consumer engagement and long-term loyalty. Personalization also exerted a significant positive effect on digital trust ($\beta = 0.42$, $P < 0.001$), confirming H_{2a}. This finding resonates with prior trust-based

Figure 1: Proposed conceptual framework

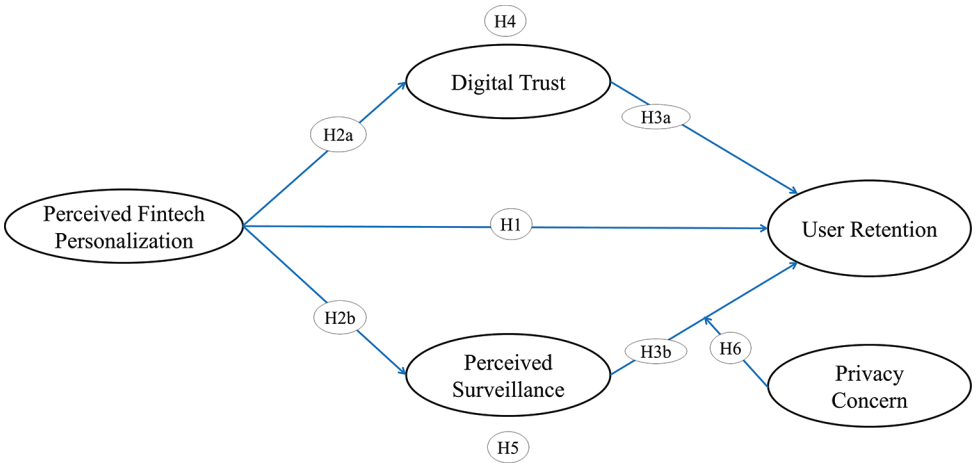

Table 3: SEM results for hypotheses testing

Hypothesis	Path	Path coefficient (β)	Standard error (SE)	t-value	P-value	Hypothesis outcome
H_1	Perceived Fintech Personalization→User Retention	0.36	0.07	5.14	<0.001	Supported
H_{2a}	Perceived Fintech Personalization→Digital Trust	0.42	0.06	7.00	<0.001	Supported
H_{2b}	Perceived Fintech Personalization→Perceived Surveillance	0.29	0.05	5.80	<0.001	Supported
H_{3a}	Digital Trust→User Retention	0.40	0.06	6.67	<0.001	Supported
H_{3b}	Perceived Surveillance→User Retention	–0.27	0.05	–5.40	<0.001	Supported
H_4	Personalization→Digital Trust→User Retention (Mediation)	0.17	0.04	4.25	<0.001	Significant Indirect Effect
H_5	Personalization→Surveillance→User Retention (Mediation)	–0.11	0.03	–3.67	<0.001	Significant Indirect Effect
H_6	Privacy Concern×Perceived Surveillance→User Retention (Moderation)	–0.09	0.03	–3.00	0.002	Supported (Moderation)

studies in e-commerce, where personalization fosters reliability and confidence (Gefen, 2002). In parallel, personalization significantly increased perceived surveillance ($\beta = 0.29$, $P < 0.001$), supporting H_{2b} and echoing the personalization–privacy paradox highlighted by Aguirre et al. (2015).

The analysis further revealed that digital trust strongly predicted user retention ($\beta = 0.40$, $P < 0.001$), supporting H_{3a}. This is consistent with Bhattacherjee's (2001) expectation-confirmation model, which underlines trust as a key driver of continuance intention. Conversely, perceived surveillance exerted a significant negative effect on user retention ($\beta = -0.27$, $P < 0.001$), supporting H_{3b}. This result reinforces Martin and Murphy's (2017) findings that intrusive data practices reduce consumers' willingness to sustain digital relationships. The mediation tests indicated that digital trust significantly mediated the link between personalization and retention ($\beta = 0.17$, $P < 0.001$), supporting H_4. This underscores the argument of McKnight et al. (2002) that trust mechanisms convert personalization benefits into long-term engagement. Similarly, perceived surveillance mediated the relationship between personalization and retention, but with a negative effect ($\beta = -0.11$, $P < 0.001$), supporting H_5. This dual pathway confirms the ambivalence of personalization, as it simultaneously fosters trust while triggering privacy concerns (Malhotra et al., 2004; Hayes, 2017; Le et al., 2021). Finally, the moderation analysis revealed that privacy concern amplified the negative influence of perceived surveillance on retention ($\beta = -0.09$, $P = 0.002$), supporting H_6. This finding is consistent with Xu et al. (2011), who demonstrated that privacy concerns heighten the adverse impacts of surveillance perceptions. Taken together, the results validate the dual mediation framework, showing that personalization in fintech is both an enabler of trust and a trigger of surveillance concerns, which jointly shape user retention.

