

E-Commerce Platform Adoption, Customer Experience Quality, and Repurchase Intention Among Emerging Market Consumers: The UTAUT2 Extension

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Abstract

E-commerce platform adoption has transformed retail markets globally, yet the determinants of sustained consumer engagement—particularly repurchase intention—in emerging market contexts characterized by infrastructural constraints, digital literacy heterogeneity, and evolving trust environments remain incompletely understood. This study extends the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) by incorporating customer experience quality as a mediating mechanism and perceived security as an additional technology adoption predictor, examining their joint influence on repurchase intention among e-commerce consumers in Morocco, India, and Brazil. Survey data from 621 online shoppers were analyzed using PLS-SEM. Results confirm significant positive effects of performance expectancy ($\beta = 0.241$), effort expectancy ($\beta = 0.189$), social influence ($\beta = 0.178$), hedonic motivation ($\beta = 0.223$), perceived security ($\beta = 0.261$), and habit ($\beta = 0.312$) on repurchase intention, with customer experience quality partially mediating multiple pathways. Multi-group analysis across the three markets reveals that

performance expectancy is the dominant predictor in India ($\beta = 0.289$) and Brazil ($\beta = 0.271$), while hedonic motivation and habit are most influential in Morocco ($\beta = 0.258$ and 0.341 respectively). The study advances UTAUT2 theory by integrating customer experience quality as a mediating construct and perceived security as an emerging-market-specific extension, providing a more comprehensive model of sustained e-commerce adoption than the original framework offers. Implications for e-commerce platform operators and digital retail policy designers in emerging economies are discussed.

Keywords: UTAUT2, e-commerce adoption, customer experience quality, repurchase intention, perceived security, PLS-SEM, emerging markets

1. Introduction

The global e-commerce market has grown exponentially in the past decade, reaching an estimated USD 5.8 trillion in 2023 and projected to surpass USD 8 trillion by 2027 (Statista, 2024). While mature markets—North America, Western Europe, and East Asia—have long been the focus of e-

commerce research and investment, emerging markets across Africa, South Asia, Latin America, and the Middle East are increasingly recognized as the frontier of future e-commerce growth (Aker & Mbiti, 2010; World Economic Forum, 2022). Markets such as Morocco, India, and Brazil exhibit rapidly expanding internet user bases, young demographic profiles with high digital adoption propensity, and growing middle-class consumer segments, yet face distinctive structural constraints including heterogeneous logistics infrastructure, digital payment ecosystem immaturity, elevated cybersecurity concerns, and variable regulatory environments for online commerce (McKinsey, 2022; Wafia & Mostafa, 2020).

Understanding what drives consumers in these markets not merely to adopt e-commerce platforms initially, but to repurchase—the sustained behavioral engagement that determines platform viability and brand equity—is a critical research and managerial priority. Repurchase intention, defined as the likelihood that a consumer will make repeated purchases from the same e-commerce platform (Bhattacharjee, 2001), is theoretically more complex than initial adoption: it requires sustained satisfaction with technology performance, accumulated experience quality, trust in platform security, and social and habitual reinforcement (Oliver, 1999; Zeithaml et al., 1996).

The Unified Theory of Acceptance and Use of Technology 2 (UTAUT2; Venkatesh et al., 2012) represents the most comprehensive consumer technology adoption framework currently available, extending the original UTAUT (Venkatesh

et al., 2003) with hedonic motivation, price value, and habit constructs specific to consumer (as opposed to organizational) technology adoption. UTAUT2 has been applied across diverse digital technology contexts including mobile payments (Baptista & Oliveira, 2015), social commerce (Farivar et al., 2017), and healthcare apps (Alam et al., 2020), consistently demonstrating strong predictive validity. However, UTAUT2 has two limitations for the present study: it does not include customer experience quality as a mediating construct—arguably the most important driver of repurchase in experiential e-commerce contexts—and it does not incorporate perceived security, which is particularly salient in emerging market e-commerce where cyber fraud concerns are disproportionately prevalent.

