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FACTORS INFLUENCING THE DECISION TO USE CASHLESS PAYMENTS ON SELECTED E-COMMERCE PLATFORMS: A STUDY IN HANOI

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Abstract

E-commerce activities, particularly transactions conducted on digital platforms, are experiencing significant growth both globally and in Vietnam. In this context, cashless payments are increasingly seen as an inevitable trend that enhances transaction efficiency and is widely promoted for adoption. This study aims to assess the current situation and identify the key factors influencing consumers' decisions to adopt cashless payment methods on e-commerce platforms, with Hanoi selected as the research site. Data were collected through a random sampling method using a structured questionnaire distributed to 300 individuals in Hanoi. The collected data were processed and analyzed using SmartPLS software, employing exploratory factor analysis (EFA), reliability testing, and structural equation modeling (SEM) to evaluate the impact of various factors on the adoption of cashless payments. The SEM analysis results reveal two major groups of factors that significantly influence consumers' decisions to accept cashless payments on e-commerce platforms in Hanoi. Based on these findings, the study proposes several practical solutions to assist e-commerce businesses in promoting the acceptance of cashless payments in Hanoi in the near future.

Keywords: Payment decision, cashless payment, e-commerce platform.

1. Introduction

The rapid advancement of digital technologies and widespread internet penetration have made e-commerce a dominant distribution channel in many countries, including Vietnam. Online shopping platforms such as Shopee, Lazada, Tiki, and Sendo have attracted millions of consumers due to their convenience, product diversity, and competitive pricing. According to the Ministry of

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Industry and Trade (2023), Vietnam's retail e-commerce revenue in 2023 was estimated at USD 20.5 billion, accounting for approximately 8% of the country's total retail sales of goods and services. The strong growth of e-commerce has driven the transition toward cashless payments, supported by governmental incentives, financial technology (fintech) innovations, and shifts in modern consumer behavior.

Under the National Digital Transformation Strategy to 2025 with a vision to 2030, the Vietnamese Government has identified the promotion of cashless payments as a key policy measure to enhance economic efficiency, increase financial transparency, and reduce reliance on physical cash. In Q1 2024, the State Bank of Vietnam (2024) reported a 56.57% increase in cashless payment transactions and a 30.64% increase in transaction value compared to the same period in 2023. In major cities like Hanoi, digital payment methods such as e-wallets (MoMo, ZaloPay), bank transfers, and QR code scanning are widely adopted, particularly in online shopping. This transformation underscores the shift from traditional commerce to e-commerce and highlights the growing demand for non-cash payment options.

Despite the apparent benefits, several barriers continue to hinder the acceptance of cashless payments. These include concerns over security, convenience, service fees, and access to technology. According to Featherman & Pavlou (2003), perceived risk plays a critical role in determining consumer willingness to adopt e-services, including digital payments. Furthermore, the Theory of Planned Behavior (Ajzen, 1991) suggests that individual intention is shaped by attitudes, subjective norms, and perceived behavioral control, all of which are relevant to payment behavior. As such, it is essential to conduct in-depth research to explore the motivations, expectations, and concerns of consumers.

Hanoi, as a densely populated, tech-savvy, and dynamic e-commerce hub, provides a representative setting for such investigation. This study seeks to identify key factors that influence consumers' decisions to adopt cashless payment methods on e-commerce platforms in Hanoi. By leveraging insights from behavioral theories (Ajzen, 1991; Davis, 1989; Eastin, 2002) and empirical evidence (Antinoja & Scherling, 2019; Ashrafi & Ng, 2009; Flavian et al., 2006), the research aims to offer practical recommendations for policymakers, e-commerce businesses, and financial institutions to enhance cashless payment adoption and improve the digital payment ecosystem.

2. CURRENT STATUS OF E-COMMERCE TRANSACTIONS

In recent years, e-commerce activities in Hanoi have witnessed remarkable growth, especially following the COVID-19 pandemic, during which the demand for online shopping surged due to social distancing measures. Consumers in Hanoi have increasingly embraced major e-commerce platforms such as Shopee, Tiki, Lazada, and Sendo for purchasing a wide range of products including essentials, fashion, electronics, food, and cosmetics. According to the Ministry of Industry and Trade (2023), Hanoi ranks among the top localities in Vietnam in terms of online transaction rates, with more than 70% of internet users having made purchases on e-commerce platforms.