The findings confirm that personalization plays a significant role in shaping user retention in fintech, with both positive and negative pathways evident in the analysis (Bleier and Eisenbeiss, 2015). Personalization was found to directly enhance user retention, suggesting that customized financial services strengthen engagement, consistent with prior evidence on personalization's role in building loyalty (Reichheld and Schefter, 2000). Additionally, personalization significantly increased digital trust, which in turn positively influenced retention, supporting the mediating role of trust as outlined in e-commerce and information systems studies (McKnight et al., 2002; Gefen, 2002). At the same time, personalization also heightened perceptions of surveillance, which negatively affected retention, thereby validating the personalization–privacy paradox in fintech (Aguirre et al., 2015; Xu et al., 2011). Mediation tests confirmed that trust served as a positive mechanism while surveillance acted as a negative mechanism, jointly shaping retention outcomes (Bhattacherjee, 2001). Furthermore, privacy concerns amplified the adverse effect of surveillance on retention, consistent with the privacy calculus perspective where concerns intensify the perception of risk (Malhotra et al., 2004; Martin and Murphy, 2017). Overall, these findings illustrate the dual-edged nature of personalization in fintech, simultaneously fostering user trust and triggering surveillance concerns that condition long-term retention.

5. CONCLUSION

This study concludes that personalization in fintech exerts dual influences on user retention by simultaneously fostering trust and triggering perceptions of surveillance (Bleier and Eisenbeiss, 2015; Aguirre et al., 2015). The findings demonstrate that trust functions as a positive mediator, strengthening user continuance, while surveillance acts as a negative mediator that undermines retention, thereby extending the personalization–privacy paradox into the fintech domain (Xu et al., 2011). These results highlight that retention in fintech is shaped not only by personalization benefits but also by user concerns regarding privacy, reinforcing the centrality of trust in digital interactions (McKnight et al., 2002; Gefen, 2002). Despite its contributions, the study has limitations. The cross-sectional survey design constrains causal inference, echoing methodological cautions raised in prior continuance research (Bhattacherjee, 2001). Data were collected from fintech users within a limited context, which may restrict generalizability across cultures and service categories (Reichheld & Sasser, 1990). Future studies should employ longitudinal designs and cross-market samples to test the stability of the dual mediation model under diverse regulatory and cultural settings, particularly as privacy concerns intensify globally (Malhotra et al., 2004; Martin and Murphy, 2017).

5.1. Future Research Directions

The present study highlights important pathways for future inquiry into fintech personalization and retention. First, future research could adopt longitudinal designs to capture the dynamic evolution of digital trust and surveillance perceptions over time, thereby addressing limitations of cross-sectional approaches (Bhattacherjee, 2001). Second, comparative cross-cultural studies would enrich understanding by examining how

institutional contexts and cultural values shape privacy concerns and personalization responses (Malhotra et al., 2004; Martin and Murphy, 2017). Third, further research may extend this model by integrating additional constructs such as perceived fairness, algorithmic transparency, or consumer empowerment, which have been shown to influence trust in digital platforms (McKnight et al., 2002; Bleier and Eisenbeiss, 2015). In addition, future scholars should conduct systematic reviews or meta-analyses to consolidate fragmented findings and provide integrative insights into personalization–privacy dynamics (Khan et al., 2025; Khan et al., 2025). Finally, qualitative approaches such as interviews or netnography could complement quantitative models by unpacking the nuanced experiences of fintech users.

