

Fintech adoption amidst constraints: a dual-factor perspective

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Abstract

Purpose – This study explores a dual-factor approach to adopting fintech by leveraging an integrated theoretical framework derived from dual-factor theory and stimulus–organization–response (SOR) theory. It aims to understand the factors that influence individuals’ attitudes and intentions toward fintech adoption, focusing on both enabling and inhibiting factors.

Design/methodology/approach – This study employed a mall intercept technique to collect 510 valid responses, which were then subjected to partial least squares structural equation modelling (PLS-SEM) analysis.

Findings – The results reveal that openness to change, economic benefits, innovativeness and attitudes toward fintech significantly influence fintech adoption intentions. Contrary to their expected inhibitory roles, regulatory constraints and government support constraints were found to have a positive influence on attitudes, economic benefits, innovativeness and adoption intentions.

Originality/value – This study makes a notable contribution to research on fintech adoption behavior by integrating multiple theoretical frameworks and bridging the gap between individual-level factors and the broader socioeconomic environment. It provides a holistic understanding of the dual influences of enablers and inhibitors on fintech adoption. The emphasis on regulatory constraints and government support constraints, as well as innovativeness, which is crucial yet often overlooked, contributes to the originality of this study. Policymakers and industry stakeholders should adopt a holistic approach to foster an environment where innovativeness is valued, economic benefits are tangible, government support is evident and positive attitudes toward fintech are cultivated. These findings offer actionable insights for fintech solution providers and policymakers to navigate a rapidly evolving fintech ecosystem.

Keywords Fintech, Regulation constraints, Government support constraints, Stimulus–organization–response (SOR) theory, Dual-factor model

Paper type Research article

1. Introduction

In recent years, the financial technology (fintech) landscape has grown rapidly, transforming traditional financial services and redefining how individuals interact with financial products. The

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advent of digital platforms, from mobile applications to blockchain, has opened novel avenues for transactions and investment. Globally, about 64% of consumers now use fintech, with rapid growth seen in developing countries. The financial gains were projected to reach up to \$3.7 trillion in 2025 in the developing economies (Srivastava, Mohta, & Shunmugasundaram, 2024). Fintech is also seen as a means to foster financial inclusion, improve government payment systems and enhance public expenditure tracking (Mothobi & Kebotsamang, 2024).

Despite these advances, the key drivers of fintech adoption are not yet fully understood. Much of the literature offers a one-dimensional perspective that primarily focuses on enablers such as trust, usability and perceived value while neglecting inhibitors (Kim, Mirusmonov, & Lee, 2010; Srivastava *et al.*, 2024), even though inhibiting factors can wield a stronger psychological influence on user decisions than enablers (Sullivan & Koh, 2019). Furthermore, in many emerging markets, the regulatory environment is fragmented (Rohatgi, Gera, & Nayak, 2024), introducing uncertainty that can hinder fintech adoption and innovation (Choi, Chung, Seyha, & Young, 2020). Although government support and regulatory constraints are recognized as relevant inhibitors, studies have seldom examined these factors together within an integrated framework (see Marakarkandy, Yajnik, & Dasgupta, 2017; Rohatgi *et al.*, 2024; Gupta, Pandey, El Ammari, & Sahu, 2023). We address this gap by examining how government support constraints simultaneously influence two underexplored pathways: perceived economic benefits and personal innovativeness. These avenues illuminate how institutional constraints may affect fintech adoption.

Beyond external constraints, internal user traits also warrant deeper investigation. Fintech research has largely concentrated on functional or technological drivers, neglecting personality-based influences (Gupta *et al.*, 2023; Kim *et al.*, 2010; Olfat, 2024). To address this gap, we introduce “openness to change” and “personal innovativeness” as new explanatory variables, in response to calls to integrate psychological traits into adoption research (Gupta & Arora, 2017; Pillai & Sivathanu, 2020). Personal dispositions are known to shape technology-related behavior, but empirical evidence on openness to change and personal innovativeness in fintech contexts remains scarce.

Moreover, prior studies often use a single-theory lens, overlooking the benefits of integrated theory synergies (Marakarkandy *et al.*, 2017). As shown in Table A in the supplementary data file, dual-factor theory (DFT) and stimulus–organism–response (SOR) have been applied to fintech adoption largely in isolation, with few studies integrating both frameworks. We address this theoretical gap by integrating DFT and SOR into a single model. This integrated perspective recognizes that enablers and inhibitors interact dynamically rather than independently and incorporates both external stimuli and internal factors. In doing so, our approach moves beyond conventional frameworks (e.g. total addressable market (TAM) and unified theory of acceptance and use of technology (UTAUT)) to provide a more comprehensive explanation of fintech adoption.

Based on the above discussion, the study is guided by three objectives: (1) to investigate the influence of openness to change, the regulatory environment and perceived economic benefits on individuals’ attitudes toward fintech; (2) to examine the role of government support as a key external factor influencing both perceived economic benefits and personal innovativeness and (3) to explore how personal innovativeness, perceived economic benefits, government support and attitudes collectively shape intentions to adopt fintech. In line with these objectives, our research questions are as follows:

- (1) How do openness to change, the regulatory environment and perceived economic benefits influence attitudes toward fintech?
- (2) How does government support influence perceived economic benefits and personal innovativeness in fintech adoption?
- (3) To what extent do personal innovativeness, perceived economic benefits, government support and attitudes collectively influence fintech adoption intentions?

Ghana's fast-growing digital finance ecosystem, evolving regulatory environment and status as a regional innovation hub make it an ideal context for this study; insights from Ghana's high-growth market may also apply to other emerging economies (Pobee, Jibril, & Owusu-Oware, 2023).

This study contributes to the fintech adoption literature. First, by assessing enablers and inhibitors simultaneously, it transcends one-sided approaches in prior research. Second, it finds that contrary to expectations, traditionally inhibitory factors (e.g. regulatory limits, weak government support) can positively influence key adoption factors (user attitudes, perceived economic benefits, personal innovativeness) and ultimately strengthen adoption intentions. Third, by incorporating openness to change and personal innovativeness (an underexplored trait), we highlight the important role of individual personality in shaping attitudes. Finally, integrating the dual-factor perspective with SOR theory yields a more robust framework for understanding fintech adoption in emerging markets. Beyond these contributions, our findings also offer practical guidance: supportive regulatory policies and communication strategies aligned with users' openness to change can help drive fintech adoption. Recognizing the dual influence of government constraints and user psychology can help stakeholders design effective interventions to promote inclusive, sustainable fintech growth.

2. Theoretical background

2.1 Dual-factor theory

DFT, rooted in Cenfetelli's (2004) conceptualization, argues that enablers and inhibitors are distinct, independent determinants of technology acceptance rather than simple opposite ends of the same continuum. This distinction makes the theory particularly suitable for examining fintech ecosystems, where users frequently encounter not only attractive technological features but also institutional, regulatory and security concerns. Thus, integrating enablers and inhibitors provides a holistic understanding of fintech adoption (Sullivan & Koh, 2019). In technology adoption, people tend to focus more on inhibitors, while unintentionally overlooking other enabling factors of technology adoption (Cenfetelli, 2004; Cenfetelli & Schwarz, 2011).