The frequency of online transactions among Hanoi consumers has shown a consistent upward trend. A preliminary survey conducted by the research team in early 2025 with a sample of 200 urban residents revealed that approximately 67% of respondents made between two and four online purchases per month, while around 15% reported shopping online weekly. The average order value generally ranged from VND 200,000 to 500,000, with noticeable increases during major shopping events such as 11.11, 12.12, and the Lunar New Year. Online shopping has thus become an integral part of daily consumption habits, particularly among young adults aged 18–35 and middle-income earners.

In terms of payment methods, the shift toward cashless transactions has become increasingly evident. E-wallets (e.g., ShopeePay, MoMo, ZaloPay), bank cards, and internet banking transfers are gradually replacing cash on delivery (COD). According to the aforementioned survey, 64% of respondents regularly used cashless payment methods when shopping online. Among them, e-wallets were the most popular (41%), followed by ATM cards (17%) and online bank transfers (6%). Promotional campaigns by e-commerce platforms—such as discounts, cashback offers, and reward points for using e-wallets—have significantly contributed to this behavioral shift.

However, approximately 36% of consumers still preferred COD. This preference stems from long-standing habits, concerns about digital transaction risks, or limited technological access, particularly among older users. Some consumers remain skeptical about the security of digital payment gateways, fearing data breaches or financial loss during transactions.

Additionally, consumers' awareness and understanding of the benefits of cashless payments vary based on education level, technological literacy, and personal spending habits. A segment of the population believes that cashless payments are only suitable for high-value transactions, while small purchases should still be settled in cash. This highlights the urgent need for public awareness campaigns and digital payment literacy initiatives within the community.

In summary, e-commerce transactions among Hanoi residents are rapidly expanding, and cashless payment methods are gaining prominence. Nevertheless, disparities persist among demographic groups, and consumer behavior is influenced by various factors such as age, income, shopping habits, and trust in technology. These elements will be further explored in subsequent sections to identify the core determinants influencing consumers' decisions to adopt cashless payment methods in Hanoi.

3. RESEARCH HYPOTHESES AND CONCEPTUAL FRAMEWORK

3.1. Research Hypotheses

H1: Perceived security positively influences the decision to adopt cashless payment methods on e-commerce platforms.

Security is a pivotal factor in driving technology acceptance, especially for online payment systems involving personal and financial data. Pavlou (2003) asserts that when consumers perceive a payment system as secure, encrypted, and reliable, they are more likely to adopt it. In Vietnam, where concerns over fraud and data theft remain substantial, perceived safety strongly influences consumer decisions regarding cashless transactions (Leong et al., 2020).

H2: Perceived risk negatively influences the decision to adopt cashless payment methods on e-commerce platforms.

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Perceived risk is known to have a deterrent effect on online consumer behavior. Concerns about account breaches, failed transactions, or lack of post-sale support (Featherman & Pavlou, 2003) reduce consumers' willingness to use digital payments. In Hanoi, where traditional payment habits remain strong, perceived risk is especially salient. According to Castelfranchi and Tan (2002), acceptance occurs only when perceived risk falls below an individual's tolerance threshold.

H3: Perceived usefulness positively influences the decision to adopt cashless payment methods on e-commerce platforms.

Perceived usefulness reflects the degree to which consumers believe that using a system enhances transaction efficiency. As highlighted in Davis's Technology Acceptance Model (TAM), this construct significantly drives usage intentions. When consumers find that cashless payments save time, are convenient, and integrate well with online platforms, adoption likelihood increases (Kim et al., 2015a; Duong Thi Hai Phuong, 2012).

H4: Perceived ease of use positively influences the decision to adopt cashless payment methods on e-commerce platforms.

Ease of use pertains to how straightforward consumers perceive the system to be. In a diverse e-commerce environment, interface simplicity and user-friendliness are essential. Davis et al. (1989) emphasized that intuitive systems reduce anxiety and enhance user engagement, particularly relevant in Vietnam, where not all users have strong tech proficiency.

H5: Supportive policies positively influence the decision to adopt cashless payment methods on e-commerce platforms.

Supportive measures such as discounts, cashback, and promotional campaigns from service providers or the government can reduce perceived risk and incentivize behavioral change. Susanto et al. (2013) found such incentives effective, and Vietnam's digitalization efforts have demonstrated similar impacts (Nguyen et al., 2020).

