

BRIDGING GAPS IN FINTECH ADOPTION: A MULTI-THEORETICAL REVIEW AND INTEGRATED FRAMEWORK FOR EMERGING ECONOMIES

PREENCHENDO LACUNAS NA ADOÇÃO DE FINTECH: UMA REVISÃO MULTITEÓRICA E UMA ESTRUTURA INTEGRADA PARA ECONOMIAS EMERGENTES

Article received on: 7/7/2025

Article accepted on: 9/5/2025

Md Kamrul Islam*

*Green University of Bangladesh, Narayangonj, Bangladesh

Orcid: <https://orcid.org/0009-0002-7015-0066>

kamrul@bus.green.edu.bd

Mohammad Tamzid*

*Green University of Bangladesh, Narayangonj, Bangladesh

Orcid: <https://orcid.org/0009-0003-1986-9128>

tamzid@bus.green.edu.bd

Mohammad Delwar Hussain*

*Green University of Bangladesh, Narayangonj, Bangladesh

Orcid: <https://orcid.org/0000-0001-9195-056X>

delwar@bus.green.edu.bd

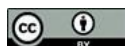
The authors declare that there is no conflict of interest

Abstract

Recent advances in financial technology (FinTech) impact not only the global financial services industry but also the integration of financial services in economically emerging countries. However, uneven integration of FinTech in emerging economies is still due to various technological, social, and institutional gaps. This review incorporates local and global evidence regarding FinTech adoption by utilizing the Stimulus-Organism-Response (S-O-R) framework, the Unified Theory of Acceptance and Use of Technology (UTAUT), and the Technology Acceptance Model (TAM). While TAM focuses on cognitive aspects like perceived usefulness and ease of use, UTAUT considers social influence and enabling conditions, and S-O-R emphasizes trust, satisfaction, and other experience-related constructs. Cultural, infrastructural, and regulatory factors in emerging economies influence adoption complexity, something all three models fail to address. Based on 66 studies in and outside Bangladesh, this paper identifies and explains the primary factors adoption diffusion gaps: trust and security, social and cultural influences, the customer experience, and the framework of the institution. To address this, the paper develops an integrated multi-level framework to explain

Resumo

Os recentes avanços em tecnologia financeira (FinTech) impactam não apenas o setor global de serviços financeiros, mas também a integração de serviços financeiros em países economicamente emergentes. No entanto, a integração desigual de FinTech em economias emergentes ainda se deve a diversas lacunas tecnológicas, sociais e institucionais. Esta revisão incorpora evidências locais e globais sobre a adoção de FinTech, utilizando a estrutura Estímulo-Organismo-Resposta (S-O-R), a Teoria Unificada de Aceitação e Uso de Tecnologia (UTAUT) e o Modelo de Aceitação de Tecnologia (TAM). Enquanto a TAM se concentra em aspectos cognitivos, como utilidade percebida e facilidade de uso, a UTAUT considera a influência social e as condições facilitadoras, e a S-O-R enfatiza a confiança, a satisfação e outros construtos relacionados à experiência. Fatores culturais, de infraestrutura e regulatórios em economias emergentes influenciam a complexidade da adoção, algo que os três modelos não abordam. Com base em 66 estudos dentro e fora de Bangladesh, este artigo identifica e explica os principais fatores que contribuem para as lacunas na difusão da adoção: confiança e segurança, influências sociais e culturais, a



FinTech adoption in emerging economies more comprehensively. In order to promote inclusive, sustainable digital financial ecosystems, policymakers, practitioners, and researchers can benefit from the theoretical development and useful advice this framework offers.

Keywords: Fintech Adoption. Technology Acceptance Model (TAM). Unified Theory of Acceptance and Use of Technology (UTATU). Stimulus–Organism–Response (S-O-R). Bangladesh. Financial Inclusion.

experiência do cliente e a estrutura da instituição. Para abordar essa questão, o artigo desenvolve uma estrutura integrada multinível para explicar a adoção de FinTechs em economias emergentes de forma mais abrangente. Para promover ecossistemas financeiros digitais inclusivos e sustentáveis, formuladores de políticas, profissionais e pesquisadores podem se beneficiar do desenvolvimento teórico e dos conselhos úteis oferecidos por essa estrutura.

Palavras-chave: Adoção de FinTechs. Modelo de Aceitação de Tecnologia (TAM). Teoria Unificada de Aceitação e Uso de Tecnologia (UTATU). Estímulo-Organismo-Resposta (S-O-R). Bangladesh. Inclusão Financeira.

1 INTRODUCTION

1.1 Background

Over the past two decades, financial services have been transformed by digital technologies, deregulation, and shifting consumer preferences, giving rise to financial technology (FinTech) innovations such as mobile money, digital wallets, peer-to-peer lending, crowdfunding, blockchain, robo-advisory, and Insurtech (Gomber et al., 2018; Kang, 2018; Pahwa & Raj, 2022). FinTech enhances efficiency, accessibility, and transparency, complementing traditional banking while enabling customer-centric models. In emerging economies, FinTech has advanced financial inclusion by lowering barriers to formal financial services, particularly through mobile money and digital payments (Demirguc-Kunt et al., 2018, 2020; Vergallo & Mainetti, 2022; World Bank, 2017). Bangladesh exemplifies this trend, with a large unbanked population and growing mobile penetration, where services like bKash, Nagad, and Rocket facilitate peer-to-peer transfers, bill payments, and remittances (Ahmed & Hasan, 2021; Rouf et al., 2019; Khan et al., 2020; Rashid Harun, 2020). Adoption globally is influenced by social influence, perceived usefulness, ease of use, and trust, supported by regulatory frameworks such as the EU PSD2 directive (Koenig-Lewis et al., 2010; Zhou et al., 2010; Gu et al., 2009; Hsu & Lin, 2016; Islam & Rijuanul, 2023; Romanova et al., 2018), with COVID-19 accelerating digital payments (Pahwa & Raj, 2022; Prajapati et al., 2022). FinTech adoption research primarily uses TAM, UTAUT, and S-O-R models (Davis, 1989;

Venkatesh et al., 2003; Mehrabian & Russell, 1974), considering cognitive, social, and affective determinants such as perceived usefulness, ease of use, trust, satisfaction, interface design, and risk perceptions (Compeau & Higgins, 1995; Ghazizadeh et al., 2012; Jeong & Yoon, 2013; Zhou et al., 2010; Bhandari et al., 2017; Arora et al., 2023; Barbu et al., 2021; Krishna, 2019; Lim et al., 2019). Despite these advancements, adoption in Bangladesh remains uneven due to gender, literacy, and infrastructural gaps (Khatun & Tamanna, 2020; Demircuc-Kunt et al., 2018).

