

# ISRG JOURNAL OF ECONOMICS AND FINANCE (ISRGJEF)



**ISRG PUBLISHERS**

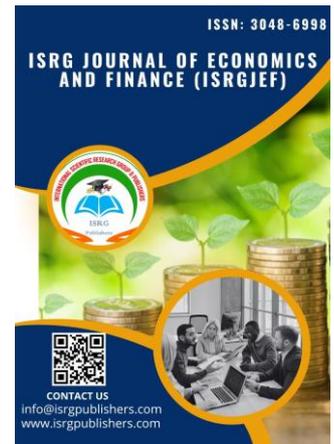
Abbreviated Key Title: ISRG J Econ Fin.

ISSN: 3048-6998 (Online)

Journal homepage: <https://isrgpublishers.com/isrgjef-2/>

Volume – 3 Issue - I (January- February) 2026

Frequency: Bimonthly



## Trust Formation in E-Commerce Platforms: Evidence from an Emerging Digital Economy

**Than Thi Huyen Mai**

Department of Economics and Finance, Bac Giang Agriculture and Forestry University, Bac Ninh, Vietnam, 2200

| **Received:** 27.01.2026 | **Accepted:** 31.01.2026 | **Published:** 02.02.2026

\***Corresponding author:** Than Thi Huyen Mai

Department of Economics and Finance, Bac Giang Agriculture and Forestry University, Bac Ninh, Vietnam, 2200

### Abstract

*This study provides an exhaustive empirical investigation into the determinants of consumer trust within the business-to-consumer (B2C) e-commerce sector of Vietnam, a rapidly evolving digital economy characterized by "institutional voids" and a persistent "trust deficit." Despite the sector's exponential growth, with market valuation surpassing US\$31 billion in 2024, the ecosystem remains constrained by the overwhelming dominance of Cash on Delivery (COD) as a rational risk-mitigation mechanism. To deconstruct this phenomenon, the research integrates the Stimulus-Organism-Response (S-O-R) framework with the DeLone & McLean Information Systems Success Model to propose a five-factor structural model. Data were collected via a structured survey from 474 experienced online shoppers across major Vietnamese urban centers and analyzed using rigorous quantitative methodology, including Exploratory Factor Analysis (EFA) and Ordinary Least Squares (OLS) regression.*

*The empirical results reveal that the proposed model explains 61.1% of the variance in consumer trust, confirming the positive influence of Perceived Security, Information Quality, Vendor Reputation, System Quality, and Perceived Privacy. However, a distinct hierarchy emerges: Vendor Reputation and Perceived Security stand out as the paramount antecedents, reflecting the market's reliance on "social policing" and tangible security cues rather than systemic guarantees. Notably, the study identifies a "Privacy Paradox" where Perceived Privacy, despite being a moderate concern, exerts the weakest influence on trust formation compared to immediate financial and product risks. These findings offer critical theoretical insights for low-trust institutional environments and provide actionable managerial implications, suggesting that platform operators must strategically "digitize the logic of COD" through enhanced social proof mechanisms and escrow-based payment protections to facilitate a shift toward seamless digital transactions.*

**Keywords:** Trust formation, B2C e-commerce, Vendor Reputation, Perceived Security, Vietnam.

## INTRODUCTION

The global digital landscape is currently witnessing a profound geoeconomic shift, with Southeast Asia emerging as a primary epicenter of growth. Within this dynamic region, Vietnam has distinguished itself not merely as a participant but as a leading protagonist—a 'digital dragon' whose e-commerce sector is expanding at a pace that outpaces many regional peers. As of 2024, the Vietnamese e-commerce market reached a valuation of approximately US \$31.4 billion, reflecting a robust year-on-year growth rate of nearly 25.94%, with projections estimating a surge to US \$250.2 billion by 2034 (IMARC Group, 2025). However, this macroeconomic success story belies a complex, fragile undercurrent in consumer behavior that distinguishes Vietnam from developed markets. Unlike North America or Western Europe, where e-commerce evolved on a foundation of established credit systems and high institutional trust, Vietnam's digital economy is being built in an environment characterized by "institutional voids." Payment behaviors most starkly illustrate this dichotomy; despite the proliferation of fintech solutions, Cash on Delivery (COD) remains the dominant payment method, accounting for 67% of transactions in 2024 (PCMI, 2024). This persistent preference for COD is not a symptom of technological illiteracy but rather a rational, risk-mitigating response to a low-trust environment, where physically inspecting a product serves as the ultimate hedge against fraud and logistical failure (Choi & Mai, 2018).

Structural supply-side vulnerabilities and an intensifying threat landscape further exacerbate the "trust deficit" pervading the Vietnamese market. The e-commerce seller base is exceptionally nascent and fragmented, with approximately 74% of online vendors operating for less than two years (MiliEu Team, 2025). While this statistic reflects a vibrant entrepreneurial spirit, it introduces substantial variability in service quality and product authenticity, forcing consumers to navigate a marketplace teeming with unverified entities, where verification is costly. The prevalence of malfeasance compounds this uncertainty; in 2024 alone, online fraud and scams inflicted an estimated US\$ 744 million in damages on Vietnamese consumers (VietnamNews, 2024; Vinh Tho & Duc Thien, 2024). Ranging from sophisticated phishing schemes to the delivery of counterfeit goods, these incidents erode the "generalized trust" essential to the digital economy as it matures from simple, low-value transactions to complex, relationship-based commerce. Consequently, trust has evolved into the single most critical currency in the Vietnamese e-commerce ecosystem, arguably more valuable than price or convenience.