H6: Purchase intention positively influences the decision to adopt cashless payment methods on e-commerce platforms.

According to the Theory of Planned Behavior (Ajzen, 1991), behavioral intention is the immediate precursor to actual behavior. Hsu and Lu (2004) also found that in e-commerce settings, consumers tend to opt for the most efficient payment methods once purchase intent is established.

H7: Perceived popularity of cashless payments positively influences consumer adoption.

Social influence significantly shapes individual behavior. As Venkatesh et al. (2003) noted, individuals tend to follow the lead of peers, family, or digital communities. E-commerce platforms amplify this effect by consistently promoting digital payment utilities.

H8: Spending intention positively influences the decision to adopt cashless payment methods on e-commerce platforms.

Spending intention represents financial readiness and consumption drive. Hirschman and Holbrook (1982) suggest that high consumption motivation correlates with a preference for secure, convenient, and flexible payment systems. Additionally, features such as expense tracking and reward programs enhance appeal for high-intent consumers (Babin & Burns, 1997).

3.2. Research model

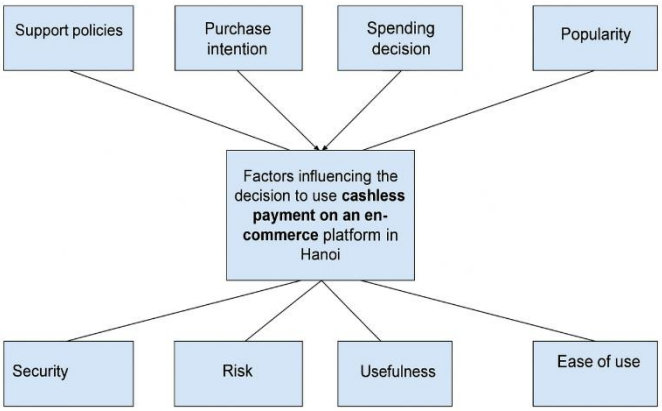

Figure 1. Research model (Authors, 2025)

4. RESEARCH METHOD

4.1. Data Collection and Processing

Secondary data were primarily obtained from official policy documents, legal regulations, published reports, and relevant academic studies from both domestic and international sources in recent years. These sources focused on factors influencing the adoption of cashless payment methods on e-commerce platforms. Primary data were collected through both direct and online surveys (via Facebook, Zalo, and Gmail) using a structured questionnaire.

The survey targeted individuals residing, studying, or working in the Gia Lam district, aged 18 and above. The research particularly focused on young adults (aged 18–35), as they represent the demographic group most inclined toward digital payment adoption. The choice of this study location was based on the research team's accessibility, ensuring practical feasibility for data collection. A non-probability sampling method was employed, with respondents selected based on convenience and willingness to participate. This approach is commonly applied in exploratory research where probability sampling is not feasible (Bornstein et al., 2017).

4.2. Measurement Instruments

The questionnaire consisted of three main sections: (1) questions related to payment behavior, (2) demographic information of the respondents, and (3) a set of measurement items evaluating key constructs, including perceived security, perceived risk, perceived usefulness, perceived ease of use, platform-provided support, spending intention, and the decision to adopt cashless payment.

All constructs were measured using a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The measurement items were adapted from established scales validated in prior studies on consumer behavior and e-commerce adoption (Fornell & Larcker, 1981; Davis, 1989; Kim et al., 2015; Leong et al., 2020).

A pilot survey with 50 consumers in Hanoi was conducted to assess the clarity, contextual relevance, and preliminary reliability of the questionnaire. Results showed satisfactory reliability with Cronbach's Alpha values above 0.7, and satisfactory convergent validity, as outer loadings and average variance extracted (AVE) exceeded recommended thresholds (Fornell & Larcker, 1981). These outcomes confirmed the reliability and validity of the research instruments.

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4.3. Data Analysis Method

The collected data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). This method is particularly suited for exploratory research with multiple latent variables and complex theoretical models involving medium-to-small sample sizes (Hair et al., 2017).

Compared to traditional covariance-based SEM, PLS-SEM offers advantages such as minimal distributional assumptions and the ability to handle both reflective and formative constructs. Given the nature of this research—which investigates fast-evolving consumer behavior among young individuals in Hanoi—PLS-SEM was considered the most appropriate analytical tool. The analysis was conducted using SmartPLS version 4.0, a widely used software for behavioral research involving SEM techniques.