1.2 Gaps and challenges

Despite increasing research, several gaps remain. Most studies focus on developed economies, with fewer examining emerging markets where FinTech could enhance financial inclusion (Al-Sabaawi et al., 2021; Setiawan et al., 2021). Cross-sectional surveys dominate, limiting contextual depth, while qualitative or mixed-methods studies are sparse (Rahman et al., 2021). Regulatory and ethical considerations are underexplored in emerging markets (Chiu, 2017; Denoncourt, 2020; Davison et al., 2022). Integration of cognitive, social, and affective dimensions into unified adoption models is limited.

In Bangladesh, research addresses attitudes toward mobile payments (Ayoungman et al., 2021; Islam et al., 2024), service quality (Islam, 2013; Hossain & Hossain, 2015; Shahria & Jahan, 2022), and satisfaction (Resmi, 2017; Karim et al., 2022), while highlighting trust, gender disparities, and infrastructure challenges (Khatun & Tamanna, 2020; Hassan et al., 2022). However, studies remain fragmented and lack theoretical synthesis.

1.3 Objectives and contribution of this review

This review provides a theory-driven synthesis of FinTech adoption research with a focus on Bangladesh, examining foundational models (TAM, UTAUT, S-O-R), global empirical evidence on adoption determinants and outcomes, and local acceptance patterns, including drivers, barriers, and contextual factors. It highlights methodological trends and research gaps, proposes an integrated framework combining cognitive, social, and affective perspectives, and outlines a future research agenda for emerging economies,

consolidating fragmented evidence and bridging theoretical and contextual gaps to guide scholars, policymakers, and practitioners.

1.4 Methodology

A systematic yet flexible approach was adopted, following best practices in management and IS literature reviews (George et al., 2016; Snyder, 2019). Three stages were employed: identification, screening, and synthesis.

1.4.1 Literature identification

From December 2023 to March 2025, leading databases (Scopus, Web of Science, ScienceDirect, Emerald Insight, Google Scholar) were searched using keywords including “FinTech adoption,” “digital finance,” “mobile payments,” “Bangladesh,” “TAM,” “UTAUT,” and “S-O-R.” Peer-reviewed articles, conference papers, book chapters, and policy reports published between 1989 and early 2024 were included.

1.4.2 Screening and eligibility

Inclusion criteria were studies addressing theoretical or empirical aspects of FinTech adoption globally or in Bangladesh. Opinion pieces without theoretical grounding, duplicates, or works lacking contribution were excluded. Abstracts and titles were first screened, followed by full-text assessment.

1.4.3 Thematic synthesis

Selected studies were coded around TAM, UTAUT, S-O-R, and contextual factors (trust, security, culture, customer experience, regulation), enabling comparison between global and Bangladesh-specific evidence while identifying gaps and methodological trends.

To ensure rigor and transparency, this review followed a systematic but flexible approach consistent with recommendations for high-quality literature reviews in

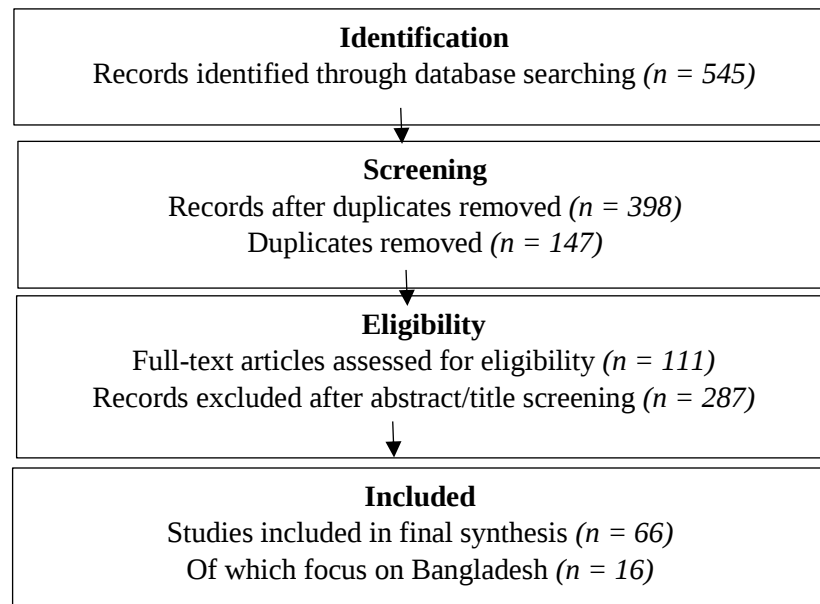
management and information systems research (George et al., 2016; Snyder, 2019). The process consisted of three stages: identification, screening, and synthesis.

1.4.4 PRISMA flow

Figure 1 illustrates the review process following PRISMA-style guidelines.

Figure 1

PRISMA flow diagram of the literature identification, screening, and inclusion process



2 THEORETICAL FOUNDATIONS OF FINTECH ADOPTION

2.1 Technology Acceptance Model (TAM) and its extensions

The Technology Acceptance Model (TAM) (Davis, 1989), derived from the Theory of Reasoned Action (Fishbein & Ajzen, 1975) and Theory of Planned Behavior (Ajzen, 1991), posits that perceived usefulness (PU) and perceived ease of use (PEOU) drive adoption intentions and actual usage (Davis et al., 1989). In FinTech, TAM has been applied to mobile banking (Gu et al., 2009; Jeong & Yoon, 2013), digital payments (Vinita & Vasantha, 2017), and Islamic FinTech (Ahmad & Mamun, 2020), consistently

highlighting PU and PEOU as critical predictors (Koenig-Lewis et al., 2010; Riquelme & Rios, 2010).

To address TAM's limitations—its narrow cognitive focus and neglect of social, affective, and contextual factors (Williams et al., 2009)—extensions emerged. TAM2 incorporated social influence and cognitive processes (Venkatesh & Davis, 2000; Venkatesh et al., 2003), while TAM3 emphasized self-efficacy and perceptions of control (Venkatesh & Bala, 2008). Other studies integrated trust (Zhou et al., 2010), perceived risk (Krishna, 2019), and customer experience (Arora et al., 2023). In Bangladesh, TAM has informed studies on mobile banking service quality and FinTech payment adoption (Islam, 2013; Hossain & Hossain, 2015; Shahria & Jahan, 2022; Islam et al., 2024), showing that contextual factors like literacy, gender norms, and trust also shape adoption.

2.2 Unified Theory of Acceptance and Use of Technology (UTAUT)

UTAUT (Venkatesh et al., 2003) integrates constructs from eight models, identifying performance expectancy, effort expectancy, social influence, and facilitating conditions as core determinants of behavioral intention and use, moderated by gender, age, experience, and voluntariness. UTAUT2 added hedonic motivation, price value, and habit for consumer contexts (Venkatesh et al., 2012).