The recent growth in the application of DFT in fintech studies demonstrates the dual nature of adoption, with enablers and inhibitors coexisting to shape user behavior, as detailed in Table A in the [supplementary file](#).

Despite the growing application of DFT, existing studies tend to focus enablers without integrating broader environmental or institutional factors that may shape inhibitors, such as government support constraints or regulatory climates. Moreover, very few studies combine DFT with complementary frameworks that explain how individuals psychologically process these enablers and inhibitors.

2.2 Stimulus–organism–response theory

SOR theory provides a lens for examining the stimulus (external factors), the organism (individual's internal processing) and the response components in the context of fintech adoption (Olfat, 2024). The SOR theory is applied to this study because it explains how external stimuli (e.g. government support, regulatory environment) influence internal cognitive and emotional response stimuli (e.g. value and innovativeness), which then affect attitude toward fintech (organism) and how this interaction can drive intentions toward fintech (Olfat, 2024). This integrated model tackles gaps in fintech adoption research by shifting from technology-centric models such as TAM and UTAUT and incorporating psychological and contextual factors.

Our model suggests that enablers and inhibitors do not operate in isolation; rather, they interact dynamically across the SOR process. For instance, the presence of strong enablers, such as perceived economic benefits or personal innovativeness, may offset the adverse effects

of external inhibitors, including government support constraints and regulatory uncertainty. In fintech contexts characterized by both opportunity and uncertainty, users cognitively weigh perceived benefits against risks. Studies, particularly in developing countries where fintech ecosystems are rapidly evolving amid underdeveloped or inconsistent regulatory environments, have shown that users may still adopt fintech solutions when the perceived personal or economic value outweighs institutional barriers.

2.3 Integrating DFT and SOR

This study employs an integrated theoretical approach that combines DFT and SOR framework to examine fintech adoption. As illustrated in Figure 1, the hypothetical model is grounded in these two complementary theories. While DFT identifies *what* influences adoption by distinguishing between enabling and inhibiting factors, SOR *explains how* these external influences shape users’ internal evaluations and subsequent behaviors.

The integration of DFT and SOR is particularly suitable for fintech research in emerging markets, where users must navigate environments characterized by both innovation-driven enablers and institution-driven inhibitors. Emerging markets often experience rapid technological advancement alongside institutional inhibitors such as regulatory gaps, inconsistent government support and information asymmetry. These conditions create a complex decision-making context in which users must simultaneously weigh positive and negative forces when forming attitudes and adoption intentions (Cenfetelli, 2004; Sullivan & Koh, 2019).

DFT effectively captures this duality by recognizing that enablers and inhibitors can co-exist rather than assuming that adoption is driven solely by enabling drivers. Likewise, SOR is well suited to emerging market contexts because external environmental factors strongly shape user perceptions due to heightened uncertainty and information asymmetry.

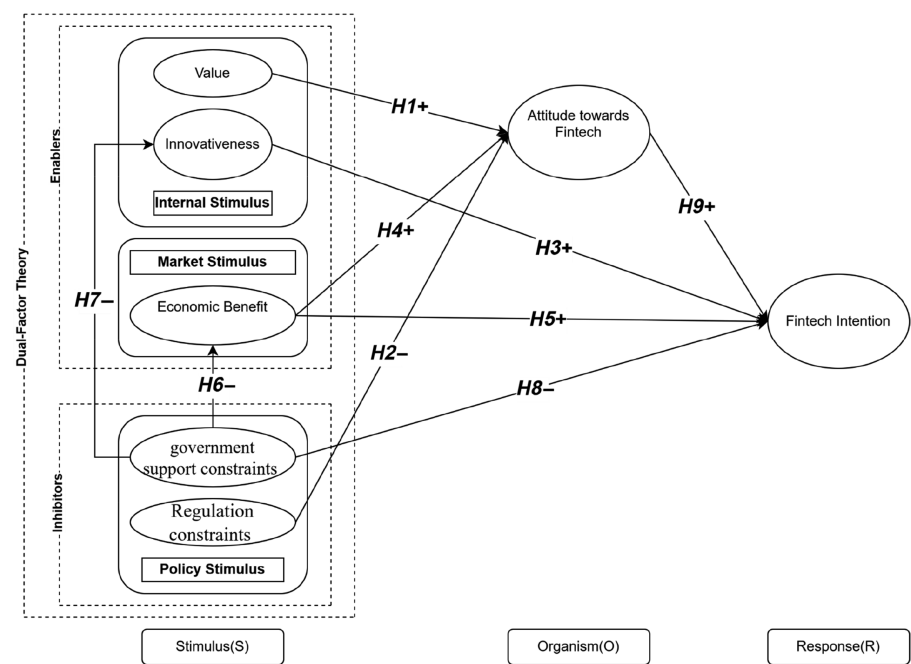


Figure 1. Hypothesized research model

3. Hypothesis development

3.1 Enablers, internal and market stimulus

3.1.1 Values. Openness to change is a value that affects behavioral choices, guiding individuals toward actions aligned with their personal interests. Fintech adoption often entails navigating unfamiliar digital platforms, managing digital transactions and dealing with multichannel institutions. These characteristics make the fintech ecosystem inherently riskier and more complex than traditional financial services. Individuals high in openness to change are typically more willing to embrace uncertainty, experiment with innovative tools and depart from routine behaviors. In the context of fintech, the openness to change trait is especially critical, as adopting digital financial services often involves navigating perceived risks (e.g. data security, unfamiliar technology) and complexity (e.g. understanding new platforms, managing digital transactions). Individuals high in openness are more likely to view these characteristics as opportunities rather than barriers, making them more inclined to engage with fintech innovations. These individuals are more willing to engage with innovative technologies like fintech platforms, which often require behavioral and cognitive shifts, such as trusting digital wallets or navigating decentralized financial tools. Moreover, fintech frequently disrupts traditional financial routines, and adapting to such shifts calls for an openness to change.

Some studies found no association between openness to change and attitudes toward fintech-related services like mobile banking and mobile payments (Gupta & Arora, 2017). However, research also establishes a direct, positive relationship between openness to change and attitudes toward emerging digital solutions (Pillai & Sivathanu, 2018), indicating that this value may be more influential in contexts emphasizing innovation and technology adoption.

Since fintech services represent a shift toward digital financial solutions that require users to embrace new technologies and behaviors, the value of openness to change will probably play a relevant role in influencing attitudes. Fintech adoption is mainly driven by perceived utility, convenience and digital transformation. Hence, individuals who prioritize openness to change may be more inclined to develop favorable attitudes toward fintech solutions.