2. Literature Review

2.1 UTAUT2: Foundational Constructs and E-Commerce Applications

UTAUT2 identifies seven key determinants of technology use intention: performance expectancy (the degree to which technology use improves performance), effort expectancy (ease of technology use), social influence (social pressure to use technology), facilitating conditions (organizational and technical support), hedonic motivation (fun and pleasure from technology use), price value (cost-benefit evaluation), and habit (automaticity of technology use from prior experience) (Venkatesh et al., 2012). In the e-commerce context, performance expectancy captures time, cost, and convenience advantages of online shopping; effort expectancy reflects

interface usability and navigation ease; hedonic motivation captures the entertainment and shopping enjoyment aspects of digital retail; and habit reflects the degree to which prior platform use has become automatic.

Applications of UTAUT2 to e-commerce repurchase intention find consistent positive effects of most constructs, with performance expectancy and habit typically emerging as the strongest predictors across cultural contexts (Farivar et al., 2017; Gao et al., 2015). However, these studies typically overlook customer experience quality as a mediating mechanism, treating UTAUT2 constructs as directly predicting intention without specifying the experiential pathway through which these perceptions generate sustained engagement.

2.2 Customer Experience Quality as a Mediating Construct

Customer experience quality (CEQ), conceptualized as the consumer's holistic evaluation of the quality of their cumulative interactions with an e-commerce platform across all touchpoints—discovery, browsing, purchase, payment, delivery, and post-sale service (Grewal et al., 2009; Lemon & Verhoef, 2016)—represents the experiential pathway through which technology acceptance perceptions translate into sustained platform engagement. High performance expectancy enhances CEQ by enabling efficient, effective transactions; low effort expectancy enhances CEQ through frictionless navigation; hedonic motivation enhances CEQ through pleasurable, stimulating shopping experiences; and habit enhances CEQ by reducing cognitive load and increasing the fluency of platform interaction.

CEQ, in turn, determines repurchase intention through satisfaction accumulation, service quality evaluation, and experiential loyalty formation (Oliver, 1999; Parasuraman et al., 1988). Integrating CEQ as a mediating construct in the UTAUT2 model provides a more complete and theoretically coherent account of the adoption–repurchase pathway than direct-effects models offer.

2.3 Perceived Security: An Emerging-Market UTAUT2 Extension

Perceived security—the consumer's subjective assessment of the degree to which e-commerce platforms protect personal and financial data against unauthorized access, fraud, and misuse (Pavlou, 2003; Yousafzai et al., 2003)—represents a critical adoption determinant in emerging market contexts that is conspicuously absent from the original UTAUT2 framework. In emerging markets, documented e-commerce fraud prevalence, limited consumer legal recourse infrastructure, and lower familiarity with digital security protocols create elevated security concern salience that substantially constrains adoption and repurchase intention (Wafia & Mostafa, 2020). Empirical support for the perceived security–e-commerce adoption relationship is robust in developing country contexts (Featherman & Pavlou, 2003; Yousafzai et al., 2003), strongly motivating its inclusion as an additional predictor in the UTAUT2 model extension.

3. Research Gap, Objectives, and Hypotheses

Gap: UTAUT2 lacks customer experience quality as a mediating construct and

perceived security as an emerging-market-relevant predictor. No multi-country comparative UTAUT2 study covering Morocco, India, and Brazil simultaneously has been conducted, preventing cross-cultural model validation.

Objectives:

1. To test the extended UTAUT2 model predicting e-commerce repurchase intention with perceived security incorporated.
2. To examine customer experience quality as a mediator between UTAUT2 constructs and repurchase intention.
3. To compare the extended model across Morocco, India, and Brazil.

Hypotheses:

- **H1a-f:** Performance expectancy (H1a), effort expectancy (H1b), social influence (H1c), hedonic motivation (H1d), perceived security (H1e), and habit (H1f) each positively predict repurchase intention.
- **H2:** Customer experience quality mediates the relationships between each UTAUT2 construct and repurchase intention.
- **H3:** The UTAUT2 model path coefficients differ significantly across the three national market groups.

4. Research Methodology

An online survey was administered to adult consumers (18+) who had made at least one e-commerce purchase in the preceding six months across Morocco (n = 207), India (n = 208), and Brazil (n = 206). Validated multi-

item scales were employed: UTAUT2 constructs from Venkatesh et al. (2012; α ranges: .831–.912). Perceived security from Yousafzai et al. (2003; 4 items; α = .889). CEQ adapted from Lemon and Verhoef (2016; 8 items; α = .921). Repurchase intention from Bhattacharjee (2001; 3 items; α = .876). PLS-SEM with SmartPLS 4.0 and bootstrapping (5,000 resamples) was employed.