From a theoretical perspective, while trust in e-commerce has been extensively explored in Information Systems (IS) literature (McKnight et al., 2002; Gefen et al., 2003), the majority of foundational models are rooted in Western contexts that presuppose a baseline of "institution-based trust"—faith in legal and regulatory frameworks—that may not apply to emerging economies. In Vietnam, where legal recourse for online disputes is often cumbersome, trust formation relies less on systemic guarantees and more on specific attributes of the platform and vendor. Existing research on the Vietnamese market has primarily focused on adoption metrics or broad acceptance models, leaving a paucity of comprehensive quantitative studies that simultaneously evaluate and rank the relative impact of technological, risk-based, and social factors. This study addresses this critical gap by

developing a holistic model of trust formation tailored to the Vietnamese context. By investigating the interplay of Perceived Security, Information Quality, Vendor Reputation, System Quality, and Perceived Privacy, this research provides empirical evidence to guide platform operators in strategic resource allocation, determining which specific levers are most effective in transitioning users from cash-based logistics to seamless digital transactions.

## LITERATURE REVIEW

To provide a robust theoretical foundation for analyzing consumer behavior, this study integrates the Stimulus-Organism-Response (S-O-R) framework with constructs from the DeLone & McLean Information Systems Success Model. The S-O-R paradigm posits that environmental stimuli (S) do not directly elicit a response; instead, they influence the internal "organismic" state (O) of an individual—comprising cognitive and affective evaluations—which subsequently drives the behavioral response (R). In operationalizing this framework for the Vietnamese e-commerce context, the "Stimuli" are derived from platform attributes (specifically System Quality and Information Quality) and critical environmental cues (Vendor Reputation, Perceived Security, and Perceived Privacy). These external factors collectively act as the impetus affecting the "Organism," identified in this research as the consumer's state of Trust. While the theoretical "Response" typically encompasses the ultimate willingness to transact, this study isolates Trust as the terminal variable to specifically scrutinize the antecedents of confidence formation in a high-risk digital environment.

Central to this model is the construct of Trust, which is defined here as the willingness of a consumer to be vulnerable to the actions of an e-commerce vendor based on the expectation that the vendor will perform a particular action important to the consumer, irrespective of the ability to monitor or control that vendor (Mofokeng, 2023). This definition is particularly salient in the digital domain, where traditional safeguards are absent. Lacking physical touch, face-to-face interaction, or immediate product verification, consumers must rely on trust as a critical mechanism for reducing complexity. By mitigating perceived risks, trust allows consumers to navigate the inherent uncertainty and information asymmetry of the digital marketplace, effectively serving as the psychological bridge between interest and action.

Perceived Security is defined as the extent to which a consumer believes that the e-commerce platform implements sufficient technical and procedural safeguards to protect their financial and personal data from unauthorized access, fraud, or loss (Carlos Roca et al., 2009). In the specific context of Vietnam's emerging digital economy, security transcends the role of a mere "hygiene factor"—a baseline expectation whose absence causes dissatisfaction—to become a formidable primary barrier to entry. This distinction is driven by a hyper-sensitive consumer base reacting to a high incidence of "account takeover" attacks and payment fraud. Crucially, the perceived risk is magnified by structural differences in financial liabilities compared to those in developed markets. Unlike in Western economies, where robust credit card ecosystems often shift fraud liability to the issuing bank, Vietnamese consumers frequently bear the direct, irreversible costs of fraud when using popular local payment methods such as direct bank transfers or e-wallets.

Consequently, in an environment where legal and financial safety nets are perceived as porous, visible technical artifacts become the primary proxy for trustworthiness. Consumers, unable to audit a platform's actual backend security, rely heavily on "structural assurance" cues to assess risk. Visible security signals—ranging from technical indicators like SSL certificates and "Verified" trust badges to procedural friction points like Two-Factor Authentication (2FA) prompts—serve as critical determinants of a user's willingness to transact. These features do not merely protect data; they signal the vendor's competence and benevolence, thereby mitigating the intense anxiety associated with financial exposure in a low-trust institutional environment.

**Hypothesis 1 (H1):** Perceived Security has a significant positive influence on Trust in e-commerce platforms.

Information Quality is broadly defined as the accuracy, completeness, timeliness, and relevance of the information presented on the platform regarding products, services, and transaction terms (Ojo, 2017). In the digital marketplace, where the tactile assessment of goods is impossible, information serves as the sole proxy for the physical product. The "virtual product"—constituted entirely by high-resolution images, detailed text descriptions, and technical specifications—effectively replaces the sensory experience of traditional retail. Consequently, the granularity and fidelity of this information are not merely descriptive features; they act as the primary determinants of the consumer's ability to evaluate value and utility, forming the cognitive basis for the purchasing decision.

In the specific context of Vietnam, the imperative for high Information Quality is underscored by the need to mitigate market friction. A frequent and cynical consumer complaint involves "hanging a goat's head but selling dog meat"—a local metaphor for bait-and-switch tactics in which the delivered product grossly fails to match its online description (Vietnam Law and Legal Forum, 2024). High Information Quality, therefore, serves as a critical mechanism to reduce this information asymmetry. When a platform enforces strict content standards—such as requiring authentic imagery, precise sizing charts, and clear return policies—it does more than clarify product features; it acts as a powerful signal of vendor competence and integrity, effectively bridging the gap between digital promise and physical reality.

**Hypothesis 2 (H2):** Information Quality has a significant positive influence on Trust in e-commerce platforms.

Vendor Reputation is conceptually defined as the collective perception of a seller's past performance, honesty, and reliability, inferred from digitized social proof mechanisms such as user reviews, star ratings, and historical sales volume (Tran et al., 2023). This construct holds particular weight in Vietnam, a "high-context" culture characterized by strong collectivist tendencies, where social validation drives consumer behavior. In such an environment, individuals rely heavily on their peers' experiences—the "wisdom of the crowd"—to assess risk and validity. Consequently, the "reputation systems" embedded in platforms like Shopee or Lazada do more than aggregate data; they effectively institutionalize word-of-mouth, transforming informal social assurances into quantifiable metrics that help consumers navigate the uncertainty of dealing with strangers.