Recent studies highlight the crucial role of digital finance in enhancing financial inclusion in developing economies. Mothobi and Kebotsamang (2024) found that while mobile-led financial technologies, such as mobile money and e-wallets, are more impactful in East African countries, bank-led fintech innovations rely more on LTE coverage. This distinction underscores the need for contextualized digital finance strategies. Similarly, Coffie, Hongjiang, Mensah, Kiconco, and Simon (2021) extend the conversation to SMEs in Ghana, emphasizing that fintech diffusion is shaped by a combination of human (CEO characteristics), business (firm attributes) and technology (payment service features) factors. In line with these findings, perceived enabling factors positively influence fintech adoption. The regional variations observed in Mothobi and Kebotsamang (2024) further highlight the importance of contextual factors in shaping adoption behaviors, supporting the premise that different market structures influence fintech adoption patterns. Based on these discussions, the following hypothesis is proposed:

- H1.* The value of openness to change is positively associated with attitudes toward fintech.

3.1.2 Innovativeness. Personal innovativeness depicts a person's tendency to embrace new technologies earlier than others, driven by curiosity and a proactive learning attitude (Gupta et al., 2023; Kim et al., 2010). Highly innovative individuals are more likely to recognize the benefits of emerging technologies and engage with them during the early adoption phase (Kim et al., 2010). Innovative people actively seek information to reduce uncertainty and anxiety linked with new technology use.

Empirical evidence highlights the significant role of personal innovativeness in fintech adoption, it is the strongest predictor of central bank digital currencies (Gupta et al., 2023). Their study highlights personal innovativeness as a significant determinant of behavioral

intention. Given fintech's reliance on digital platforms and technological advancements, individuals with high personal innovativeness are more likely to explore and adopt fintech solutions. Thus, we postulate the following hypothesis.

H3. Innovativeness is positively associated with fintech intentions.

3.1.3 Economic benefit. Economic benefits are associated with the financial and transactional advantages consumers perceive when using fintech solutions. These advantages include cost savings, increased convenience, time efficiency and broader access to financial services compared to traditional banking methods. Consumers are often motivated by the potential for economic gains, making financial incentives a key driver of fintech adoption. As fintech continues to expand, its influence on economic growth may intensify, reinforcing consumers' need for economic benefits from both conventional banking and fintech.

Previous studies have revealed that economic benefits shape consumer attitudes and behavioral intentions. For instance, the findings of [Hu, Shou, Kang, and Park \(2020\)](#) revealed that economic benefits directly improve attitudes toward technology adoption, while [Anubhav, Agarwal, and Aashish \(2023\)](#) confirmed a direct influence on behavioral intention. However, some studies ([Anubhav et al., 2023](#)) report no significant association between economic benefits and attitudes. This suggests that this relationship may depend on contextual factors such as trust, perceived risk or individual financial literacy. This leads us to propose the following hypothesis.

H4. Economic benefits are positively associated with attitudes toward fintech.

H5. Economic benefits are positively associated with fintech intention.

3.2 Inhibitors and policy stimulus

3.2.1 Regulatory constraints. Regulatory constraints refer to perceived barriers arising from fragmented, ambiguous, overly complex or lack of supportive legal frameworks governing fintech services ([Choi et al. \(2020\)](#)). Regulatory uncertainty has been identified as one of the key inhibitors of fintech adoption ([Sullivan & Koh, 2019](#)), especially as fintech innovation often outpaces regulation ([Sullivan & Koh, 2019](#)).

Regulatory constraints arising from a lack of consumer protection laws reduce users' confidence, increase perceived risk and undermine the perceived legitimacy of fintech platforms. Fintech operating under regulatory constraints heightens risk aversion, hesitation or skepticism, all of which are detrimental to attitude formation due to high-risk exposure to opportunistic behavior ([Anic, Škare, & Kursan Milaković, 2019](#)). From the perspective of the SOR model, the absence of clear and supportive regulation triggers negative stimuli and psychological reactions (e.g. uncertainty, anxiety, perceived risk) due to increased cognitive dissonance and elevated risk perceptions, dampens enthusiasm and distorts trust, thereby diminishing favorable attitudes toward fintech.

Due to the complexity of fintech services, stakeholders, specifically customers, often lack the necessary knowledge and resources to evaluate risks independently. Hence, regulatory oversight is critical in reducing opportunistic behaviors ([Anic et al., 2019](#)). Despite the regulatory environment's significance in ensuring safe transactions, fintech regulations frequently lag behind industry advancements, outpacing the law-making process ([Xu & Bao, 2023](#)). This regulatory uncertainty can create user confusion, perceived legal risk and lack of trust in service providers, all of which contribute to negative attitudes toward fintech. When potential adopters are unsure about the rules protecting their transactions, data or privacy, they are more likely to view fintech platforms as unreliable or unsafe ([Anic et al., 2019](#)).

[Coffie et al. \(2021\)](#) highlight that, despite the potential of fintech payment services, their diffusion in SMEs is uneven, suggesting that business constraints and technological complexities may hinder adoption. [Mothobi and Kebotsamang \(2024\)](#) similarly point out that in some contexts, certain network infrastructures (e.g. LTE vs GSM/UMTS) have

differential impacts on financial inclusion. The presence of structural barriers, be it network-related, accessibility, business constraints or consumer skepticism, demonstrates the dual nature of fintech adoption, where both enabling and inhibiting factors co-exist. So, we assert that:

H2. Regulation constraints are negatively associated with attitudes toward fintech.

3.2.2 Government support constraints. Government support – or lack thereof – functions as a critical external institutional force that shapes users' perceptions of technology value, given that limited government involvement triggers skepticism and lowers perceived usefulness, particularly in terms of financial outcomes like efficiency, cost reduction and economic inclusion. Government support includes policies, incentives and infrastructure offered by state agencies to promote the development of fintech. These enabling conditions improve credibility, stimulate demand and add to the total value of fintech innovations (Marakarkandy *et al.*, 2017). Since fintech is linked with government efforts to drive financial inclusion, supportive policies can play a significant role in adoption. Prior empirical studies have revealed mixed results on the role of government support in fintech adoption. For instance, Rohatgi *et al.* (2024) government support positively affects digital banking adoption, while Marakarkandy *et al.* (2017) found no significant effect on Internet banking, indicating potential contextual differences.

Full realization of economic benefits is heavily reliant on effective government involvement, such as regulatory clarity, cybersecurity frameworks, and digital infrastructure investment. Constraints in government support negatively affect how individuals perceive the economic benefits of fintech. For example, without government-led interoperability standards, mobile money systems may remain siloed, leading to inefficiencies and higher transaction costs for users. Likewise, the absence of robust digital ID systems, cybersecurity protocols or tax incentives can weaken the economic appeal of fintech platforms, especially for underserved or rural populations. When government support is weak or inconsistent, users may face difficulties accessing services, encounter hidden fees or fear that platforms could be shut down or exposed to legal grey areas, thereby undermining their perceived economic utility (Sullivan & Koh, 2019).