UTAUT has been applied in mobile payments, banking, and e-wallets (Baptista & Oliveira, 2015; Zhou et al., 2010; Kelly & Palaniappan, 2023), particularly capturing social influence and infrastructural support in emerging economies (AbuShanab & Pearson, 2007; Tajul Urus et al., 2022; Lai et al., 2009). In Bangladesh, UTAUT studies highlight trust, perceived security, and institutional support as significant, though emotional and cultural factors remain underexplored (Hassan et al., 2022; Mahmud et al., 2023).

2.3 Stimulus–Organism–Response (S-O-R) framework

The S-O-R model (Mehrabian & Russell, 1974) emphasizes psychological and experiential dimensions, linking stimuli (service quality, interface design) to organism states (trust, satisfaction, perceived risk), producing responses (behavioral intention and usage). In FinTech, S-O-R highlights customer experience and emotions (Chopdar &

Balakrishnan, 2020; Barbu et al., 2021; Arora et al., 2023). In Bangladesh, where trust deficits and low digital literacy are barriers, S-O-R explains how satisfaction and experience mediate adoption (Karim et al., 2022; Islam et al., 2024).

2.4 Toward integrated frameworks

TAM, UTAUT, and S-O-R each provide insights but are individually limited. TAM and UTAUT focus on cognition and social/contextual factors but neglect emotions and culture; S-O-R emphasizes affect but underrepresents institutional and infrastructural elements. Most studies are cross-sectional, and regulatory and ethical dimensions are under-theorized (Chiu, 2017; Denoncourt, 2020; Davison et al., 2022). Integrated models combining cognitive, social, and affective perspectives are increasingly recommended to capture the complexity of FinTech adoption, especially in Bangladesh where cultural, institutional, and technological challenges intersect (Zhou et al., 2010; Kelly & Palaniappan, 2023).

2.5 Summary table of theoretical models

Table 1

Summary table of theoretical models

Model	Core Constructs	Key Strengths	Limitations	FinTech Applications
TAM (Davis, 1989)	PU, PEOU, Attitude	Parsimonious, widely validated	Ignores trust, social & affective factors	Mobile banking (Gu et al., 2009); Bangladesh mobile money (Islam, 2013)
TAM2 & TAM3 (Venkatesh & Davis, 2000; Venkatesh & Bala, 2008)	Adds social influence, self-efficacy	Broader scope	Still cognitively biased	Digital payments (Koenig-Lewis et al., 2010)
UTAUT (Venkatesh et al., 2003)	Performance & effort expectancy, social influence, facilitating conditions	High explanatory power, includes moderators	Overly complex, limited affective constructs	Mobile money (AbuShanab & Pearson, 2007); FinTech in Ghana (Kelly & Palaniappan, 2023)
UTAUT2 (Venkatesh et al., 2012)	Adds hedonic motivation, price value, habit	Consumer relevance	Cultural gaps, limited affective integration	E-wallets (Tajul Urus et al., 2022)
S-O-R (Mehrabian & Russell, 1974)	Stimulus → Organism → Response	Captures trust, satisfaction, emotions	Less predictive for institutional factors	Mobile commerce (Chopdar & Balakrishnan, 2020); Bangladesh FinTech loyalty (Karim et al., 2022)

Theoretical models of FinTech adoption—from TAM to UTAUT and S-O-R—combine cognitive, social, and affective dimensions. In Bangladesh, adoption is shaped by infrastructural, cultural, and trust factors, making a hybrid framework most effective, enhancing explanatory power and supporting socially responsible IS research (Davison et al., 2022; George et al., 2016).

3 EMPIRICAL EVIDENCE: GLOBAL STUDIES

Empirical research on FinTech adoption covers diverse geographies, methods, and theories. Most studies focus on developed economies such as the U.S., Europe, and East Asia (Bhandari et al., 2017; Romanova et al., 2018; Dillon & Morris, n.d.), though emerging markets in South Asia, Southeast Asia, and Sub-Saharan Africa are increasingly examined (Baptista & Oliveira, 2015; Setiawan et al., 2021; Kelly & Palaniappan, 2023). Key determinants include cognitive factors like perceived usefulness and ease of use (Gu et al., 2009; Zhou et al., 2010), trust and security (Lim et al., 2019; Krishna, 2019), social influence, and cultural moderators in collectivist contexts (Baptista & Oliveira, 2015; Tajul Urus et al., 2022), as well as affective experiences captured via S-O-R (Barbu et al., 2021; Chopdar & Balakrishnan, 2020). Most research uses cross-sectional surveys and SEM, with qualitative or experimental approaches limited, producing context-specific findings.

3.1 Summary of global studies

Table 2 synthesizes key empirical works on FinTech adoption globally, organized by author, country/region, theoretical framework, methodology, and findings.

Table 2

Selected Empirical Studies on FinTech Adoption (Global Context)

Author(s) & Year	Country/Region	Theory/Framework	Method/Sample	Key Findings
Davis (1989); Davis et al. (1989)	USA	TAM	Surveys, early IT users	PU and PEOU strongly predict intention; foundational for FinTech adoption research.
Gu et al. (2009)	South Korea	TAM	Survey, n=288	PU, trust, and social influence significant for mobile banking adoption.

Koenig-Lewis et al. (2010)	UK	TAM extension	Survey, n=225 students	PU and social influence predict adoption among young consumers.
Zhou et al. (2010)	China	UTAUT + TTF	Survey, n=250	Task–technology fit, trust, and performance expectancy drive adoption.
Riquelme & Rios (2010)	Singapore	TAM with gender moderation	Survey, n=300	Gender moderates role of PU and PEOU in mobile banking adoption.
Baptista & Oliveira (2015)	Mozambique	UTAUT with cultural moderators	Survey, n=306	Social influence and cultural context significantly affect adoption.
Lim et al. (2019)	South Korea	TAM extension	Survey, n=317	Perceived security and knowledge strongly influence continuous intention.
Setiawan et al. (2021)	Indonesia	Innovation diffusion	Survey, n=400	User innovativeness predicts FinTech adoption; trust mediates behavior.
Tajul Urus et al. (2022)	Malaysia & Indonesia	UTAUT	Survey, n=450 graduates	Social influence and performance expectancy drive adoption; cross-country differences noted.
Kelly & Palaniappan (2023)	Ghana	TAM	Survey, n=385	Perceived usefulness, ease of use, and trust predict continuous usage.
Romanova et al. (2018)	Europe	Regulatory analysis	Mixed methods	PSD2 creates competition but also regulatory uncertainty for FinTech adoption.
Barbu et al. (2021)	Romania	S-O-R	Survey, n=410	Customer experience mediates adoption–loyalty link in FinTech services.
Chopdar & Balakrishnan (2020)	India	S-O-R	Survey, n=512	Interface design and interactivity affect trust and usage intention.
Demirguc-Kunt et al. (2018, 2020)	Global (140 countries)	Financial inclusion framework	Global Database Index	Digital payments enhance inclusion, but gaps remain by gender, income, and geography.