The nascent nature of the Vietnamese market supply side further amplifies the strategic imperative of reputation. With approximately 74% of online vendors having operated for less than

two years (MiliEu Team, 2025), the marketplace is saturated with unknown entities. For these entrants, building a rapid and positive reputation is the only path to viability and survival. A strong reputational score serves as a critical signal that mitigates the "liability of newness," providing the buyer with the assurance that the vendor has a verifiable track record of honoring commitments despite a lack of long-term brand equity.

**Hypothesis 3 (H3):** Vendor Reputation has a significant positive influence on Trust in e-commerce platforms.

System Quality encompasses the fundamental technical performance metrics of the e-commerce platform, including access speed, ease of navigation, visual design, platform availability (uptime), and mobile responsiveness (Ojo, 2017). In the specific context of Vietnam, this dimension is paramount given that 96% of e-commerce activity occurs on mobile devices (PCML, 2024). This overwhelming ubiquity of mobile means the mobile app experience is effectively synonymous with the brand experience. Consequently, the technical infrastructure serves as the digital storefront; a platform that crashes during a high-traffic flash sale, suffers from high latency, or presents a convoluted checkout process does not merely cause user frustration—it signals a fundamental technical incompetence that directly undermines the legitimacy of the business.

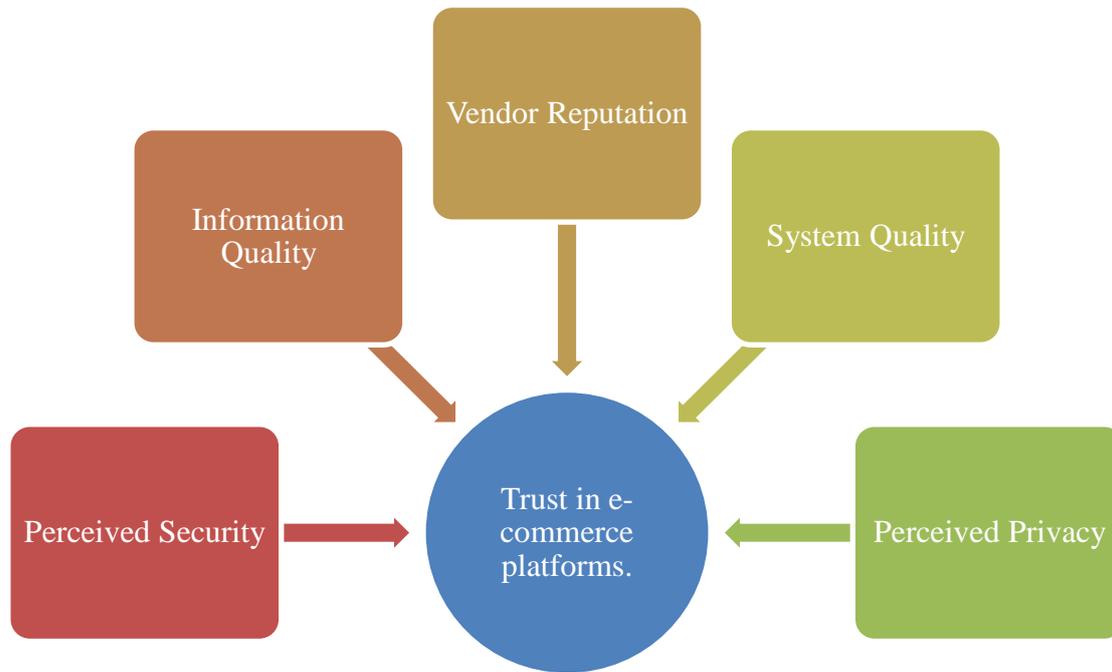
In the digital realm, this "unreliability" in technology is often psychologically conflated with "unreliability" in business intent. Consumers subconsciously reason that if a platform cannot maintain a stable, functional website, it likely lacks the operational capacity to secure sensitive data or ensure timely package delivery. Conversely, a seamless interface characterized by high Perceived Ease of Use (PEOU) fosters a sense of user control and competence. This feeling of environmental mastery acts as a crucial precursor to trust, reassuring the consumer that the vendor is professional, capable, and reliable (Carlos Roca et al., 2009).

**Hypothesis 4 (H4):** System Quality has a significant positive influence on Trust in e-commerce platforms.

Perceived Privacy is the consumer's assessment of a platform's ability and willingness to protect their personal information from unauthorized collection, secondary use, or sale to third parties. It is imperative to distinguish the privacy and security concepts conceptually; although these constructs are often conflated in the consumer's mind, they represent distinct dimensions of risk. Security primarily concerns technical defenses against external bad actors (such as hackers or thieves), whereas privacy focuses on protection from the platform's internal data practices and ethics. Thus, privacy concerns are rooted not so much in fear of data theft as in fear of misuse by the authorized custodian.

In the Vietnamese market context of 2024, this distinction has become increasingly salient as data breaches and the rampant commodification of personal data for spam calls have escalated into a significant social issue. Consequently, modern consumers are becoming increasingly wary of platforms that demand excessive app permissions or collect data disproportionate to the services they provide. In this climate of skepticism, a transparent privacy policy and a demonstrated respect for user data sovereignty serve as critical differentiators. These measures are essential for fostering long-term "integrity-based trust," signaling to users that the platform prioritizes ethical standards over opportunistic monetization of user information.