Equally, when individuals perceive insufficient or ineffective government backing in the fintech sector, they are less likely to demonstrate curiosity and are also discouraged from exploring emerging digital financial tools. Sullivan and Koh (2019) found that weak or unclear government involvement tends to suppress user confidence and exploratory behavior in fintech. Similarly, constrained support sends signals of instability and creates a climate of distrust, where individuals doubt the safety, effectiveness, or future viability of fintech innovations. Similarly, perceived institutional void undermines user confidence, and users are less likely to develop favorable attitudes toward fintech. Limited government support signals an immature fintech ecosystem, making users feel unsupported or vulnerable, particularly in the event of fraud, data breaches or service failures – concerns that directly shape how fintech is perceived. Therefore, we hypothesize as follows:

H6. Government support constraints weaken the perceived economic benefits of fintech

H7. Government support constraints are negatively associated with innovativeness.

H8. Government support constraints are associated with less-favorable fintech attitudes.

3.3 Attitudes and fintech intentions.

Attitude refers to a person's predisposition to assess an object, activity, or innovation positively or negatively (Marakarkandy *et al.*, 2017). Prior empirical studies have consistently depicted a positive relationship between attitudes and behavioral intentions across various domains. In fintech adoption, past research confirms that favorable attitudes directly improve usage intentions (Marakarkandy *et al.*, 2017). Similar linkages have been found in other new product

adoption contexts, such as green purchasing and technology contexts like smart farming (Anubhav *et al.*, 2023). These findings suggest that the possibility of adoption increases as people develop more favorable attitudes toward fintech. Hence, we propose the following hypothesis:

H9. Attitudes toward fintech have a positive influence on fintech intentions.

The proposed hypothesized relationship between the aforementioned variables is illustrated in Figure 1.

4. Methodology

4.1 Measurement instruments

We adapted all measurement items from prior studies to enhance content validity. The items were reworded to better reflect the context of the study. Economic benefits were evaluated using a measurement instrument developed by Ryu (2018). To assess regulation and government support, items from Choi *et al.* (2020) were used. The innovativeness measures were derived from Kim *et al.* (2010), whereas the scales for the value of openness to change were sourced from Pillai and Sivathanu (2020). For attitudes, the scales of Belanche, Casaló, and Flavián (2019) were adopted. Finally, we measured fintech intention using three items from Ofori, Boateng, Okoe, and Gvozdanovic (2017). We tasked the subject matter experts with reviewing the questionnaire to improve its comprehensibility and user-friendliness. Based on their feedback, we improved the questionnaire. Before collecting the data, we ran a pre-test with 15 fintech users to detect any linguistic or sequence concerns. The questionnaire was finalized after the feedback was incorporated. The survey was conducted in English and anchored on a 7-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (7) as evidence in Appendix A.

4.2 Sample and data collection

we assessed the sufficiency of the study sample size using the conventional “10 times rule” as suggested by (Hair, Ringle, & Sarstedt, 2011), which stipulates that the sample size must be at least 10 times the number of constructs in the model. In all counts, 510 valid responses far exceeded the recommended thresholds.

The mall intercept technique (Bush & Hair, 1985) was used to approach the respondents at Accra Mall, West Hills Mall and Junction Mall, the three largest shopping malls in Accra and Ghana. The mall intercept approach is deemed a suitable data collection method for studies on technology adoption as shopping mall attracts a diverse group of patronage with diverse demographic characteristics, including individuals from various age groups, income levels, educational levels and broad geographic areas (Sudman, 1980; Bush & Hair, 1985). We followed the protocols recommended by Sudman (1980) to enhance unbiased sampling and improve sample quality at shopping malls. Data were collected during different hours of the day, on different days of the week, and on the weekend in May 2022 to minimize periodicity and noncoverage problems (Pappu & Quester, 2008). Following Hornik and Ellis (1988), trained research assistants were stationed at vantage points in the selected shopping malls. The research assistants approached every 10th person from the stationed mall entrance, explained the rationale behind the research, assessed them for eligibility and asked them to participate in the survey. Respondents willing to participate in our research were provided with a pen to complete the questionnaire and return it on the spot. After discarding 35 incomplete and/or insincere responses, 510 valid responses were analyzed. The valid responses far exceeded the ten-times minimum sample size rule recommended by Hair *et al.* (2011). The demographic profile indicates that fintech use in this study is largely driven by economically active individuals, with Generation Y (29–43 years) constituting 53.92% of the sample ($n = 275$), followed by Generation Z (18–28 years) at 26.27% ($n = 134$) and

Generation X (44–58 years) at 19.80% ($n = 101$). Regarding gender, males accounted for 78.43% ($n = 400$) of respondents, while females represented 21.57% ($n = 110$). In terms of educational attainment, the majority of respondents hold a bachelor's degree (65.88%, $n = 336$), followed by Diploma or below qualifications (23.14%, $n = 118$), whereas 9.22% ($n = 47$) possess master's degree and only 1.76% ($n = 9$) hold a PhD.

4.3 Common method bias (CMB)

Following the guidelines suggested by [Mackenzie and Podsakoff \(2012\)](#), we aimed to minimize common method bias. For this purpose, [Mackenzie and Podsakoff \(2012\)](#) have suggest various *ex ante* and ex-post statistical treatments. Our study incorporated several *ex ante* procedural steps. First, we encouraged respondents to answer accurately to our instruments, emphasizing in the cover instructions that we valued their opinions, and that there were no right or wrong answers. To ensure anonymity and confidentiality, no personal information was collected. The questionnaire consisted of three sections with randomized question sequence. We pretested the questionnaire with 15 fintech users to identify any linguistic or sequencing issues. Ex-post, we used variance inflation factor (VIF) to evaluate possible issues with common method bias. [Kock \(2015\)](#) recommend that VIF values must not be greater than 3.3 to ensure that there are no issues with common method bias. VIF values shown in [Table B](#) in the [supplementary material](#) file are all well below the 3.3 threshold. We therefore conclude that common method bias is not a concern.

5. Results and analysis

Our analytical approach was predicated on PLS-SEM using SmartPLS 3 software to evaluate our hypothesized model. We use the PLS-SEM two-step procedure recommended by [Chin \(2010\)](#). Assessment of the validation and adequacy of the measurement model was the first step, followed by structural model hypothesis testing.

5.1 Measurement model assessment

The reliability, convergent validity and discriminant validity of the measurement model were assessed based on criteria proposed by [Henseler, Ringle, and Sarstedt \(2015\)](#). The results shown in [Table 1](#) indicate that all measurement construct loadings, composite reliability, Cronbach's alpha and rho A surpassed the 0.70 threshold recommended by ([Henseler, Hubona, & Ray, 2016](#)); therefore, the constructs were reliable. Additionally, convergent validity was confirmed with the respective average variance extracted (AVEs) superseded 0.50 ([Henseler et al., 2016](#)).

Subsequently, discriminant validity was established using the Fornell and Larcker criterion and the heterotrait-monotrait (HTMT) correlation ratio criteria ([Henseler et al., 2015](#); [Kumar & Purani, 2018](#)). [Table 2](#) shows that the square root of AVE for each construct exceeds the maximum correlation between any pair of constructs, demonstrating that discriminant validity was met. The HTMT ratio values in their entirety fall below the conservative threshold of 0.85 ([Henseler et al., 2015](#)). Therefore, the measurement model shows sufficient evidence of reliability, convergent validity and discriminant validity.