3.2 Synthesis of global evidence

Global evidence shows that cognitive factors like usefulness and ease of use are necessary but insufficient for FinTech adoption. Trust, security, cultural norms, social influence, and affective experiences (satisfaction, enjoyment, loyalty) critically shape adoption, highlighting the need for integrated, context-sensitive frameworks combining TAM, UTAUT, and S-O-R perspectives.

4 EMPIRICAL EVIDENCE: BANGLADESH CONTEXT

Bangladesh has become a vibrant market for FinTech adoption, driven largely by mobile financial services (MFS) such as bKash, Rocket, and Nagad, which enhance financial inclusion for previously unbanked populations (Ahmed & Hasan, 2021; Rahman

et al., 2021). Empirical research highlights both opportunities and barriers across service quality, trust, satisfaction, and socio-cultural factors.

4.1 Service quality and customer satisfaction

Early studies underscore the role of service quality in shaping satisfaction. Islam (2013) identified gaps between customer expectations and performance in bKash, while Hossain and Hossain (2015) found reliability, responsiveness, and assurance influenced mobile banking satisfaction. Resmi (2017) highlighted issues such as hidden charges undermining satisfaction, and Shahria and Jahan (2022) confirmed that service quality predicts loyalty through PLS-SEM analysis.

4.2 Comparative studies of providers

A comparative lens has also been applied. Rouf et al. (2019) measured satisfaction levels and service gaps between bKash and Rocket, showing that although bKash enjoys greater popularity, service limitations exist in both platforms. Rahman et al. (2017) similarly highlighted how mobile banking service quality directly shapes customer satisfaction and retention.

4.3 Attitudes, trust, and adoption intentions

Beyond banking, FinTech adoption in healthcare, e-wallets, and hospitality depends on trust, performance expectancy, and customer experience (Hassan et al., 2022; Karim et al., 2022; Islam et al., 2024). Key barriers include trust deficits, digital illiteracy, fraud risk, and gender and rural–urban divides, indicating that long-term adoption requires addressing structural, cultural, and regulatory challenges (Rahman et al., 2021; Khatun & Tamanna, 2020; Rashid Harun, 2020).

4.4 Beyond banking: sectoral applications

FinTech adoption in Bangladesh is expanding beyond traditional mobile money into sectors like healthcare, hospitality, and e-wallets. Trust and performance expectancy

influence patient adoption in healthcare (Hassan et al., 2022), while e-wallet satisfaction is shaped by usability and service quality (Karim, Chowdhury, & Haque, 2022). Customer experience drives loyalty in hospitality (Karim et al., 2022), and adaptability, social influence, security perceptions, and ease of use affect overall payment system acceptance (Islam, Tamzid, & Ocean, 2024).

4.5 Emerging challenges

Despite rapid adoption, several barriers remain. Studies highlight issues of **trust deficits**, **digital illiteracy**, and **fraud risks** (Rahman et al., 2021; Rashid Harun, 2020; Steele, Lo, Secombe, & Wong, 2009; Sudheerkumar, Hemalatha, & V, 2022). Gender gaps and rural–urban divides further limit inclusivity (Khatun & Tamanna, 2020). Collectively, these findings suggest that while Bangladesh is progressing toward a **digital financial ecosystem**, long-term sustainability depends on addressing structural, cultural, and regulatory barriers.

5 KEY DETERMINANTS OF FINTECH ADOPTION

FinTech adoption is shaped by a complex interplay of technological, individual, social, and institutional factors. While early studies emphasized cognitive attributes like perceived usefulness (PU) and ease of use (PEOU) (Davis, 1989; Davis et al., 1989), recent research highlights trust, security, cultural norms, customer experience, and regulatory frameworks as critical determinants (Chiu, 2017; Hassan et al., 2022; Karim et al., 2022). Understanding these drivers and barriers is essential, particularly in developing economies like Bangladesh, where digital finance supports financial inclusion (Demirguc-Kunt et al., 2018; Rahman et al., 2021).

5.1 Cognitive and technological factors

Cognitive evaluations of utility and usability remain central. TAM-based studies show PU and PEOU consistently predict adoption (Davis, 1989; Venkatesh et al., 2003; Gu et al., 2009). In Bangladesh, ease of use of bKash influenced satisfaction (Islam, 2013), while adaptability and usability predicted FinTech acceptance (Islam et al., 2024).

UTAUT constructs like performance expectancy and facilitating conditions also matter, with infrastructural support and digital literacy shaping adoption (AbuShanab & Pearson, 2007; Mahmud et al., 2023).

5.2 Trust and security

Trust and perceived security are decisive, particularly for mobile payments. Global and local studies show that security concerns influence usage and adoption intentions (Lim et al., 2019; Ayoungman et al., 2021; Hassan et al., 2022). In Bangladesh, fraud risk and insufficient transparency undermine confidence (Karim et al., 2022; Rahman et al., 2021), highlighting the need for robust safeguards.

5.3 Social and cultural influences

Social norms and cultural contexts shape adoption. Peer influence, awareness campaigns, and recommendations are significant in collectivist societies (Venkatesh et al., 2003; Baptista & Oliveira, 2015; Tajul Urus et al., 2022). In Bangladesh, social influence drives readiness, yet gender norms and rural–urban divides constrain inclusivity (Islam et al., 2024; Khatun & Tamanna, 2020; Rahman et al., 2021).

5.4 Customer experience and affective factors

Affective experiences mediate adoption. S-O-R studies link interface design, responsiveness, and promotions to satisfaction, trust, and loyalty (Mehrabian & Russell, 1974; Chopdar & Balakrishnan, 2020). In Bangladesh, customer experience strongly predicts loyalty and sustained mobile banking usage (Karim et al., 2022; Shahria & Jahan, 2022).

5.5 Institutional and regulatory factors

Regulatory support and institutional readiness facilitate adoption. Policies and central bank initiatives legitimize services like bKash and Nagad (Rahman et al., 2021), while weak enforcement and consumer protection remain barriers (Rashid Harun, 2020).

Institutional determinants also link to sustainable development, framing FinTech as a tool for inclusion and innovation (Denoncourt, 2020; George et al., 2016).

Collectively, determinants can be grouped into cognitive/technological, trust/security, social/cultural, experiential/affective, and institutional/regulatory dimensions. Cognitive drivers remain foundational, but trust, social norms, customer experience, and institutional support are essential for long-term adoption. Integrated frameworks combining TAM, UTAUT, and S-O-R provide the most robust approach to capture these multidimensional influences.