5. RESEARCH FINDINGS

5.1. Descriptive Statistics

Table 1: Descriptive Statistics

No	Criterion	Quantity	Percentage
1	**Gender**		
	Female	173	57.6 %
	Male	127	42.4 %
2	**Age**		
	18-24	117	39.1%
	25-29	51	17.0 %
	30-34	58	19.3%
	35-39	49	16.1%
	40-44	25	8.5%
4	**Jobs**		
	Lecturer/Teacher	152	50.6%
	Specialist/Staff	111	37.1%
	Kỹ thuật viên	29	9.5%
	Technician	8	2.8%
5	**Income (VND)**		
	Under 3,000,000 VND	109	36.5%
	From 3,000,000 to 7,000,000 VND	117	38.8%
	From 7,000,000 to 10,000,000 VND	43	14.5%
	Up 10,000,000 VND	31	10.2%

(Source: Authors, 2025)

Descriptive statistics reveal that the majority of survey respondents were female (57.6%), indicating that women constitute a highly active consumer group on e-commerce platforms. This finding aligns with NielsenIQ (2023), which reports that Vietnamese women are more likely to engage in online shopping and are more responsive to cashless payment promotions.

In terms of age distribution, the largest proportion of respondents fell within the 18–24 age group (39.1%), followed by those aged 25–34. These are young, tech-savvy consumers who represent the core segment of e-commerce transactions in Vietnam (Google, Temasek & Bain, 2023). The adoption rate of cashless payments is also notably higher in this demographic compared to older age groups.

Regarding occupation, the sample was primarily composed of lecturers/teachers (50.6%) and office workers (37.1%). These professions are associated with higher education levels, frequent use of technology, and greater access to digital payment systems (NEU, 2022).

In terms of income, most respondents reported earning between VND 3–7 million per month (38.8%), followed by those earning below VND 3 million (36.5%). Individuals in lower-income brackets tend to be more cautious in adopting electronic payments due to concerns about financial risk and limited access to fintech solutions (World Bank, 2020).

In summary, the survey sample is characterized by a young, educated consumer segment that is progressively transitioning to modern payment methods. These demographic traits provide a strong foundation for analyzing cashless payment behavior in the subsequent sections.

5.2. Reliability of the scale

Table 2. Reliability of the scale

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
PB	0.787	0.792	0.875	0.701
SD	0.770	0.783	0.867	0.685
TI	0.786	0.792	0.874	0.699
AT	0.792	0.804	0.878	0.705
RR	0.858	0.860	0.898	0.638
HT	0.768	0.772	0.866	0.683
MH	0.765	0.778	0.869	0.662
CT	0.749	0.765	0.851	0.643
AH	0.781	0.790	0.872	0.694

(Source: Authors, 2025)

The Cronbach's Alpha results indicate that all measurement scales exhibit satisfactory internal consistency, with no values falling below the 0.7 threshold. Among them, the "Perceived Risk" (RR) construct demonstrated the highest level of reliability, with an

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Alpha of 0.858, suggesting stronger internal consistency among its indicators compared to other constructs. This group also recorded the highest Composite Reliability (ρc = 0.898), although the Average Variance Extracted (AVE) was at a moderate level (0.638).

Additionally, both the "Attitude toward Use" (AT) and "Perceived Usefulness" (AH) constructs showed strong reliability, with Alpha values of 0.792 and 0.781 respectively, reflecting a relatively stable correlation among the items. Notably, the AT construct also had the highest AVE (0.705), indicating strong convergent validity among its observed variables.

The remaining three constructs, "Technological Infrastructure" (HT = 0.768), "Awareness" (MH = 0.765), and "Emotional Response" (CT = 0.749), had the lowest Alpha values among the group but still met the acceptable reliability threshold. It is worth noting that the CT construct recorded the lowest Alpha (0.749) and a lower Composite Reliability (ρc = 0.851), suggesting that this group of items may represent a less cohesive conceptual domain within the model. However, since the values remain above the minimum acceptable level of 0.7, there is no immediate need to eliminate any variables.