5.2 Structural model assessment

The structural model path coefficients and their significance were assessed using a bootstrapping procedure that generated 5,000 subsamples, with replacements from a valid sample of 510 ([Hair et al., 2011](#)). The results of the structural model analysis are presented in [Table 3](#). More specifically, the values of openness to change ([H1](#): $\beta = 0.604$; $p < 0.001$) and economic benefits ([H4](#): $\beta = 0.238$, $p < 0.001$) have a significant and positive influence on attitudes toward fintech at the 1% statistical significance level, providing support for [H1](#) and [H4](#).

Table 1. Assessment of the measurement model

Construct	Item	Loading	Excess kurtosis	Skewness	Cramér-von mises p-value	α	rho_A	CR	AVE
Economic Benefit	EB1	0.928	−0.480	−0.698	0.000	0.929	0.931	0.955	0.876
	EB2	0.941	−0.256	−0.758	0.000				
	EB3	0.940	−0.143	−0.849	0.000				
Value of Openness to Change	VC1	0.902	−0.039	−0.939	0.000	0.917	0.923	0.948	0.858
	VC2	0.938	0.450	−1.108	0.000				
	VC3	0.938	0.585	−1.160	0.000				
Innovativeness	IN1	0.934	−0.038	−0.978	0.000	0.903	0.917	0.939	0.837
	IN2	0.890	−0.641	−0.582	0.000				
	IN3	0.920	0.299	−1.061	0.000				
Regulation	RG1	0.905	−0.897	0.041	0.000	0.928	0.940	0.948	0.821
	RG2	0.897	−0.853	0.152	0.000				
	RG3	0.930	−0.906	0.045	0.000				
	RG4	0.891	−0.747	−0.020	0.000				
Government Support	GS1	0.912	−0.919	−0.049	0.000	0.933	0.941	0.952	0.832
	GS2	0.906	−0.782	0.032	0.000				
	GS3	0.931	−0.924	−0.016	0.000				
	GS4	0.900	−0.919	−0.047	0.000				
Attitude toward Fintech	AT1	0.931	1.764	−1.509	0.000	0.934	0.934	0.958	0.883
	AT2	0.946	0.509	−1.088	0.000				
	AT3	0.942	0.845	−1.222	0.000				
Fintech Intention	FI1	0.962	0.230	−0.957	0.000	0.965	0.965	0.977	0.935
	FI2	0.967	0.351	−0.956	0.000				
	FI3	0.972	0.425	−1.015	0.000				

Note(s): α = Cronbach’s alpha, CR = composite reliability, AVE = average variance extracted. All the values of AVE, CR, Cronbach’s alpha and rho_A are significant at $p < 0.001$ level

Table 2. Discriminant validity

	At	EB	GS	IN	FI	RG	VC
<i>Fornell–Larcker criterion</i>							
Attitude (AT)	0.940						
Economic benefit (EB)	0.599	0.936					
Government support (GS)	0.259	0.210	0.912				
Innovativeness (IN)	0.586	0.519	0.267	0.915			
Fintech intention (FI)	0.646	0.490	0.287	0.560	0.967		
Regulation (RG)	0.193	0.113	0.668	0.172	0.264	0.906	
Value for change (VC)	0.754	0.585	0.280	0.698	0.622	0.174	0.926
<i>Heterotrait-Monotrait ratio</i>							
Attitude (AT)							
Economic benefit (EB)	0.642						
Government support (GS)	0.273	0.223					
Innovativeness (IN)	0.635	0.562	0.282				
Fintech intention (FI)	0.680	0.517	0.299	0.595			
Regulation (RG)	0.203	0.119	0.714	0.182	0.274		
Value for Change (VC)	0.811	0.632	0.300	0.765	0.659	0.184	
Note(s): The off-diagonal values (italic) in the above matrix are the square correlations between the latent constructs and diagonals are AVEs. HTMT<0.85							

Table 3. Hypothesis testing and model fit

Hypotheses testing					Model fit			
Hypothesized path	Path coefficient	STDEV	p-values	Decision		R ²	Q ² _{Predict}	SRMR
H1: VC → AT	0.604	0.037	0.000	Supported	EB	0.044	0.040	0.037
H2: RG → AT	0.061	0.027	0.026	Not Supported	IN	0.071	0.066	
H3: IN → FI	0.239	0.051	0.000	Supported	AT	0.610	0.552	
H4: EB → AT	0.238	0.040	0.000	Supported	FI	0.481	0.299	
H5: EB → FI	0.092	0.047	0.051	Supported				
H6: GS → EB	0.208	0.050	0.000	Not Supported				
H7: GS → IN	0.268	0.047	0.000	Not Supported				
H8: GS → FI	0.094	0.036	0.009	Not Supported				
H9: AT → FI	0.427	0.053	0.000	Supported				

Note(s): Attitude (AT), Economic benefit (EB), Government support (GS), Innovativeness (IN), Fintech intention (FI), Regulation (RG), Value for change (VC)

Contrary to our hypothesized negative relationship, the results reveal that regulation constraint (H2: $\beta = 0.061$; $p < 0.05$) exerts a significant and positive influence on attitudes toward fintech at the 5% significance level, indicating a lack of support for H2. Contrary to our negative supposition, government support constraints had a significant positive effect on economic benefits (H6: $\beta = 0.208$, $p < 0.001$) and personal innovativeness (H7: $\beta = 0.268$, $p < 0.001$), both significant at the 1% level, indicating that H6 and H7 were unsupported. In a similar vein, the analysis revealed that government support constraints (H8: $\beta = 0.094$, $p < 0.05$) had a significant positive effect on fintech intentions at the 5% significance level, providing no support for the hypothesized negative relationship in H8.

Economic benefits (H5: $\beta = 0.092$, $p < 0.05$) were found to have significant positive effects on fintech intentions at the 5% significance level, providing support for H5. Finally, innovativeness (H3: $\beta = 0.239$, $p < 0.001$) and attitudes toward fintech (H9: $\beta = 0.427$, $p < 0.001$) are found to have significant positive effects on fintech intentions at the 1% level of significance, providing support for H3 and H9.

Overall, our model is able to explain 48% of the variation in fintech intention. The model goodness-of-fit parameters listed in Table 3 satisfy overall quality standards (L. Hu & Bentler, 1999). Furthermore, our model's SRMR value of 0.037 is considered a good fit because it is far less than the 0.08 threshold (Pandey, 2024). Based on these findings, it is evident that the proposed model demonstrates strong goodness-of-fit.