6 METHODOLOGICAL TRENDS IN FINTECH ADOPTION RESEARCH

The methodological landscape of FinTech adoption research reflects both the rapid evolution of digital financial technologies and the need to capture complex consumer decision-making processes. Most empirical studies apply **quantitative, survey-based designs** supported by statistical modeling, particularly **structural equation modeling (SEM)**, to test theoretical frameworks such as TAM, UTAUT, and their extensions (Davis et al., 1989; Venkatesh et al., 2003). However, as FinTech ecosystems mature, scholars are increasingly calling for **mixed-method, qualitative, and experimental approaches** to address limitations of traditional models and to explore contextual nuances (Walsham, 2012; Davison et al., 2022).

6.1 Survey dominance and model-driven research

Structured questionnaires remain the most prevalent tool, measuring constructs like PU, PEOU, trust, security, satisfaction, and loyalty. For instance, Gu et al. (2009) examined mobile banking adoption in Korea, Jeong and Yoon (2013) in the U.S., and in Bangladesh, Ayoungman et al. (2021) and Hassan et al. (2022) conducted large-scale surveys across financial and healthcare contexts. Surveys allow rapid data collection but may overemphasize self-reported intentions rather than actual usage. Complementing surveys with behavioral tracking, field experiments, or longitudinal designs can better capture adoption dynamics.

6.2 Structural equation modeling (SEM)

Both covariance-based (CB-SEM) and partial least squares (PLS-SEM) dominate statistical analyses. SEM enables simultaneous estimation of measurement models and structural relationships, making it ideal for testing TAM and UTAUT extensions. Studies in Mozambique (Baptista & Oliveira, 2015), China (Zhou et al., 2010), and Bangladesh (Shahria & Jahan, 2022; Mahmud et al., 2023) demonstrate SEM's utility in evaluating service quality, trust, and FinTech readiness. However, overreliance on SEM can constrain theoretical development by focusing on incremental model extensions (Williams et al., 2009; Davison et al., 2022).

6.3 Cross-sectional dominance and lack of longitudinal designs

Most studies are cross-sectional, capturing adoption intentions at one point in time (Kim et al., 2015; Hassan et al., 2022). While identifying determinants, these designs cannot account for habit formation, behavioral evolution, or technology maturation. Longitudinal studies, such as Venkatesh and Davis (2000), illustrate the potential of tracking adoption over time but remain underutilized, especially in Bangladesh where regulation, infrastructure, and trust evolve rapidly (Rahman et al., 2021).

6.4 Limited use of qualitative and mixed methods

Qualitative approaches remain scarce, though essential for understanding cultural, social, and experiential factors. Walsham (2012) emphasized interpretive studies in ICT adoption, and Oshodin et al. (2017) explored FinTech disruption in Australia. In Bangladesh, Rahman et al. (2021) provide limited case-based insights, but broader studies rely heavily on surveys. Mixed-method designs, as demonstrated in Indonesia (Setiawan et al., 2021), offer triangulation, combining quantitative rigor with contextual richness (George et al., 2016).

6.5 Regional and sectoral trends

Methodologies often reflect ecosystem maturity. Advanced economies integrate experiments or regulatory analysis, while emerging markets like Bangladesh, Pakistan, and Mozambique rely on TAM/UTAUT surveys (Islam et al., 2024; Mazhar et al., 2014). Mobile payments and banking dominate research; healthcare (Hassan et al., 2022), hospitality (Karim et al., 2022), and education (Marchewka & Kostiwa, 2014) are emerging sectors.

Overall, methodological trends reveal a dominance of cross-sectional survey-based SEM, emphasizing predictive validation but limiting contextual and dynamic insights. Longitudinal, experimental, qualitative, and mixed-method designs are needed to capture evolving adoption patterns, especially in Bangladesh.

7 TOWARD AN INTEGRATED FRAMEWORK

7.1 Rationale for integration

Global and Bangladeshi evidence indicates FinTech adoption is multi-dimensional, spanning technological, individual, social, and institutional domains. TAM explains cognitive evaluations (PU, PEOU) but neglects cultural, regulatory, and security considerations (Davis, 1989; Venkatesh et al., 2003; Zhou et al., 2010). UTAUT incorporates social influence and facilitating conditions but underrepresents trust, digital literacy, and institutional support (AbuShanab & Pearson, 2007; Baptista & Oliveira, 2015). Bangladesh-specific studies highlight gaps in service quality (Islam, 2013; Resmi, 2017), trust, readiness, and structural inequalities (Ayoungman et al., 2021; Mahmud et al., 2023; Rahman et al., 2021). A comprehensive framework integrating these factors is necessary.

7.2 Dimensions of the integrated framework

- **Technology Factors:** Ease of use, usefulness, security, reliability (Gu et al., 2009; Lim et al., 2019; Islam et al., 2024).

- **Individual Factors:** Trust, innovativeness, readiness, risk perception (Setiawan et al., 2021; Mahmud et al., 2023; Rahman et al., 2021).
- **Social-Cultural Factors:** Subjective norms, peer influence, literacy, gender, urban–rural divides (Baptista & Oliveira, 2015; Khatun & Tamanna, 2020).
- **Institutional-Contextual Factors:** Regulation, infrastructure, financial inclusion policies (Romanova et al., 2018; Rahman et al., 2021).

These clusters interact dynamically: technological ease of use requires trust and regulatory safeguards, while social influence impacts adoption differentially across demographic groups.

7.3 The proposed integrated framework

The framework can be visualized as a multi-level model: technology forms the core, individual factors mediate adoption, social-cultural factors moderate adoption effects, and institutional factors provide the enabling macro environment. This approach extends TAM and UTAUT while embedding contextual realism relevant to Bangladesh and similar emerging economies.

7.4 Conceptual diagram (description)

- **Theoretical:** Integrates TAM, UTAUT, and S-O-R with social and institutional dimensions.
- **Empirical:** Guides multi-level, mixed-method, and longitudinal testing.
- **Practical:** Informs policymakers and practitioners on literacy campaigns, fraud prevention, and regulatory clarity to enhance adoption and inclusion.

Future research should combine surveys, behavioral analytics, and interviews to empirically test the framework, addressing prior methodological limitations and capturing dynamic adoption processes. Moreover, researchers could empirically test this framework using **multi-source data**, including surveys, behavioral analytics, and interviews, to overcome methodological limitations of past studies.