5.2. Implications

The findings of this study offer both theoretical and managerial implications. Theoretically, the results extend personalization research by empirically validating the dual mediation role of digital trust and perceived surveillance, showing that personalization operates as both a driver of retention and a trigger of privacy concerns (Bleier and Eisenbeiss, 2015; Aguirre et al., 2015). By integrating trust theory (McKnight et al., 2002; Gefen, 2002) with the personalization–privacy paradox (Xu et al., 2011) and privacy calculus perspectives (Malhotra et al., 2004), this study provides a comprehensive framework for understanding continuance in fintech beyond expectation-confirmation models (Bhattacherjee, 2001). From a managerial perspective, the results suggest that fintech platforms must carefully design personalization strategies to build trust while minimizing cues of surveillance (Martin and Murphy, 2017). This includes transparent communication of data practices and privacy safeguards, especially for privacy-sensitive users, who react strongly to perceptions of over-monitoring (Reichheld and Schefter, 2000). By balancing personalization benefits with ethical data practices, fintech providers can enhance retention, sustain competitive advantage, and foster long-term loyalty.

REFERENCES

Aguirre, E., Mahr, D., Grewal, D., De Ruyter, K., Wetzels, M. (2015), Unraveling the personalization-privacy paradox: The role of psychological contract breach. Journal of Retailing, 91(1), 34-49.

Bhattacherjee, A. (2001), Understanding information systems continuance: An expectation-confirmation model. MIS Quarterly, 25(3), 351-370.

Bleier, A., Eisenbeiss, M. (2015), The importance of trust for personalized online advertising. Journal of Retailing, 91(3), 390-409.

Fornell, C., Larcker, D.F. (1981), Evaluating structural equation models with unobservable variables and measurement error. Journal of Marketing Research, 18(1), 39-50.

Gefen, D. (2002), Customer loyalty in e-commerce. MIS Quarterly, 26(4), 507-524.

Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E. (2010), Multivariate Data Analysis. 7th ed. London: Pearson.

Hayes, A.F. (2017), Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach. 2nd ed. New York: Guilford Press.

Khan, F.M., Khan, A., Ahmed, S.S., Naz, A., Salim, M., Zaheer, A., Rashid, U. (2025), The Machiavellian, narcissistic, and psychopathic consumers: A systematic review of Dark Triad. International Journal of Consumer Studies, 49(2), 70018.

Khan, F.M., Rasul, T., Ahmed, S.S., Ladeira, W., Santini, F.D.O., Azhar, M., Khan, M. (2025), Cultural Values in Consumer-Centric Research: A Hybrid Review Exploring Trends, Structure, and Future Research Trajectories. Global Business and Organizational Excellence. Available from: https://www.researchgate.net/publication/395220779

Le, M.T.H., Ngo, C.T., Trinh, T.T.H., Nguyen, T.T.H. (2021), Examining factors that boost intention and loyalty to use Fintech post-COVID-19 lockdown as a new normal behavior. Frontiers in Psychology, 12, 743654.

Malhotra, N.K., Kim, S.S., Agarwal, J. (2004), Internet users' information privacy concerns (IUIPC): The construct, the scale, and a causal model. Information Systems Research, 15(4), 336-355.

Martin, K.D., Murphy, P.E. (2017), The role of data privacy in marketing. Journal of the Academy of Marketing Science, 45(2), 135-155.

McKnight, D.H., Choudhury, V., Kacmar, C. (2002), Developing and validating trust measures for e-commerce: An integrative typology. Information Systems Research, 13(3), 334-359.

Nunnally, J.C. (1978), Psychometric Theory. 2nd ed. United States: McGraw-Hill.

Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y., Podsakoff, N.P. (2003), Common method biases in behavioral research: A critical review of the literature and recommended remedies. Journal of Applied Psychology, 88(5), 879-903.

Reichheld, F.F., Sasser, W.E. Jr. (1990), Zero defections: Quality comes to services. Harvard Business Review, 68(5), 105-111.

Reichheld, F.F., Schefter, P. (2000), E-loyalty: Your secret weapon on the web. Harvard Business Review, 78(4), 105-113.

Rust, R.T., Lemon, K.N., Zeithaml, V.A. (2004), Return on marketing: Using customer equity to focus marketing strategy. Journal of Marketing, 68(1), 109-127.

Xu, H., Luo, X., Carroll, J.M., Rosson, M.B. (2011), The personalization-privacy paradox: An exploratory study of decision making process for location-aware marketing. Decision Support Systems, 51(1), 42-52.