5.3 Robustness check

We performed various robustness checks before and after the model estimations, as suggested by Vaithilingam, Ong, Moisesescu, and Nair (2024). Before model estimation, we performed a normality test. Table 1 summarizes the statistics showing a non-normal distribution with skewness and Excess Kurtosis values falling within an acceptable range of -2 to $+2$, supporting the study's SEM analysis choice (Vaithilingam *et al.*, 2024). Furthermore, the Cramér-von Mises test statistic shows that the data deviate from the normal distribution. After the estimation, we used quadratic effect analysis to examine nonlinearities. All hypotheses except H1, H6, and H7 in Table 4 are linear. We followed the recommendations of Kumar and Purani (2018) to further examine linearity concerns with H1, H6, and H7 using WarpPLS, a PLS-SEM software that can model nonlinear relationships. The hypothesized path results obtained from both a linear program, SmartPLS 4 in Table 3, and a nonlinear program, WarpPLS 8.0, in Table 4, are quantitatively congruent, indicating that they are robust to different SEM estimation techniques. The comparative findings show that the pattern of results remained stable in terms of coefficient signs, magnitudes and statistical significance, providing further support for the robustness of the findings.

Table 4. Quadratic nonlinearity results and WarpPLS structural path results

Quadratic Nonlinearity results					WarpPLS path results		
Hypothesized path	Estimates	STDEV	T-stat	p-values	Hypothesized path	Path coefficient	p-values
H1: QE (VC) → AT	−0.071	0.035	2.017	0.044	H1: VC → AT	0.610	<0.001
H2: QE (RG) → AT	−0.043	0.026	1.638	0.101	H2: RG → AT	0.034	<0.218
H3: QE (IN) → FI	−0.027	0.038	0.729	0.466	H3: IN → FI	0.241	<0.001
H4: QE (EB) → AT	0.050	0.035	1.422	0.155	H4: EB → AT	0.225	<0.001
H5: QE (EB) → FI	0.044	0.041	1.096	0.273	H5: EB → FI	0.078	<0.038
H6: QE (GS) → EB	−0.147	0.046	3.211	0.001	H6: GS → EB	0.281	<0.001
H7: QE (GS) → IN	−0.113	0.043	2.639	0.008	H7: GS → IN	0.320	<0.001
H8: QE (GS) → FI	−0.011	0.036	0.310	0.757	H8: GS → FI	0.056	<0.103
H9: QE (AT) → FI	0.001	0.045	0.012	0.990	H9: AT → FI	0.433	<0.001

Note(s): Attitude (AT), Economic benefit (EB), Government support (GS), Innovativeness (IN), Fintech intention (FI), Regulation (RG), Value for change (VC)

6. Discussion

This study examines the dual-factor drivers of fintech adoption. In this study, we adopted an integrated dual-factor theoretical approach. Our results provide strong support for the dual-factor model, as we show that fintech adoption is simultaneously triggered by enabling and inhibiting dual factors (Sullivan & Koh, 2019).

The results show that the value of openness to change (H1) and economic benefits (H4) have a significant and positive influence on attitudes toward fintech, thereby corroborating H1 and H4. These findings are in line with prior studies showing that individuals with higher levels of openness to change are more likely to develop positive attitudes toward technologies (Pillai & Sivathanu, 2018). This study contradicts the results of previous studies that observed that the value of openness to change has no direct influence on attitude (Sivathanu, 2018). Moreover, our results affirm that a well-regulated environment fosters a sense of security and trustworthiness, which positively influences individuals’ attitudes toward fintech. This finding concurs with Okello Candiya Bongomin and Ntayi (2020), who assert that regulation in the fintech sector fosters trust and guarantees that users receive transparent and equitable treatment. Our results diverged from those of an organic food context study that inferred a negative relationship between regulation and attitude (Khan, Hameed, & Akram, 2023). Consistent with previous studies, we found that economic benefits positively influence fintech attitude (Hu et al., 2020). Fintech users are motivated to reap transactional money-saving economic benefits, including cost savings, increased convenience, time savings and remote access to a greater choice of financial offering.

Personal innovativeness remains an important determinant of fintech intention, thus supporting H3. This result suggests that individuals who are generally more curious, open-minded and willing to explore innovative solutions embrace fintech. This finding also corroborates previous scholarly investigations (Gupta et al., 2023), showing that personal innovativeness is associated with a higher comfort level when adapting to changes and experimenting with innovative financial tools. The results also fully support H5, finding that users are more likely to adopt fintech if they perceive greater economic benefit. This finding was confirmed by Anubhav et al. (2023). The results are inconsistent with collaborative consumption platform studies, where economic benefits do not lead to intention (Nguyen & Llosa, 2023). Finally, our findings suggest that a positive attitude toward fintech is a significant driver of fintech intention. This finding supports H9 and is consistent with previous studies (Anubhav et al., 2023; Marakarkandy et al., 2017).

7. Implications, future research and conclusion

This study examined fintech adoption in an emerging market context using an integrated model that combines the DFT and SOR frameworks. The findings highlight the importance of

both enabling and inhibiting conditions in shaping user attitudes and intentions toward fintech. Variables such as openness to change, innovativeness, perceived economic benefits and attitudes positively influenced fintech intentions, reinforcing the role of psychological and value-based factors. Surprisingly, regulatory constraints and government support constraints showed positive relationships with attitudes, economic benefits, innovativeness and adoption intentions, suggesting that users may adapt positively to institutional gaps in fast-evolving digital environments.

7.1 Theoretical implications

This study makes a significant theoretical contribution to the field of fintech adoption. We validated the DFT theoretical lens, as advanced by [Cenfetelli \(2004\)](#) and [Cenfetelli and Schwarz \(2011\)](#), by demonstrating that enablers and inhibitors are distinct constructs that co-exist in shaping fintech adoption. Our approach advances prior work, which has typically examined enablers or inhibitors in isolation, as well as recent DFT-based fintech studies that place limited emphasis on regulatory or institutional inhibiting factors. The integrative approach of employing DFT and SOR enriches fintech adoption research, espousing a more comprehensive understanding of fintech adoption behavior. This integrative approach not only synthesizes different perspectives but also emphasizes the synergies that arise from considering these theories collectively, contributing to a more comprehensive understanding of fintech adoption behavior.

Additionally, the findings contribute to the fintech adoption literature by revealing that openness, a personality trait often overlooked in previous studies, plays a significant role in shaping user attitudes toward financial technologies. The study's results depict that individuals with higher levels of openness are more receptive to fintech solutions, an indication that psychological predispositions influence adoption beyond traditional technology acceptance models. This extends prior studies by incorporating personality-driven perspectives into fintech adoption frameworks, offering a comprehensive understanding of user behavior.

This study addresses critical research gaps by shedding light on the role of government support and regulation in the fintech adoption process, which has often been overlooked in existing fintech adoption research. Our results highlight the influence of government support not only on economic benefits but also on innovativeness, contributing a novel aspect to the understanding of external factors impacting fintech adoption. This study also responds to the call ([Gupta & Arora, 2017](#); [Pillai & Sivathanu, 2020](#)) to model personal innovativeness.

7.2 Practical implications

These findings suggest that enhancing users' attitudes and perceptions of fintech, along with creating economic benefits and fostering innovativeness, can positively influence fintech intentions. Fintech companies and stakeholders should create an environment that supports these factors and promotes long-term industrial growth. For example, regulators can improve user confidence by publishing simplified regulatory guides and publishing simplified regulatory guides, hosting public awareness campaigns or creating digital dashboards that explain consumer rights and data protection policies. Similarly, fintech providers can enhance positive attitudes by adjusting design features to improve transparency and usability, such as providing clear fee disclosures, offering local-language support or embedding visual security cues (e.g. certification badges) within their apps.