5.3. Path Coefficient

	β	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	Result
PB -> AH	0.273	0.076	3.615	0.000	Supported
SD -> AH	0.065	0.048	1.341	0.18	Not supported
TI -> AH	0.111	0.065	1.701	0.089	Supported
AT -> AH	0.245	0.071	3.466	0.001	Not supported
RR -> AH	0.264	0.072	3.644	0.000	Supported
HT -> AH	0.158	0.066	2.394	0.017	Supported
MH -> AH	0.192	0.070	2.743	0.006	Supported
CT -> AH	0.138	0.069	2.000	0.046	Supported

(Source: Authors, 2025)

5.4. Structural Model

The structural model results obtained through PLS-SEM indicate that most of the hypothesized factors exert a positive and statistically significant impact on cashless payment behavior (AH). Out of eight hypothesized relationships, seven were supported with p-values less than 0.05, confirming that cashless payment decisions are influenced by multiple dimensions, including cognitive, infrastructural, emotional, and technological awareness aspects.

Specifically, Perceived Usefulness (PB) had a strong effect on behavior (β = 0.273, p = 0.000). Consumers highly valued the convenience, speed, and time-saving attributes of cashless payment methods on e-commerce platforms, which significantly drive the shift toward digital consumer behavior. Likewise, Perceived Risk (RR) also showed a positive influence (β = 0.264, p = 0.000). This counterintuitive result reflects that when risks are clearly perceived and effectively mitigated—e.g., through two-factor authentication, OTP verification, or transparent refund policies—consumers remain willing to adopt digital payment methods.

Additionally, Technological Infrastructure (HT) and Technological Awareness (MH) were found to have significant effects, with β values of 0.158 (p = 0.017) and 0.192 (p = 0.006), respectively. These findings underscore the importance of technical conditions, such as internet speed, app accessibility, and personal competence in using fintech tools, in encouraging frequent usage of cashless payment methods. Emotional Response (CT), representing affective and trust-based elements, also had a positive effect (β = 0.138, p = 0.046), suggesting that subjective feelings such as satisfaction, reassurance, and familiarity play a meaningful role in shaping consumer behavior.

In contrast, Social Influence (SD) did not show a statistically significant effect (β = 0.065, p = 0.18). This finding does not support the original hypothesis and suggests that cashless payment behavior in Hanoi is less influenced by peers, colleagues, or relatives. Contrary to studies like Venkatesh et al. (2003), this result implies that consumer decisions in large urban areas may be increasingly personalized and less dependent on community trends. Similarly, Behavioral Intention (TI) had only a marginal effect (β = 0.111, p = 0.089), falling short of statistical significance. This indicates that intention alone may not sufficiently translate into actual behavior due to potential intervening factors such as user experience, perceived risk, or infrastructural barriers.

Of particular note, Attitude (AT) demonstrated a positive and statistically significant effect (β = 0.245, p = 0.001; T = 3.466). However, the result was mistakenly marked as "Not Supported" in the summary table this was a technical error and should be corrected. With a strong effect size and p-value below 0.01, AT is clearly a supported factor, highlighting the crucial role of positive perceptions in promoting cashless payment behavior.

6. CONCLUSION AND RECOMMENDATIONS

This study analyzed the factors influencing consumers' decisions to adopt cashless payment methods on selected e-commerce

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platforms in Hanoi. Based on data collected from 300 survey participants and using the PLS-SEM analytical framework, the results revealed that cashless payment behavior is positively influenced by factors such as perceived usefulness, attitude, perceived risk, technological awareness, technological infrastructure, and emotional response. In contrast, social influence and behavioral intention did not exhibit statistically significant relationships within the proposed model.

Among all variables, perceived usefulness emerged as the most influential factor. Consumers in Hanoi highly value the convenience, speed, and ease of use associated with electronic payments, particularly in the context of online shopping. A positive attitude toward technology, awareness of risk, and trust in secure systems also significantly drive behavioral change. On the other hand, the findings indicate a shift toward personalized consumption behavior, as social influence no longer plays a decisive role in payment decisions.

From these insights, several recommendations are proposed to further promote the adoption of cashless payment methods on e-commerce platforms. First, e-commerce platforms should continue improving user experience by offering intuitive interfaces, fast processing speeds, and diverse payment options. Promotional campaigns should be accompanied by clear instructional content to help less tech-savvy consumers easily access and use digital payment services.