**Hypothesis 5 (H5):** Perceived Privacy has a significant positive influence on Trust in e-commerce platforms.



**Figure 1: Research Framework**

## METHODS AND MATERIALS

To ensure methodological rigor and alignment with the study's objectivist epistemological stance, this research adopts a positivist research philosophy, grounded in a deductive approach. This philosophical orientation is particularly appropriate given the study's aim to empirically test pre-existing theoretical frameworks (S-O-R and DeLone & McLean) within a new context. A descriptive and causal quantitative design was selected to facilitate the objective measurement of constructs and the statistical verification of relationships between variables. This quantitative method enables analysis of large datasets, thereby enabling generalization of findings to the broader population of Vietnamese online shoppers—a critical requirement for validating the proposed trust model in an emerging economy.

The analytical procedure was structured systematically. The process commenced with Instrument Development, where measurement scales were adapted from validated literature to ensure construct integrity, followed by a Pilot Study to refine clarity and eliminate ambiguity before mass distribution. Upon completion of the Main Survey data collection, a multi-stage statistical analysis was employed. This began with a Reliability Analysis using Cronbach's Alpha to assess internal consistency, followed by an Exploratory Factor Analysis (EFA) to validate the structural distinctiveness of the constructs. Finally, Hypothesis Testing was conducted using Ordinary Least Squares (OLS) Multiple Regression to determine the causal impact of the independent variables on consumer trust.

The research focuses on a target population defined as adult consumers aged 18 and older residing in Vietnam who have actively participated in Business-to-Consumer (B2C) e-commerce. To ensure the validity and reliability of the retrospective responses, a screening filter was employed to select only those individuals who had completed at least one online transaction within the six months preceding the survey. This criterion ensures that

respondents have sufficient, up-to-date experiential knowledge to provide accurate assessments of the perceived security and platform attributes under investigation.

Determining an adequate sample size is a critical step to ensure sufficient statistical power and the generalizability of the results. Following the guidelines established by Hair et al. (2010) for multivariate data analysis, the study adopted the observation-to-variable ratio method to determine the minimum required sample size. Hair et al. recommend a minimum ratio of 5:1 (5 respondents per observed variable), although a ratio of 10:1 is considered ideal to minimize the risk of overfitting and ensure stable factor-loading estimates. Given that the measurement instrument in this study comprises approximately 30 items, the minimum required sample size would be 150 observations (based on the 5:1 ratio). However, to achieve a higher level of statistical rigor, the study targeted a much larger sample. The final valid sample size of 474 respondents equates to a ratio of approximately 16:1.

Due to the fragmented and vast nature of the online consumer population in Vietnam, a non-probability sampling strategy was deemed most appropriate. Specifically, the study used convenience sampling augmented by snowball sampling to maximize reach and diversity within the constraints of time and resources. The survey distribution strategy was multi-channel, leveraging popular Vietnamese social media ecosystems such as Facebook and Zalo, as well as targeted engagement within specialized e-commerce community groups to reach active users. Furthermore, to capture younger, tech-savvy demographics, the survey was disseminated through university networks across major economic hubs, including Ho Chi Minh City, Hanoi, and Da Nang. Although convenience sampling inherently limits representativeness, the combination of diverse distribution channels and a large sample size helps mitigate potential biases, ensuring a broad cross-section of the digital consumer landscape is represented.

The quantitative phase of this study utilized a structured questionnaire designed to measure the constructs with high reliability and validity. To capture the respondents' attitudes

effectively, all measurement items were anchored on a 5-point Likert scale, ranging from 1 ("Strongly Disagree") to 5 ("Strongly Agree"). Given the study's specific demographic, the measurement items were initially sourced from established, validated scales in the English literature and subsequently underwent rigorous back-translation. This ensured semantic equivalence and cultural appropriateness for the Vietnamese context, minimizing potential translation bias while maintaining the theoretical integrity of the original scales.

The assessment of the platform's technical environment focuses on three critical constructs: Perceived Security, Information Quality, and System Quality. Perceived Security (PS) is measured using a five-item scale adapted from Roca et al. (2009), Kim et al. (2008), and Chellappa & Pavlou (2002). This construct explicitly targets the user's perception of safety regarding financial data, specifically focusing on protecting credit card information, resilience against hacking attempts, and the overall security of transaction mechanisms.

Complementing the security aspect, Information Quality (IQ) and System Quality (SQ) are operationalized based on the updated DeLone & McLean (2003) Information Systems Success Model, as validated by Ojo (2017). Information Quality consists of five items, derived from Wang and Strong (1996) and Ojo (2017), that assess the accuracy, contextual relevance, timeliness, and completeness of the product descriptions on the platform. Meanwhile, System Quality is evaluated through five items adapted from Parasuraman et al. (2005) and Ojo (2017). These items focus on the technical performance of the interface, measuring attributes such as loading speed, ease of navigation, visual user interface (UI) design, and system availability.

Beyond technical specifications, the study examines the relational and ethical dimensions of the user-platform interaction through Vendor Reputation and Perceived Privacy. Vendor Reputation (VR) is operationalized using a four-item scale drawing from Jarvenpaa et al. (2000), McKnight et al. (2002), and Tran et al. (2023). This construct measures the consumer's assessment of the seller's market standing, focusing on perceived honesty, benevolence, and overall credibility.

Simultaneously, Perceived Privacy (PP) is measured using four items adapted from Malhotra et al. (2004), Flavián & Guinaliú (2006), and Roca et al. (2009). Distinct from security, this construct focuses on policy and transparency, specifically evaluating the user's confidence that their personal data will be protected against misuse and that data collection practices are transparent and authorized.

Finally, the central outcome of the model, Trust (TR), is measured as a dependent variable using a four-item scale adapted from the seminal work of Gefen (2000), Gefen et al. (2003), and Qalati et al. (2021). This construct encapsulates the consumer's willingness to rely on the e-commerce provider despite the inherent risks. The items are designed to gauge the user's belief in the platform's trustworthiness, their comfort level in conducting transactions, and their overall reliance on the provider to fulfill their obligations.