8 CONCLUSION AND FUTURE DIRECTIONS

8.1 Conclusion

This review synthesizes global and Bangladeshi evidence on FinTech adoption, revealing that while digital finance is expanding rapidly, adoption remains uneven and context-dependent. Traditional models such as TAM (Davis, 1989) and UTAUT (Venkatesh et al., 2003) explain technology-driven adoption, emphasizing perceived ease of use, usefulness, and facilitating conditions. However, they underrepresent trust, cultural values, regulatory frameworks, and readiness gaps. In Bangladesh, service quality, trust, security, literacy, and institutional support emerge as key enablers (Islam, 2013; Ayoungman et al., 2021; Mahmud et al., 2023), while barriers include fraud risk, digital illiteracy, and rural–urban divides (Rahman et al., 2021; Rashid Harun, 2020).

To address these multidimensional influences, an integrated framework is proposed, comprising four clusters: (1) technology factors—ease of use, security, reliability; (2) individual factors—trust, innovativeness, readiness; (3) social-cultural factors—subjective norms, literacy, gender; and (4) institutional-regulatory factors—infrastructure, regulation, and inclusion policies. This framework captures the interactive, multi-level nature of adoption in emerging economies.

8.2 Theoretical contributions

The model advances understanding by extending TAM and UTAUT with trust, security, and readiness, contextualizing adoption in emerging markets, and framing adoption as a dynamic, evolving process shaped by infrastructure, regulation, and consumer trust.

8.3 Methodological implications

Most studies rely on survey-based, cross-sectional SEM, limiting insight into behavioral dynamics. Future research should adopt longitudinal designs to track adoption over time, mixed methods combining surveys with interviews and behavioral data, cross-

country comparative analyses, and experimental approaches such as field trials or A/B testing to capture real-world adoption.

8.4 Practical and policy implications

For policymakers and practitioners, the framework provides guidance to strengthen trust and security via regulatory oversight and awareness campaigns (Rahman et al., 2021), bridge digital literacy gaps, especially among rural and female populations (Khatun & Tamanna, 2020), foster innovation ecosystems linking banks, telecoms, and FinTechs (Islam et al., 2024), and develop inclusive regulations that balance innovation with consumer protection (Romanova et al., 2018).

8.5 Future research directions

Research should explore sectoral diversity beyond mobile banking, investigate social inclusion factors such as gender, literacy, and rural access, integrate behavioral economics to understand real-world adoption behaviors, and link adoption to financial resilience, poverty alleviation, and Sustainable Development Goals (Denoncourt, 2020; George et al., 2016). Addressing these areas will ensure FinTech contributes not only to efficiency but also to inclusive development and social equity.

REFERENCES

- AbuShanab, E., & Pearson, J. M. (2007). Internet banking in Jordan: The unified theory of acceptance and use of technology (UTAUT) perspective. *Journal of Systems and Information Technology*, 9(1), 78–97. <https://doi.org/10.1108/13287260710817700>
- Ahmad, S. M., & Mamun, A. A. (2020). Opportunities of Islamic FinTech: The case of Bangladesh and Turkey. *CenRaPS Journal of Social Sciences*, 2(3), 39–52. <https://doi.org/10.46291/cenraps.v2i3.39>
- Ahmed, A., & Hasan, E. (2021). Bangladesh toward digital financial inclusion: FinTech experience. *Journal of Entrepreneurship and Business Innovation*, 8(2), 1–15. <https://doi.org/10.5296/jebi.v8i2.19115>
- Al-Sabaawi, M. Y. M., Alshaher, A. A., & Alsalem, M. A. (2021). User trends of electronic payment systems adoption in developing countries: An empirical analysis. *Journal of Science and Technology Policy Management*, 14(2), 246–270. <https://doi.org/10.1108/JSTPM-11-2020-0162>

- Arora, A., Gupta, S., Devi, C., & Walia, N. (2023). Customer experiences in the era of artificial intelligence (AI) in context to FinTech: A fuzzy AHP approach. *Benchmarking: An International Journal*. <https://doi.org/10.1108/BIJ-10-2021-0621>
- Ashraf, S. (2020). Impact of Innovation Culture on Organizational Citizenship Behavior: A Study on Fin-tech Industry of Bangladesh.
- Ayoungman, F. Z., Chowdhury, N. H., Hussain, N., & Tanchangya, P. (2021). User attitude and intentions towards FinTech in Bangladesh. *International Journal of Asian Business and Information Management*, 12(3), 1–20. <https://doi.org/10.4018/IJABIM.20210701.0a30>
- Baptista, G., & Oliveira, T. (2015). Understanding mobile banking: The unified theory of acceptance and use of technology combined with cultural moderators. *Computers in Human Behavior*, 50, 418–430. <https://doi.org/10.1016/j.chb.2015.04.024>
- Barbu, C. M., Florea, D. L., Dabija, D.-C., & Barbu, M. C. R. (2021). Customer experience in FinTech. *Journal of Theoretical and Applied Electronic Commerce Research*, 16(5), 1415–1433. <https://doi.org/10.3390/jtaer16050080>
- Bhandari, U., Neben, T., Chang, K., & Chua, W. Y. (2017). Effects of interface design factors on affective responses and quality evaluations in mobile applications. *Computers in Human Behavior*, 72, 525–534. <https://doi.org/10.1016/j.chb.2017.02.044>
- Chiu, I. H.-Y. (2017). A new era in fintech payment innovations? A perspective from the institutions and regulation of payment systems. *Law, Innovation and Technology*, 9(2), 190–234. <https://doi.org/10.1080/17579961.2017.1377912>
- Chopdar, P. K., & Balakrishnan, J. (2020). Consumers' response towards mobile commerce applications: S-O-R approach. *International Journal of Information Management*, 53, 102106. <https://doi.org/10.1016/j.ijinfomgt.2020.102106>
- Compeau, D. R., & Higgins, C. A. (1995). Computer self-efficacy: Development of a measure and initial test. *MIS Quarterly*, 19(2), 189–211. <https://doi.org/10.2307/249688>
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35(8), 982–1003. <https://doi.org/10.1287/mnsc.35.8.982>
- Davison, R., Majchrzak, A., Hardin, A., & Ravishankar, M. (2022). Special issue on responsible IS research for a better world. *Information Systems Journal*, 33(1), 1–10. <https://doi.org/10.1111/isj.12405>
- Demirguc-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2018). *Global Findex Database 2017: Measuring financial inclusion and the FinTech revolution*. World Bank. <https://doi.org/10.1596/978-1-4648-1259-0>
- Demirgüç-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2020). The Global Findex Database 2017: Measuring financial inclusion and opportunities to expand