Policy makers and industry stakeholders should adopt a holistic approach to foster an environment where innovativeness is valued, economic benefits are tangible, government support is evident and positive attitudes are cultivated. Policy makers should continue to refine and adapt regulatory frameworks to support fintech growth, while ensuring consumer protection. Governments should consider providing targeted support for fintech initiatives. Financial incentives, regulatory support and collaborative initiatives can enhance economic benefits for users and contribute to the growth of the fintech sector. Policy makers can explore

ways to provide targeted support for fintech initiatives that directly contribute to users' economic well-being. Policymakers should regularly assess users' evolving needs and preferences, adapt policies accordingly and ensure that regulations remain effective and support innovation.

Financial institutions and fintech providers can leverage these factors to design and implement innovations that align with user attitudes and preferences, potentially increasing user adoption and satisfaction. They can also actively engage in government initiatives to maximize their economic advantages.

Higher educational institutions (HEIs) should consider initiatives that encourage collaboration between government agencies and fintech companies to enhance personal innovativeness among users. For example, HEIs can organize co-sponsored fintech bootcamps. Fintech Ecosystem stakeholders should invest in educational and awareness programs to enhance digital literacy and innovation. Establish innovation hubs and support networks to facilitate collaboration and knowledge sharing within the fintech ecosystem. HEIs should extend R&D efforts to foster an innovative environment in the fintech sector. To deepen collaborative impact, HEIs and industry partners can establish innovation hubs or fintech labs equipped with sandbox environments where students, developers and policymakers experiment with new applications under guided supervision.

Given that regulatory constraints and government support constraints showed positive relationships with attitudes, economic benefits, innovativeness and adoption intentions.

7.3 Limitations and future research directions

Despite the contributions, this study contains limitations that allow for future investigation. The current study was cross-sectional; longitudinal investigations could be encouraged. However, the study combined a number of theories; other enabling and inhibiting factors may be addressed in future studies. Our study explains 48% of fintech intention variability; future research should include other relevant variables. Future research could explore other methods, such as necessary condition analysis (NCA), fuzzy set qualitative comparative analysis (fsQCA) to complement the SEM analysis.

Supplementary material

The supplementary material for this article can be found online.

References

- Anic, I. D., Škare, V., & Kursan Milaković, I. (2019). The determinants and effects of online privacy concerns in the context of e-commerce. *Electronic Commerce Research and Applications*, 36 (October 2018), 100868. doi: [10.1016/j.elerap.2019.100868](https://doi.org/10.1016/j.elerap.2019.100868).
- Anubhav, K., Agarwal, M., & Aashish, K. (2023). Smart farming for future: A structural relation analysis of attitude, facilitating condition, economic benefit and government support. *Technology Analysis and Strategic Management*, 37(2), 1–15. doi: [10.1080/09537325.2023.2283550](https://doi.org/10.1080/09537325.2023.2283550).
- Belanche, D., Casaló, L. V., & Flavián, C. (2019). Artificial intelligence in FinTech: Understanding robo-advisors adoption among customers. *Industrial Management and Data Systems*, 119(7), 1411–1430. doi: [10.1108/ims-08-2018-0368](https://doi.org/10.1108/ims-08-2018-0368).
- Bush, A. J., & Hair, J. F. (1985). An assessment of the mall intercept as a data collection method. *Journal of Marketing Research*, 22(2), 158–167. doi: [10.1177/002224378502200205](https://doi.org/10.1177/002224378502200205).
- Cenfetelli, R. T. (2004). Inhibitors and enablers as dual factor concepts in technology usage. *Journal of the Association for Information Systems*, 5(11), 472–492. doi: [10.17705/1jais.00059](https://doi.org/10.17705/1jais.00059).
- Cenfetelli, R. T., & Schwarz, A. (2011). Identifying and testing the inhibitors of technology usage intentions. *Information Systems Research*, 22(4), 808–823. doi: [10.1287/isre.1100.0295](https://doi.org/10.1287/isre.1100.0295).

- Chin, W. W. (2010). How to write up and report PLS analyses. In *Handbook of Partial Least Squares* (pp. 665–690).
- Choi, D., Chung, C. Y., Seyha, T., & Young, J. (2020). Factors affecting organizations' resistance to the adoption of blockchain technology in supply networks. *Sustainability*, 12(21), 1–37. doi: [10.3390/su12218882](https://doi.org/10.3390/su12218882).
- Coffie, C. P. K., Hongjiang, Z., Mensah, I. A., Kiconco, R., & Simon, A. E. O. (2021). Determinants of FinTech payment services diffusion by SMEs in sub-saharan Africa: Evidence from Ghana. *Information Technology for Development*, 27(3), 539–560. doi: [10.1080/02681102.2020.1840324](https://doi.org/10.1080/02681102.2020.1840324).
- Gupta, A., & Arora, N. (2017). Consumer adoption of m-banking: A behavioral reasoning theory perspective. *International Journal of Bank Marketing*, 35(4), 733–747. doi: [10.1108/ijbm-11-2016-0162](https://doi.org/10.1108/ijbm-11-2016-0162).
- Gupta, S., Pandey, D. K., El Ammari, A., & Sahu, G. P. (2023). Do perceived risks and benefits impact trust and willingness to adopt CBDCs?. *Research in International Business and Finance*, 66 (May), 101993. doi: [10.1016/j.ribaf.2023.101993](https://doi.org/10.1016/j.ribaf.2023.101993).
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–152. doi: [10.2753/mtp1069-6679190202](https://doi.org/10.2753/mtp1069-6679190202).
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. doi: [10.1007/s11747-014-0403-8](https://doi.org/10.1007/s11747-014-0403-8).
- Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS path modeling in new technology research: Updated guidelines. *Industrial Management and Data Systems*, 116(1), 2–20. doi: [10.1108/imds-09-2015-0382](https://doi.org/10.1108/imds-09-2015-0382).
- Hornik, J., & Ellis, S. (1988). Strategies to secure compliance for a mall intercept interview. *Public Opinion Quarterly*, 52(4), 539–551. doi: [10.1086/269129](https://doi.org/10.1086/269129).
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1–55. doi: [10.1080/10705519909540118](https://doi.org/10.1080/10705519909540118).
- Hu, W., Shou, Y., Kang, M., & Park, Y. (2020). Risk management of manufacturing multinational corporations: The moderating effects of international asset dispersion and supply chain integration. *Supply Chain Management: International Journal*, 25(1), 61–76. doi: [10.1108/scm-01-2019-0009](https://doi.org/10.1108/scm-01-2019-0009).
- Khan, Y., Hameed, I., & Akram, U. (2023). What drives attitude, purchase intention and consumer buying behavior toward organic food? A self-determination theory and theory of planned behavior perspective. *British Food Journal*, 125(7), 2572–2587. doi: [10.1108/bfj-07-2022-0564](https://doi.org/10.1108/bfj-07-2022-0564).
- Kim, C., Mirusmonov, M., & Lee, I. (2010). An empirical examination of factors influencing the intention to use mobile payment. *Computers in Human Behavior*, 26(3), 310–322. doi: [10.1016/j.chb.2009.10.013](https://doi.org/10.1016/j.chb.2009.10.013).
- Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of e-Collaboration*, 11(4), 1–10. doi: [10.4018/ijec.2015100101](https://doi.org/10.4018/ijec.2015100101).
- Kumar, D. S., & Purani, K. (2018). Model specification issues in PLS-SEM: Illustrating linear and non-linear models in hospitality services context. *Journal of Hospitality and Tourism Technology*, 9 (3), 338–353. doi: [10.1108/jhtt-09-2017-0105](https://doi.org/10.1108/jhtt-09-2017-0105).
- Mackenzie, S. B., & Podsakoff, P. M. (2012). Common method bias in marketing: Causes, mechanisms, and procedural Remedies. *Journal of Retailing*, 88(4), 542–555. doi: [10.1016/j.jretai.2012.08.001](https://doi.org/10.1016/j.jretai.2012.08.001).
- Marakarkandy, B., Yajnik, N., & Dasgupta, C. (2017). Enabling internet banking adoption: An empirical examination with an augmented technology acceptance model (TAM). *Journal of Enterprise Information Management*, 30(2), 263–294. doi: [10.1108/jeim-10-2015-0094](https://doi.org/10.1108/jeim-10-2015-0094).
- Mothobi, O., & Kebotsamang, K. (2024). The impact of network coverage on adoption of Fintech and financial inclusion in sub-Saharan Africa. *Journal of Economic Structures*, 13(1), 5. doi: [10.1186/s40008-023-00326-7](https://doi.org/10.1186/s40008-023-00326-7).