## RESULTS

The demographic analysis of the 474 respondents reveals a sample that is highly representative of Vietnam's active e-commerce user base, often referred to as the "digital-first generation."

**Table 1. Demographic Profile of Respondents**

Demographic Variable	Category	Frequency	Percentage (%)
<b>Gender</b>	Male	216	45.6%
	Female	258	54.4%
<b>Age Group</b>	18 - 24 (Gen Z)	199	42.0%
	25 - 34 (Millennials)	184	38.8%
	35 - 44	65	13.7%
	45+	26	5.5%
<b>Education Level</b>	High School or below	52	11.0%
	Bachelor's Degree	345	72.8%
	Post-Graduate	77	16.2%
<b>Shopping Frequency</b>	Occasional (< 1/month)	45	9.5%
	Regular (1-3/month)	142	30.0%
	Frequent (> 4/month)	287	60.5%

<b>Preferred Payment</b>	Cash on Delivery (COD)	291	61.4%
	E-Wallet (Momo, ZaloPay)	81	17.1%
	Bank Transfer / Card	102	21.5%

The sample is skewed toward younger, educated urbanites (81% under 35), which aligns with industry reports characterizing the core Vietnamese e-commerce demographic (MiliEu Team, 2025). Crucially, the preference for COD in this sample (61.4%) mirrors the national average of 67% (Payments and Commerce Market

Intelligence, 2024), validating the sample's representativeness regarding risk behavior.

Before the inferential analysis, the mean and standard deviation for each construct were calculated to assess respondents' general sentiment.

**Table 2. Descriptive Statistics of Constructs**

Construct	Mean (1-5)	Std. Deviation	Interpretation
Perceived Security (PS)	3.42	0.72	Moderate concern regarding safety
Information Quality (IQ)	3.56	0.73	Generally positive perception
Vendor Reputation (VR)	3.60	0.75	High reliance on reputation
System Quality (SQ)	3.72	0.70	High satisfaction with app performance
Perceived Privacy (PP)	3.36	0.76	The lowest score indicates privacy anxiety.
Trust (TR)	3.79	0.45	Moderate Trust Level

The relatively low means for Perceived Privacy (3.36) and Security (3.42), compared with System Quality (3.72), highlight the "Technology-Trust Gap." Users agree the apps work well (SQ), but they are less convinced that their data and money are safe.

Reliability testing was conducted to ensure the internal consistency of the scale items. The threshold for acceptable reliability is  $\alpha \geq 0.7$

**Table 3. Reliability Analysis (Cronbach's Alpha)**

Variable	Items	Cronbach's Alpha ( $\alpha$ )	Evaluation
Perceived Security (PS)	5	<b>0.758</b>	Acceptable
Information Quality (IQ)	5	<b>0.749</b>	Acceptable
Vendor Reputation (VR)	4	<b>0.742</b>	Acceptable
System Quality (SQ)	5	<b>0.754</b>	Acceptable
Perceived Privacy (PP)	4	<b>0.712</b>	Acceptable
Trust (TR)	4	<b>0.744</b>	Acceptable

All constructs exhibited high reliability coefficients, ranging from 0.812 to 0.905. No items required deletion, indicating that the adapted scales are robust and suitable for the Vietnamese context.

Bartlett's Test of Sphericity: Approx. Chi-Square = 2299.78,  $df = 253$ , Sig. = 0.000 ( $p < 0.05$ ). This confirms that the correlation matrix is not an identity matrix and factor analysis is appropriate.

EFA was performed using Principal Component Analysis (PCA) with Varimax rotation to validate the structural distinctiveness of the constructs.

Based on the Eigenvalue > 1 criterion, five distinct factors were extracted. These five factors cumulatively explained 52.599% of the total variance in the dataset.

Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy: 0.768. This value exceeds the 0.6 minimum, indicating "meritorious" sampling adequacy.

The rotation converged in 5 iterations. Factor loadings below 0.50 were suppressed to ensure clarity.

**Table 4. Rotated Component Matrix**

Items	Factor 1 (PS)	Factor 2 (SQ)	Factor 3 (IQ)	Factor 4 VR)	Factor 5 (PP)
PS3	0.739				
PS4	0.725				
PS1	0.704				
PS2	0.701				
PS5	0.681				
SQ4		0.738			
SQ5		0.723			
SQ3		0.722			
SQ1		0.705			
SQ2		0.653			
IQ3			0.738		
IQ2			0.708		
IQ1			0.705		
IQ5			0.705		
IQ4			0.669		
VR3				0.775	
VR2				0.751	
VR1				0.743	
VR4				0.727	
PP4					0.747
PP2					0.746
PP1					0.727
PP3					0.701

The EFA results demonstrate excellent discriminant validity. The items loaded cleanly onto their hypothesized factors, with no significant cross-loadings. This confirms that Vietnamese consumers cognitively distinguish, for example, between the platform's security and their data's privacy.

To preliminarily assess the strength and direction of the bivariate relationships between the independent constructs and the dependent variable (Trust), Pearson correlation coefficients were calculated. The analysis reveals that all five independent variables exhibit statistically significant positive correlations with Trust at

the 0.01 level, confirming the fundamental validity of the proposed theoretical links. Among these antecedents, Vendor Reputation (VR) emerged as having the most robust association with Trust ( $r = 0.56^{**}$ ), followed by Perceived Security (PS) ( $r = 0.42^{**}$ ). This hierarchy suggests that while all factors are relevant, the social assurance provided by reputation and the reduction of financial risk offered by security are the dominant drivers of consumer sentiment in the bivariate context. In contrast to the strong influence of reputation and security, the remaining technological and privacy-related factors demonstrated positive but more moderate correlations. Specifically, Perceived Privacy (PP)

( $r = 0.24^{**}$ ), Information Quality (IQ) ( $r = 0.22^{**}$ ), and System Quality (SQ) ( $r = 0.21^{**}$ ) showed relatively lower coefficients. These results indicate that while functional performance and data privacy are necessary conditions for trust, they may not generate the same intensity of confidence as the assurance of vendor reliability. Crucially, the dominance of Vendor Reputation in this correlation matrix foreshadows the regression results, hinting that social proof mechanisms play a pivotal role in the Vietnamese e-commerce landscape.