5. Data Analysis and Findings

5.1 Demographic Profile

Table 1 Demographic Profile (N = 621)

Characteristic	Category	n	%
Country	Morocco	207	33.3%
	India	208	33.5%
	Brazil	206	33.2%
Gender	Female	324	52.2%
	Male	287	46.2%
	Non-binary	10	1.6%
Age	18–25	201	32.4%
	26–35	231	37.2%
	36–45	132	21.3%
	46+	57	9.2%
Monthly Income	Low (< USD 500 PPP)	173	27.9%
	Medium (USD 500–289)	448	72.1%

Characteristic	Category	n	%	Path	β	SE	t	p	Decision
	1500 PPP)			SI	→0.178**	0.051	3.49	.001	H1c Supported
	High (> USD 1500 PPP)	1500	25.6%	Repurchase	*				

5.2 Measurement Model

Table 2 Reliability and Validity Statistics

Construct	α	CR	AVE
Performance Expectancy	.891	.908	.664
Effort Expectancy	.856	.877	.641
Social Influence	.831	.860	.606
Hedonic Motivation	.879	.899	.671
Perceived Security	.889	.906	.706
Habit	.912	.926	.717
Customer Experience Quality	.921	.933	.612
Repurchase Intention	.876	.898	.745

HM	→0.223**	0.047	4.74	<.001	H1d Supported
Repurchase	*				
PS	→0.261**	0.046	5.67	<.001	H1e Supported
Repurchase	*				
HB	→0.312**	0.044	7.09	<.001	H1f Supported
Repurchase	*				
R ²		(Repurchase 0.612)			

Note. PE = Performance Expectancy; EE = Effort Expectancy; SI = Social Influence; HM = Hedonic Motivation; PS = Perceived Security; HB = Habit. ***p < .001.

5.3 Structural Model Results

Table 3 Standardized Path Coefficients: Full Model (H1a–f)

Path	β	SE	t	p	Decision
PE	→0.241**	0.049	4.92	<.001	H1a Supported
Repurchase	*				
EE	→0.189**	0.053	3.57	<.001	H1b Supported
Repurchase	*				

Table 4 CEQ Mediation Results (Selected Pathways) (H2)

Mediation Path	Indirect Effect	SE	95% CI
PE → CEQ → Repurchase	→0.141***	0.031	[0.081, 0.201]
HM → CEQ → Repurchase	→0.128***	0.029	[0.071, 0.185]
PS → CEQ → Repurchase	→0.154***	0.033	[0.089, 0.219]
HB → CEQ → Repurchase	→0.168***	0.034	[0.101, 0.235]

Mediation Path	Indirect Effect	SE	95% CI
Repurchase			0.235]

Note. H2 supported for all four pathways. CEQ partially mediates each relationship.

Table 5 Multi-Group Analysis: Dominant Path Coefficients by Country (H3)

Construct	Morocco (β)	India (β)	Brazil (β)	Sign. Diff.
Performance Expectancy	0.198**	0.289***	0.271***	IN vs. MO*
Hedonic Motivation	0.258***	0.189***	0.201***	MO vs. IN*
Habit	0.341***	0.298***	0.312***	NS
Perceived Security	0.241***	0.271***	0.253***	NS

Note. *p < .05; **p < .01; ***p < .001. NS = not significant.

6–11. Discussion, Implications, and Conclusion (condensed)

Discussion: Habit and perceived security emerge as the two strongest universal predictors of repurchase intention across all three markets, underscoring the centrality of automaticity and trust infrastructure in sustaining e-commerce engagement in emerging contexts. The cross-national variation—performance expectancy

dominance in India and Brazil, hedonic motivation and habit dominance in Morocco—reflects structural differences in e-commerce market maturity: India and Brazil have more established functional e-commerce ecosystems where consumers primarily evaluate utilitarian performance benefits, while Morocco's younger e-commerce market generates stronger hedonic and habituation-driven repurchase dynamics.

Theoretical Implications: Advances UTAUT2 by establishing CEQ as a mediating construct that clarifies the experiential pathway from adoption perceptions to repurchase behavior, and by empirically validating perceived security as a significant e-commerce adoption predictor in emerging markets—a theoretically motivated but previously untested UTAUT2 extension.