- access to and use of financial services. *World Bank Economic Review*, 34(Supplement_1), S2–S8. <https://doi.org/10.1093/wber/lhz013>
- Denoncourt, J. (2020). Companies and UN 2030 Sustainable Development Goal 9 industry, innovation and infrastructure. *International Journal of Law in Context*, 16(2), 131–149. <https://doi.org/10.1080/14735970.2019.1652027>
- Dillon, A., & Morris, M. G. (n.d.). User acceptance of information technology: theories and models.
- Febrian, D., Simanjuntak, M., & Hasanah, N. (2021). The Effect of Benefits Offered and Customer Experience on Re-use Intention of Mobile Banking through Customer Satisfaction and Trust. *Jurnal Keuangan Dan Perbankan*, 25(3), Article 3. <https://doi.org/10.26905/jkdp.v25i3.5879>
- George, G., Howard-Grenville, J., Joshi, A., & Tihanyi, L. (2016). Understanding and tackling societal grand challenges through management research. *Academy of Management Journal*, 59(6), 1880–1895. <https://doi.org/10.5465/amj.2016.4007>
- George, G., Howard-Grenville, J., Joshi, A., & Tihanyi, L. (2016). Understanding and tackling societal grand challenges through management research. *Academy of Management Journal*, 59(6), 1880–1895. <https://doi.org/10.5465/amj.2016.4007>
- Ghazizadeh, M., Lee, J. D., & Boyle, L. N. (2012). Extending the technology acceptance model to assess automation. *Cognition, Technology & Work*, 14(1), 39–49. <https://doi.org/10.1007/s10111-011-0194-3>
- Gomber, P., Kauffman, R. J., Parker, C., & Weber, B. W. (2018). On the FinTech revolution: Interpreting the forces of innovation, disruption, and transformation in financial services. *Journal of Management Information Systems*, 35(1), 220–265. <https://doi.org/10.1080/07421222.2018.1440766>
- Gu, J.-C., Lee, S.-C., & Suh, Y.-H. (2009). Determinants of behavioral intention to mobile banking. *Expert Systems with Applications*, 36(9), 11605–11616. <https://doi.org/10.1016/j.eswa.2009.03.024>
- Hassan, M. S., Islam, M. A., Sobhani, F. A., Hassan, M. M., & Hassan, M. A. (2022). Patients' intention to adopt FinTech services: A study on Bangladesh healthcare sector. *International Journal of Environmental Research and Public Health*, 19(22), 15302. <https://doi.org/10.3390/ijerph192215302>
- Hossain, M. N., & Hossain, M. Y. (2015). Mobile banking and customer satisfaction: The case of Dhaka city. *Journal of Business and Technology*, 10(1), 108–120.
- Hsu, C.-L., & Lin, J. C.-C. (2016). Effect of perceived value and social influences on mobile app stickiness and in-app purchase intention. *Technological Forecasting and Social Change*, 108, 42–53. <https://doi.org/10.1016/j.techfore.2016.04.012>
- Islam, M. (2013). Assessing service quality of mobile money transfer in Bangladesh: A case study on bKash. *Business Review*, 2(1), 83–89.
- Islam, M. K., Tamzid, M., & Ocean, M. M. (2024). Adaptability and acceptance of FinTech payment system: A study on the users of Bangladesh. *South Asian Journal of Social Sciences and Humanities*, 5(1), 1–12. <https://doi.org/10.48165/sajssh.2024.5111>

- Islam, S., & Rijuwanul, T. (2023, July 19). Customer Satisfaction Analysis of Service Quality Bank, Fintech, Cooperative with CSI and IPA Methods—ProQuest. <https://www.proquest.com/openview/55f5ad26e2bb2a5c72e24689fe31800a/1?pq-origsite=gscholar&cbl=1046413>
- Jeong, B. K., & Yoon, T. E. (2013). An empirical investigation on consumer acceptance of mobile banking services. *Business and Management Research*, 2(1), 31–40. <https://doi.org/10.5430/bmr.v2n1p31>
- Kang, J. (2018). Mobile payment in FinTech environment: Trends, security challenges, and services. *Human-Centric Computing and Information Sciences*, 8(1), 1–15. <https://doi.org/10.1186/s13673-018-0155-4>
- Karim, M. W., Chowdhury, M. A. M., & Haque, A. K. M. A. (2022). A study of customer satisfaction towards e-wallet payment system in Bangladesh. *American Journal of Economics and Business Innovation*, 1(1), 1–14. <https://doi.org/10.54536/ajebi.v1i1.144>
- Karim, R. A., Sobhani, F. A., Rabiul, M. K., Lepee, N. J., Kabir, M. R., & Chowdhury, M. A. M. (2022). Linking FinTech payment services and customer loyalty intention in the hospitality industry: The mediating role of customer experience and attitude. *Sustainability*, 14(24), 16481. <https://doi.org/10.3390/su142416481>
- Kelly, A. E., & Palaniappan, S. (2023). Using a technology acceptance model to determine factors influencing continued usage of mobile money service transactions in Ghana. *Journal of Innovation and Entrepreneurship*, 12(1), 34. <https://doi.org/10.1186/s13731-023-00301-3>
- Khatun, N., & Tamanna, M. (2020). Factors affecting the adoption of FinTech: A study based on the financial institutions in Bangladesh. *Copernican Journal of Finance & Accounting*, 9(4), 77–99. <https://doi.org/10.12775/CJFA.2020.021>
- Kiang, P. M. (2007). Adoption of mobile technologies for chinese consumers. 8(3).
- Kim, Y., Park, Y.-J., Choi, J., & Yeon, J. (2015). An empirical study on the adoption of “FinTech” service: Focused on mobile payment services. *Advanced Science and Technology Letters*, 114, 136–140.
- Koenig-Lewis, N., Palmer, A., & Moll, A. (2010). Predicting young consumers’ take up of mobile banking services. *International Journal of Bank Marketing*, 28(5), 410–432. <https://doi.org/10.1108/02652321011064917>
- Krishna, K. (2019). A study on concerns and preferences in cashless payments. *International Journal of Advanced Research*, 7(7), 150–160. <https://doi.org/10.13140/RG.2.2.22382.87365>
- Lai, D. C.-F., Lai, I. K.-W., & Jordan, E. (2009). An extended UTAUT model for the study of negative user adoption behaviours of mobile commerce. In *Proceedings of the International Conference on Electronic Business (ICEB 2009)*, 720–728
- Lim, S. H., Kim, D. J., Hur, Y., & Park, K. (2019). An empirical study of the impacts of perceived security and knowledge on continuous intention to use mobile FinTech payment services. *International Journal of Human–Computer Interaction*, 35(10), 886–898. <https://doi.org/10.1080/10447318.2018.1507132>