- Nguyen, S., & Llosa, S. (2023). When users decide to bypass collaborative consumption platforms: The interplay of economic benefit, perceived risk, and perceived enjoyment. *Tourism Management*, 96(December 2022), 104713. doi: [10.1016/j.tourman.2022.104713](https://doi.org/10.1016/j.tourman.2022.104713).
- Ofori, K. S., Boateng, H., Okoe, A. F., & Gvozdanovic, I. (2017). Examining customers' continuance intentions towards internet banking usage. *Marketing Intelligence & Planning*, 35(6), 756–773. doi: [10.1108/mip-11-2016-0214](https://doi.org/10.1108/mip-11-2016-0214).
- Okello Candiya Bongomin, G., & Ntayi, J.M. (2020). Mobile money adoption and usage and financial inclusion: mediating effect of digital consumer protection. *Digital Policy, Regulation and Governance*, 22(3), 157–176. doi:[10.1108/DPRG-01-2019-0005](https://doi.org/10.1108/DPRG-01-2019-0005).
- Olfat, M. (2024). The influence of employees' work-related use of social media on their service innovation behavior: The SOR paradigm. *Digital Transformation and Society*, 3(4), 359–375. doi: [10.1108/dts-11-2023-0099](https://doi.org/10.1108/dts-11-2023-0099).
- Pandey, J. K. (2024). Evaluating public service value within collaborative e-governance: A study in the Indian context. *Digital Transformation and Society*, 3(2), 197–213. doi: [10.1108/dts-08-2023-0065](https://doi.org/10.1108/dts-08-2023-0065).
- Pappu, R., & Quester, P. G. (2008). Does brand equity vary between department stores and clothing stores? Results of an empirical investigation. *The Journal of Product and Brand Management*, 17(7), 425–435. doi: [10.1108/10610420810916335](https://doi.org/10.1108/10610420810916335).
- Pillai, R., & Sivathanu, B. (2018). An empirical study on the adoption of M-learning apps among IT/ITeS employees. *Interactive Technology and Smart Education*, 15(3), 182–204. doi: [10.1108/itse-01-2018-0002](https://doi.org/10.1108/itse-01-2018-0002).
- Pillai, R., & Sivathanu, B. (2020). Adoption of internet of things (IoT) in the agriculture industry deploying the BRT framework. *Benchmarking: An International Journal*, 27(4), 1341–1368. doi: [10.1108/bij-08-2019-0361](https://doi.org/10.1108/bij-08-2019-0361).
- Pobee, F., Jibril, A. B., & Owusu-Oware, E. (2023). Does taxation of digital financial services adversely affect the financial inclusion agenda? Lessons from a developing country. *Digital Business*, 3(2), 100066. doi: [10.1016/j.digbus.2023.100066](https://doi.org/10.1016/j.digbus.2023.100066).
- Rohatgi, S., Gera, N., & Nayak, K. (2024). Has digital banking usage reshaped economic empowerment of urban women?. *Journal of Management & Governance*, 28(2), 543–563. doi: [10.1007/s10997-023-09676-7](https://doi.org/10.1007/s10997-023-09676-7).
- Ryu, H. S. (2018). What makes users willing or hesitant to use fintech?: The moderating effect of user type. *Industrial Management and Data Systems*, 118(3), 541–569. doi: [10.1108/ims-07-2017-0325](https://doi.org/10.1108/ims-07-2017-0325).
- Sivathanu, B. (2018). Adoption of internet of things (IOT) based wearables for healthcare of older adults – a behavioural reasoning theory (BRT) approach. *Journal of Enabling Technologies*, 12(4), 169–185. doi: [10.1108/jet-12-2017-0048](https://doi.org/10.1108/jet-12-2017-0048).
- Srivastava, S., Mohta, A., & Shunmugasundaram, V. (2024). Adoption of digital payment FinTech service by gen Y and gen Z users: Evidence from India. *Digital policy. Regulation & Governance*, 26(1), 95–117. doi: [10.1108/dprg-07-2023-0110](https://doi.org/10.1108/dprg-07-2023-0110).
- Sudman, S. (1980). Improving the quality of shopping center sampling. *Journal of Marketing Research*, 17(4), 423–431. doi: [10.1177/002224378001700402](https://doi.org/10.1177/002224378001700402).
- Sullivan, Y. W., & Koh, C. E. (2019). Social media enablers and inhibitors: Understanding their relationships in a social networking site context. *International Journal of Information Management*, 49(March), 170–189. doi: [10.1016/j.ijinfomgt.2019.03.014](https://doi.org/10.1016/j.ijinfomgt.2019.03.014).
- Vaithilingam, S., Ong, C. S., Moisescu, O. I., & Nair, M. S. (2024). Robustness checks in PLS-SEM: A review of recent practices and recommendations for future applications in business research. *Journal of Business Research*, 173(5), 114465. doi: [10.1016/j.jbusres.2023.114465](https://doi.org/10.1016/j.jbusres.2023.114465).
- Xu, Y., & Bao, H. (2023). FinTech regulation: evolutionary game model, numerical simulation, and recommendations. *Expert Systems with Applications*, 211, 118327. doi:[10.1016/j.eswa.2022.118327](https://doi.org/10.1016/j.eswa.2022.118327).

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