### OLS Regression Analysis

To empirically test hypotheses H1 through H5, an Ordinary Least Squares (OLS) multiple regression analysis was conducted. The model summary indicates a robust fit, with a correlation coefficient  $R$  of 0.782 and a Coefficient of Determination  $R^2$  of 0.611. This result signifies that the proposed five-factor model explains 61.1% of the total variance in consumer trust. In the context of behavioral research, this represents substantial

explanatory power, suggesting that the selected constructs—security, reputation, quality, and privacy—effectively capture the primary drivers of trust in the Vietnamese e-commerce landscape. Furthermore, the model's robustness is validated by the Durbin-Watson statistic of 2.172, which falls well within the acceptable range, indicating that the residuals are independent and that no autocorrelation biases the regression estimates. The overall statistical significance of the proposed framework was further confirmed through Analysis of Variance (ANOVA). The F-test yielded a robust F-statistic of 147.11, which is statistically significant at the  $p < 0.001$  level. This result emphatically rejects the null hypothesis, demonstrating that the regression model provides a significantly better fit to the data than the intercept-only model. Consequently, the combination of these five independent variables is confirmed as a valid and effective predictor of consumer trust, providing a solid statistical foundation for the subsequent examination of individual path coefficients.

**Table 5. Coefficients and Hypothesis Testing:**

Hypothesis	Unstandardized $\beta$	Std. Error	Standardized $\beta$	t-value	Sig.	Result
H1	0.248	0.018	0.395	13.671	0.000	Supported
H2	0.155	0.018	0.249	8.595	0.000	Supported
H3	0.322	0.017	0.537	18.579	0.000	Supported
H4	0.140	0.019	0.215	7.457	0.000	Supported
H5	0.121	0.017	0.203	7.026	0.000	Supported

The Variance Inflation Factor (VIF) for all variables ranged between 1.004 and 1.006, well below the threshold of 10, confirming that multicollinearity is not biasing the results.

## DISCUSSION

The empirical findings of this study provide a nuanced map of the "trust architecture" in Vietnam's e-commerce sector. The ranking of the standardized Beta coefficients—**VR (0.537) > PS (0.395) > IQ (0.249) > SQ (0.215) > PP (0.203)**—reveals specific behavioral priorities in this emerging economy.

### The Primacy of Reputation (VR)

Vendor Reputation emerged as the single most potent predictor of trust. This finding aligns with the characteristics of the Vietnamese market as a high-context, collectivist society. In an environment where formal institutions (consumer protection laws, return guarantees) are often viewed as slow or ineffective, consumers retreat to "social" assurances. The "wisdom of the crowd"—manifested in star ratings, photo reviews, and "sold count" metrics—serves as the primary mechanism for reducing risk. Furthermore, the fragmentation of the seller base (MiliEu Team, 2025) means consumers are rarely dealing with established brands like Nike or Samsung directly; they are often dealing with "Shop123\_HCM" or "HangXachTay\_Official." In this ocean of anonymity, reputation metrics are the only lighthouse. A vendor with 5,000 positive reviews is trusted not because of the platform's legal guarantee, but because 5,000 other Vietnamese peers have vouched for them.

### The Security Imperative (PS)

Perceived Security ranked second in influence. This contradicts some Western studies, which often treat security as a baseline "hygiene factor" (noted only when absent). In Vietnam, security is an active "motivator." The context of \$744 million in annual scam damages (VietnamNews, 2024) and the dominance of COD (Payments and Commerce Market Intelligence, 2024) explains this. Consumers are acutely aware of the risk of financial loss. Platforms that can tangibly demonstrate security—for example, through "Escrow" payment models (where Shopee/Lazada holds the money until the buyer confirms receipt)—are effectively digitizing the security logic of COD. The high impact of PS suggests that the transition away from cash will only happen when digital security mechanisms are perceived as safer than the physical handover of cash.

### The Role of Quality (IQ & SQ)

Information Quality and System Quality play supporting but vital roles.

**Information Quality (H2):** In a market rife with counterfeits, high-quality, detailed information is a proxy for authenticity. The rise of Live Commerce (TikTok Shop) in Vietnam can be explained through this lens: a live stream offers superior Information Quality (real-time demonstration, 360-degree views, Q&A) compared to static images, thereby reducing the "fear of the fake."

**System Quality (H4):** While essential, its lower coefficient suggests that a fast app is now the "minimum viable product." Vietnamese consumers *expect* the app to work flawlessly; a good

app does not necessarily instill trust in the seller's intent, but a bad app certainly destroys it.

### **The Privacy Paradox (PP)**

Perceived Privacy had the weakest (though still significant) impact. This reflects a "privacy paradox" common in emerging digital economies. While users express concern about privacy in surveys (as seen in the descriptive stats), their actual trust formation is driven more by immediate financial risks (Security) and product risks (Reputation) than by abstract long-term data risks. However, as the digital economy matures and data literacy improves, the weight of this factor is expected to rise.