- Mahmud, K., Joarder, M. M. A., & Sakib, K. (2023). Customer FinTech readiness (CFR): Assessing customer readiness for FinTech in Bangladesh. *Journal of Open Innovation: Technology, Market, and Complexity*, 9(2), 100032. <https://doi.org/10.1016/j.joitmc.2023.100032>
- Marchewka, J. T., & Kostiwa, K. (2014). An application of the UTAUT model for understanding student perceptions using course management software. *Communications of the IIMA*, 7(2), 93–104. <https://doi.org/10.58729/1941-6687.1038>
- Mazhar, F., Rizwan, M., Fiaz, U., Ishrat, S., Razzaq, M. S., & Khan, T. N. (2014). An investigation of factors affecting usage and adoption of internet & mobile banking in Pakistan. *International Journal of Accounting and Financial Reporting*, 4(2), 478–500. <https://doi.org/10.5296/ijafr.v4i2.6586>
- Mehrabian, A., & Russell, J. A. (1974). *An approach to environmental psychology*. MIT Press. Retrieved from <https://archive.org/details/approachtoenviro00albe>
- Oshodin, Osemwonyemwen; Molla, Alemayehu; Karanasios, Stan; and Ong, Chin Eang, "Is FinTech a Disruption or a New Eco-system? An Exploratory Investigation of Banks' Response to Fintech in Australia" (2017). *ACIS 2017 Proceedings*. 95. <https://aisel.aisnet.org/acis2017/95>
- Rahman, A., Hasan, M., Amin, M., & Assistant, M. (2017). Mobile banking service quality and customer satisfaction in Bangladesh: An analysis. *The Cost and Management*, 45(3), 26–33.
- Rahman, B., Ahmed, O., & Shakil, S. (2021). Fintech in Bangladesh: ecosystem, opportunities and challenges. *International Journal of Business and Technopreneurship*, 11(1), 73-90.
- Rashid Harun, M. A. (2020). Prospects of digital financial services in Bangladesh in the context of fourth industrial revolution. *Asian Journal of Social Sciences and Legal Studies*, 2(1), 88–95. <https://doi.org/10.34104/ajssls.020.088095>
- Riquelme, H., & Rios, R. (2010). The moderating effect of gender in the adoption of mobile banking. *International Journal of Bank Marketing*, 28(5), 328–341. <https://doi.org/10.1108/02652321011064872>
- Romanova, I., Grima, S., Spiteri, J., & Kudinska, M. (2018). The Payment Services Directive II and competitiveness: The perspective of European FinTech companies. *European Research Studies Journal*, 21(2), 20–35. <https://doi.org/10.35808/ersj/981>
- Rouf, M. A., Babu, M. A., Khatun, M. A., Rasel, M., & Kumar, A. (2019). Measuring customer's satisfaction level and service gap between bKash and Rocket in Bangladesh. *American journal of marketing research*, 5(2), 29-35.
- Setiawan, B., Nugraha, D. P., Irawan, A., Nathan, R. J., & Zoltan, Z. (2021). User innovativeness and FinTech adoption in Indonesia. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(3), 188. <https://doi.org/10.3390/joitmc7030188>

- Shahria, G., & Jahan, N. (2022). PLS-SEM based analysis of customer satisfaction of mobile banking in Bangladesh: A study on users' perspective. *Asian Journal of Economics, Business and Accounting*, 22(6), 35–44.
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104, 333–339. <https://doi.org/10.1016/j.jbusres.2019.07.039>
- Steele, R., Lo, A., Secombe, C., & Wong, Y. K. (2009). Elderly persons' perception and acceptance of using wireless sensor networks to assist healthcare. *International Journal of Medical Informatics*, 78(12), 788–801. <https://doi.org/10.1016/j.ijmedinf.2009.08.001>
- Sudheerkumar, M. A., Hemalatha, D. T. M., & V, M. P. (2022). A Study On Preference Of Youth Towards Cashless Payment System. *Central European Management Journal*, 30(4), Article 4. <https://doi.org/10.57030/23364890.cemj.30.4.202>
- Tajul Urus, S., Kurniasari, F., Nazri, S. N. F. M., Utomo, P., Othman, I. W., Jimmy, S. Y., & Hamid, N. A. (2022). A comparative study of FinTech payment services adoption among Malaysian and Indonesian fresh graduates: Through the lens of UTAUT theory. *Eastern-European Journal of Enterprise Technologies*, 5(13(119)), 73–88. <https://doi.org/10.15587/1729-4061.2022.265662>
- Tajul Urus, S., Kurniasari, F., Syed Mustapha Nazri, S. N. F., Utomo, P., Othman, I. W., Jimmy, S. Y., & Abd Hamid, N. (2022). A comparative study of FinTech payment services adoption among Malaysian and Indonesian fresh graduates: Through the lens of UTAUT theory. *Eastern-European Journal of Enterprise Technologies*, 5(13(119)), 73–88. <https://doi.org/10.15587/1729-4061.2022.265662>
- Venkatesh, Morris, Davis, & Davis. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, 27(3), 425. <https://doi.org/10.2307/30036540>
- Venkatesh, V., & Bala, H. (2008). *Technology acceptance model 3 and a research agenda on interventions*. *Decision Sciences*, 39(2), 273–315. <https://doi.org/10.1111/j.1540-5915.2008.00192.x>
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, 46(2), 186–204. <https://doi.org/10.1287/mnsc.46.2.186.11926>
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478. <https://doi.org/10.2307/30036540>
- Vergallo, R., & Mainetti, L. (2022). The Role of Technology in Improving the Customer Experience in the Banking Sector: A Systematic Mapping Study. *IEEE Access*, 10, 118024–118042. <https://doi.org/10.1109/access.2022.3218010>
- Vinitha, K., & Vasantha, S. (2017). Factors influencing consumer's intention to adopt digital payment: Conceptual model. *Indian Journal of Public Health Research & Development*, 8(3), 225–230. <https://doi.org/10.5958/0976-5506.2017.00181.4>

- Walsham, G. (2012). Are we making a better world with ICTs? Reflections on a future agenda for the IS field. *Journal of Information Technology*, 27(2), 87–93. <https://doi.org/10.1057/jit.2012.4>
- Williams, M. D., Dwivedi, Y. K., Lal, B., & Schwarz, A. (2009). Contemporary trends and issues in IT adoption and diffusion research. *Journal of Information Technology*, 24(1), 1–10. <https://doi.org/10.1057/jit.2008.30>
- Zhou, T., Lu, Y., & Wang, B. (2010). Integrating TTF and UTAUT to explain mobile banking user adoption. *Computers in Human Behavior*, 26(4), 760–767. <https://doi.org/10.1016/j.chb.2010.01.013>

Authors' Contribution

Both authors contributed equally to the development of this article.

Data availability

All datasets relevant to this study's findings are fully available within the article.

How to cite this article (APA):

Islam, M. K., Tamzid, M., & Hussain, M. D. (2025). BRIDGING GAPS IN FINTECH ADOPTION: A MULTI-THEORETICAL REVIEW AND INTEGRATED FRAMEWORK FOR EMERGING ECONOMIES. *Veredas Do Direito*, 22(2), e3228. <https://doi.org/10.18623/rvd.v22.n2.3228>