Practical Implications: E-commerce platform operators in Morocco should prioritize hedonic interface design and habit-formation mechanisms (loyalty programs, personalization algorithms) alongside security signal communication. India and Brazil platform operators should emphasize functional performance demonstrations—delivery speed transparency, product authenticity guarantees, and price comparison tools—to drive repurchase among performance-expectancy-driven consumer segments.

Conclusion: This multi-country UTAUT2 extension confirms that performance expectancy, effort expectancy, social influence, hedonic motivation, perceived security, and habit collectively predict e-commerce repurchase intention, with customer experience quality as a significant

partial mediator. Future research should incorporate actual behavioral data (purchase frequency records), longitudinal designs, and additional emerging market contexts to further validate the extended model.

References (Selected)

Aker, J. C., & Mbiti, I. M. (2010). Mobile phones and economic development in Africa. *Journal of Economic Perspectives*, 24(3), 207–232. <https://doi.org/10.1257/jep.24.3.207>

Alam, M. M., Awawdeh, A. E., & Muhamad, A. I. B. (2020). Using e-health application to improve vaccination rates. *Telematics and Informatics*, 53, 101434. <https://doi.org/10.1016/j.tele.2020.101434>

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>

Bhattacharjee, A. (2001). Understanding information systems continuance: An expectation-confirmation model. *MIS Quarterly*, 25(3), 351–370. <https://doi.org/10.2307/3250921>

Farivar, S., Turel, O., & Yuan, Y. (2017). A trust-risk perspective on social commerce use: An examination of the biasing role of habit. *Internet Research*, 27(3), 586–607. <https://doi.org/10.1108/IntR-06-2016-0175>

Featherman, M. S., & Pavlou, P. A. (2003). Predicting e-services adoption: A perceived

risk facets perspective. *International Journal of Human-Computer Studies*, 59(4), 451–474. [https://doi.org/10.1016/S1071-5819\(03\)00111-3](https://doi.org/10.1016/S1071-5819(03)00111-3)

Gao, L., Waechter, K. A., & Bai, X. (2015). Understanding consumers' continuance intention towards mobile purchase: A theoretical framework and empirical study. *Computers in Human Behavior*, 53, 249–262. <https://doi.org/10.1016/j.chb.2015.07.014>

Grewal, D., Levy, M., & Kumar, V. (2009). Customer experience management in retailing: An organizing framework. *Journal of Retailing*, 85(1), 1–14. <https://doi.org/10.1016/j.jretai.2009.01.001>

Lemon, K. N., & Verhoef, P. C. (2016). Understanding customer experience throughout the customer journey. *Journal of Marketing*, 80(6), 69–96. <https://doi.org/10.1509/jm.15.0420>

McKinsey. (2022). *The state of grocery retail 2022: Consumers hold all the cards*. McKinsey & Company.

Oliver, R. L. (1999). Whence consumer loyalty? *Journal of Marketing*, 63(4_suppl1), 33–44. <https://doi.org/10.1177/00222429990634s105>

Parasuraman, A., Berry, L. L., & Zeithaml, V. A. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12–40.

Pavlou, P. A. (2003). Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance

model. *International Journal of Electronic Commerce*, 7(3), 101–134.
<https://doi.org/10.1080/10864415.2003.11044275>

Marketing, 60(2), 31–46.
<https://doi.org/10.1177/002224299606000203>

Statista. (2024). *Retail e-commerce sales worldwide from 2014 to 2027*. Statista.
<https://www.statista.com>

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>

Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. *MIS Quarterly*, 36(1), 157–178.
<https://doi.org/10.2307/41410412>

Wafia, A., & Mostafa, M. (2020). E-commerce adoption barriers in developing countries: An empirical analysis. *Journal of Global Information Technology Management*, 23(1), 1–21.
<https://doi.org/10.1080/1097198X.2020.1712665>

World Economic Forum. (2022). *Future of consumption in fast-growth consumer markets*. World Economic Forum.

Yousafzai, S. Y., Pallister, J. G., & Foxall, G. R. (2003). A proposed model of e-trust for electronic banking. *Technovation*, 23(11), 847–860.
[https://doi.org/10.1016/S0166-4972\(03\)00130-5](https://doi.org/10.1016/S0166-4972(03)00130-5)

Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of*