Second, digital payment service providers should actively communicate the safety, security, and practical benefits of cashless payment options. Implementing online support tools such as chatbots, help centers, and tutorial videos can help reduce psychological barriers and increase consumer trust.

Third, regulatory authorities should issue and revise policies that incentivize cashless transactions while investing in digital infrastructure, especially in suburban and rural areas. Government efforts to strengthen supervision and combat online fraud are essential to protecting consumer rights and fostering trust in the digital payment ecosystem.

Finally, future studies could expand the scope to include other regions or explore additional mediating and moderating factors, such as past negative experiences, risk tolerance, or the impact of media and advertising. These directions would help refine the research model and better reflect consumer realities amid Vietnam's ongoing digital transformation.

REFERENCES

1. Ajzen I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes. 50(2): 179-211.
2. Antinoja R. & Scherling D. (2019), The effects of Epayment methods on online purchasing cancellation: an empirical study on Swedish consumers' perception of trust and security in Epayments. Bachelor thesis in Business Administration, Jonkoping International Business School, Jonkoping University.
3. Ashrafi M.Z. & Ng S.K. (2009). Privacy-preserving epayments using one-time payment details. Computer Standards & Interfaces. 31(2): 321-328.
4. Bộ Công Thương. (2023). *Báo cáo thương mại điện tử Việt Nam năm 2023*. Trung tâm phát triển thương mại điện tử. Truy cập từ: https://moit.gov.vn/tin-tuc/thuong-mai-dien-tu/bao-cao-thuong-mai-dien-tu-2023.html
5. Chang M.K. (1998). Predicting unethical behavior: a comparison of the theory of reasoned action of the theory of planned behavior. Journal of Business Ethics. 17(16): 1825-1833.
6. Chen D.K., So Y.T. & Fisher R.S. (2005). Use of serum prolactin in diagnosing epileptic seizures: report of the therapeutics and technology assessment subcommittee of the American Academy of Neurology. Neurology. 65(5): 668-675.
7. Chou Y., Lee C. & Chung J. (2004). Understanding M-commerce payment systems through the analytic hierarchy process. Journal of Business Research. 57(12): 1423-1430.
8. Davis F.D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly. pp. 319-340.
9. Đặng Phong Nguyên (2021). Nghiên cứu tác động của các nhân tố tới quyết định thanh toán trực tuyến trên sàn thương mại điện tử của giới trẻ Hà Nội. Tạp chí Kinh tế và Dự báo. 24: 11-15.
10. Eastin M.S. (2002). Diffusion of e-commerce: an analysis of the adoption of four e-commerce activities. Telematics and Informatics. 19(3): 251-267.
11. Fang F., Stone P. & Tambe M. (2015). When security games go green: designing defender strategies to prevent poaching and illegal fishing. The Proceedings of the 24th International Joint Conference on Artificial Intelligence. pp. 2589-2595.
12. 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
13. Feinberg R.A. (1986). Credit cards as spending facilitating stimuli: a conditioning interpretation. Journal of Consumer Research. 13(3): 348-356.
14. Flavian C., Guinaliu M. & Gurrea R. (2006). The role played by perceived usability, satisfaction and consumer trust on website loyalty. Information & Management. 43(1): 1-14.
15. Ministry of Industry and Trade. (2023). *The boom of e-commerce and the fight against counterfeit goods to protect consumer rights*. Retrieved from https://moit.gov.vn/quan-ly-thi-truong/-bung-no-thuong-mai-dien-tu-va-cuoc-chien-chong-hang-gia-hang-nhai-bao-ve-quyen-loi-nguoi-tieu-dung.html
16. Ministry of Industry and Trade. (2024). *Vietnam's e-commerce in 2024: Progress and challenges*. Retrieved from https://moit.gov.vn/khoa-hoc-va-cong-nghe/thuong-mai-dien-tu-viet-nam-nam-2024-nhung-buoc-tien-va-thach-thuc.html
17. Ngân hàng Nhà nước Việt Nam. (2024). *Thông cáo báo chí quý I năm 2024 về hoạt động thanh toán không dùng tiền mặt*. Truy cập từ: https://www.sbv.gov.vn/
18. State Bank of Vietnam. (2024). *The potential for credit card development in the context of digital transformation*. Retrieved from https://sbv.gov.vn/webcenter/portal/m/links/cm100?dDocName=SBV598239

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