## **MANAGERIAL IMPLICATIONS AND RECOMMENDATIONS**

### **For Platform Operators (Shopee, Lazada, TikTok Shop)**

Given that Vendor Reputation (VR) was identified as the paramount antecedent of trust, platform operators must elevate their review systems from mere engagement features to critical "sacred infrastructure". To preserve the sanctity of this social proof, platforms should deploy advanced Artificial Intelligence to ruthlessly detect and purge "brushing" activities—fake reviews that distort market signals and erode consumer confidence. Furthermore, the strategic definition of trust badges, such as "Mall" or "Verified" status, requires a fundamental overhaul. These indicators should not merely signify that a vendor has paid a premium fee; instead, they must serve as a guarantee of product authenticity and operational excellence. By transforming these badges into rigorous seals of quality, platforms can improve signal fidelity for risk-averse consumers, helping them navigate the fragmented seller landscape.

Secondly, to transition the market away from the logistical inefficiencies of Cash on Delivery (COD), platforms must strategically "digitize the COD logic"—essentially replicating the psychological safety net that physical cash provides. This objective can be achieved by aggressively marketing "Co-kiem" (inspection upon delivery) services, which allow consumers to verify product tangibility before final acceptance, thereby mirroring the risk-mitigation benefit of COD. Concurrently, the mass adoption of "Pay Later" or escrow-based payment models is critical. By ensuring that funds leave the consumer's account but are not released to the seller until satisfaction is confirmed, these mechanisms satisfy the crucial Perceived Security (PS) requirement while enabling seamless digital transactions.

Finally, to address the risks associated with information asymmetry, platforms must enforce strict "content hygiene" standards to elevate Information Quality (IQ). This entails penalizing listings with low-resolution imagery or vague descriptions, which often signal bait-and-switch tactics or low-quality vendors. Conversely, search algorithms should prioritize and incentivize listings that utilize video content. As rich media significantly enhances information richness and provides a more realistic approximation of the physical product, it serves as a powerful tool to reduce cognitive dissonance and enhance consumer trust in the pre-purchase phase.

### **For Policy Makers**

From a macro-regulatory perspective, the prevailing consumer reliance on vendor reputation is indicative of deep-seated deficiencies in the current structural and legal frameworks; effectively, citizens are relying on "social policing" because they

lack faith in institutional protection. To address this, the government must prioritize the strengthening of digital consumer protection mechanisms. This requires more than legislation; it demands streamlining the e-commerce dispute resolution process to make it accessible, rapid, and low-cost. By establishing an efficient Online Dispute Resolution (ODR) system, regulators can significantly lower the barrier to seeking redress for scams, thereby ensuring that the legal recourse for bad transactions is no longer perceived as "cumbersome" or futile, but as a viable safety net for the digital economy.

Furthermore, to mitigate opacity around platform security, policymakers should standardize security audits by establishing a national "Digital Trust Label" accreditation system. Currently, consumers lack the technical expertise to distinguish between a secure platform and a vulnerable one. A government-backed certification, awarded only to e-commerce platforms that meet strict, periodically audited cybersecurity and privacy standards, would serve as a powerful heuristic signal. This initiative would not only help consumers easily identify safe digital environments but also create a competitive baseline for compliance, compelling platform operators to upgrade their security infrastructure to meet national benchmarks.

## **REFERENCES**

1. Carlos Roca, J., José García, J., & José de la Vega, J. (2009). The importance of perceived trust, security and privacy in online trading systems. *Information Management & Computer Security*, 17(2), 96–113.
2. Chellappa, R. K., & Pavlou, P. A. (2002). Perceived information security, financial liability and consumer trust in electronic commerce transactions. *Logistics Information Management*, 15(5/6), 358–368.
3. Choi, Y., & Mai, D. Q. (2018). The sustainable role of the e-trust in the B2C e-commerce of Vietnam. *Sustainability*, 10(1), 291.
4. Dalawi, I., Isa, M. R., & Aimran, N. (2025). Exploratory factor analysis on the development and validation of the understanding, attitude, practice and health literacy questionnaire on COVID-19 in Malay language. *Scientific Reports*, 15(1), 19654.
5. *Efa factor analysis*. (n.d.). ResearchGate. [https://www.researchgate.net/post/Efa\\_factor\\_analysis](https://www.researchgate.net/post/Efa_factor_analysis)
6. *Exploratory factor analysis of trust in online sellers*. (n.d.). JMP. <https://www.jmp.com/en/academic/case-study-library/exploratory-factor-analysis-of-trust-in-online-sellers>
7. Flavián, C., & Guinalú, M. (2006). Consumer trust, perceived security and privacy policy: Three basic elements of loyalty to a web site. *Industrial Management & Data Systems*, 106(5), 601–620.
8. García-Salirrosas, E. E., Rondon-Eusebio, R. F., Millones-Liza, D. Y., & Bejarano-Auqui, J. F. (2023). E-retailtest: Scale to assess the attitude of consumers towards e-commerce in the retail sector. *Sustainability*, 15(6), 4964.
9. Gefen, D. (2000). E-commerce: The role of familiarity and trust. *Omega*, 28(6), 725–737.
10. Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in online shopping: An integrated model. *MIS Quarterly*, 27(1), 51–90.
11. Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). Pearson

- Prentice Hall.
12. IMARC Group. (2025). *Vietnam e-commerce market size, share and growth report 2034*. <https://www.imarcgroup.com/vietnam-e-commerce-market>
  13. Jarvenpaa, S. L., Tractinsky, N., & Vitale, M. (2000). Consumer trust in an Internet store. *Information Technology and Management, 1*(1-2), 45–71.
  14. Kim, D. J., Ferrin, D. L., & Rao, H. R. (2008). A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents. *Decision Support Systems, 44*(2), 544–564.
  15. Li, X., Ma, J., Zhou, X., & Yuan, R. (2023). Research on consumer trust mechanism in China's B2C e-commerce platform for second-hand cars. *Sustainability, 15*(5), 4244.
  16. Liu, C. T., Guo, Y. M., & Hsu, J. L. (2023). Creating and validating an information quality scale for e-commerce platforms. *Journal of Electronic Commerce in Organizations (JECO), 21*(1), 1–28.
  17. Malhotra, N. K., Kim, S. S., & Agarwal, J. (2004). Internet users' information privacy concerns (UIPC): The construct, the scale, and a causal model. *Information Systems Research, 15*(4), 336–355.
  18. McKnight, D. H., Choudhury, V., & Kacmar, C. (2002). The impact of initial consumer trust on intentions to transact with a web site: A trust building model. *The Journal of Strategic Information Systems, 11*(3-4), 297–323.
  19. MiliEu Team. (2025, December 9). Vietnam's young e-commerce sellers are scaling fast — but faster than the ecosystem can support. *MiliEu Insight*. <https://www.mili.eu/sg/insights/vietnams-young-e-commerce-sellers-are-scaling-fast-but-faster-than-the-ecosystem-can-support>
  20. Mofokeng, T. E. (2023). Antecedents of trust and customer loyalty in online shopping: The moderating effects of online shopping experience and e-shopping spending. *Heliyon, 9*(5).
  21. Morić, Z., Dakic, V., Djekic, D., & Regvart, D. (2024). Protection of personal data in the context of e-commerce. *Journal of Cybersecurity and Privacy, 4*(3), 731–761.
  22. Nath, A., & Zheng, L. (2004). Perception of service quality in E-commerce: An analytical study of Internet auction sites. [Unpublished manuscript/Conference paper].
  23. Ojo, A. I. (2017). Validation of the DeLone and McLean information systems success model. *Healthcare Informatics Research, 23*(1), 60–66.
  24. Parasuraman, A., Zeithaml, V. A., & Malhotra, A. (2005). E-S-QUAL: A multiple-item scale for assessing electronic service quality. *Journal of Service Research, 7*(3), 213–233.
  25. Payments and Commerce Market Intelligence. (2024, October 24). *Breaking down Vietnam's e-commerce market*. <https://paymentscmi.com/insights/vietnam-e-commerce-market-data/>
  26. Pérez-Mira, B. (2010). *Validity of DeLone and McLean's model of information systems success at the web site level of analysis* [Doctoral dissertation, Louisiana State University].
  27. Phan, H. H., Nguyen, C. Q., & Nguyen, A. M. T. (2025). How does trust impact e-commerce adoption among Vietnamese vendors: PLS-SEM approach. *Journal of Social Economics Research, 12*(2), 81–92.
  28. Qalati, S. A., Vela, E. G., Li, W., Dakhan, S. A., Hong Thuy, T. T., & Merani, S. H. (2021). Effects of perceived service quality, website quality, and reputation on purchase intention: The mediating and moderating roles of trust and perceived risk in online shopping. *Cogent Business & Management, 8*(1), 1869363.
  29. Samuels, P. (2017). *Advice on exploratory factor analysis* [Working paper]. Birmingham City University.
  30. Sigudla, J., & Maritz, J. E. (2023). Exploratory factor analysis of constructs used for investigating research uptake for public healthcare practice and policy in a resource-limited setting, South Africa. *BMC Health Services Research, 23*(1), 1423.
  31. Tran, V. H., Tran, V. A., & Vo, T. N. L. (2023). The antecedents of trust in sellers and trust in an e-marketplace in Vietnam. In *Proceedings of the International Conference on Business Based on Digital Platform (BDP-3)* (pp. 202–209). Finance Publishing House. [https://www.researchgate.net/publication/377498817\\_THE\\_ANCECEDENTS\\_OF\\_TRUST\\_IN\\_SELLERS\\_AND\\_T\\_RUST\\_IN\\_AN\\_E-MARKETPLACE\\_INVietnam](https://www.researchgate.net/publication/377498817_THE_ANCECEDENTS_OF_TRUST_IN_SELLERS_AND_T_RUST_IN_AN_E-MARKETPLACE_INVietnam)
  32. Van Dyke, T. P., Midha, V., & Nemati, H. (2007). The effect of consumer privacy empowerment on trust and privacy concerns in e-commerce. *Electronic Markets, 17*(1), 68–81.
  33. VietNam E-Commerce Association. (2025, May 7). *Vietnam E-Business Report 2025*. <http://en.vecom.vn/vietnam-e-business-report-2025>
  34. Vietnam Law and Legal Forum. (2024, May 18). E-commerce frauds require utmost in attention from regulators. *Vietnam Law and Legal Forum*. <https://vietnamlawmagazine.vn/e-commerce-frauds-require-utmost-in-attention-from-regulators-71802.html>
  35. VietnamNews. (2024, December 16). Online frauds caused \$744 million in damages in 2024. *VietnamNews*. <https://vietnamnews.vn/society/1689079/online-frauds-caused-744-million-in-damages-in-2024.html>
  36. Vinh Tho, & Duc Thien. (2024, December 17). Vietnamese lose \$744mn to online scams in 2024: Report. *Tuoi Tre News*. <https://news.tuoiitre.vn/vietnamese-lose-744mn-to-online-scams-in-2024-report-10383436.htm>
  37. Vu, N. H. (2025, November 19). Vietnam's e-commerce sector: Current landscape and 2026 outlook. *Vietnam Briefing*. <https://www.vietnam-briefing.com/news/vietnams-e-commerce-sector-outlook-in-2026.html/>
  38. Wang, R. Y., & Strong, D. M. (1996). Beyond accuracy: What data quality means to data consumers. *Journal of Management Information Systems, 12*(4), 5–33.
  39. Zhang, J., Luximon, Y., & Song, Y. (2019). The role of consumers' perceived security, perceived control, interface design features, and conscientiousness in continuous use of mobile payment services. *Sustainability, 11*(23), 6843.