

A barrier, not a bridge: why Global Brand Presence hinders CBDC adoption plans in an emerging economy

Anh Pham

Research Institute for Banking, Banking Academy of Vietnam, Hanoi, Vietnam, and

Hung Tran

Hanoi Municipal Youth Union, Hanoi, Vietnam

Abstract

Purpose – This paper provides an alternative view of central bank digital currency (CBDC) adoption by addressing the critical gap between intention and implementation behavior. Moving beyond the standard focus on predicting user intention, we theorize and test two novel moderators, namely dispositional resistance to change (RTC) and socio-political perceptions of Global Brand Presence (GBP), as key factors explaining the transition from a general intention to the formulation of implementation plans in Vietnam.

Design/methodology/approach – Following an initial instrument development stage involving focus groups and expert validation, a large-scale survey was administered to consumers in Vietnam, yielding 1,547 valid responses after a rigorous data cleaning process. The conceptual model, grounded in an extended Unified Theory of Acceptance and Use of Technology (UTAUT) framework, was analyzed using partial least squares structural equation modeling (PLS-SEM).

Findings – We find that (1) GBP acts as a significant negative moderator, weakening the link between a consumer's adoption intention and their subsequent implementation behavior; (2) RTC, in contrast, was not a significant moderator in this context, a finding likely attributable to the young, digitally-native sample; (3) These moderating effects were tested within a robust foundational model where consumer trust and perceived benefits were confirmed as strong predictors of behavioral intention.

Practical implications – The findings provide actionable guidance for central banks. Beyond building foundational trust and articulating clear user benefits, monetary authorities must manage the communication around international partnerships to mitigate socio-political risks and sovereignty concerns. A targeted, phased rollout may also be more effective than a universal launch.

Originality/value – This study's novelty is threefold: (1) it introduces a more precise "intention-implementation" gap to the pre-adoption CBDC context; (2) it is the first to empirically validate the negative moderating role of GBP, challenging conventional branding theory in a sovereign context and (3) it offers a data-driven explanation for the contextual nature of RTC.

Keywords Central bank digital currency (CBDC), UTAUT, Resistance to change, Global brand presence, Implementation behavior

Paper type Research article

1. Introduction

The digitalization of payment systems is a cornerstone of modern economic development, offering a pathway to greater financial inclusion, particularly in emerging economies. These nations, however, often face significant barriers, including limited banking infrastructure, high transaction costs for services like remittances and a persistent reliance on cash that sustains a shadow economy (Kpodar and Imam, 2022; Ozili, 2024). In response,



© Anh Pham and Hung Tran. Published in the *Journal of Economics and Development*. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at [Link to the terms of the CC BY 4.0 licence](#).

Funding: This work was supported by Banking Academy of Vietnam.

Competing interests: The authors declare no competing interests.

central bank digital currency (CBDC) has emerged as a transformative solution – a direct liability of the central bank that provides a secure, government-backed digital alternative to physical cash (Auer and Böhme, 2020). The global momentum is undeniable; as of late 2025, over 130 countries, representing 98% of global GDP, are in various stages of exploring a CBDC. With over 60% of central banks globally prioritizing financial inclusion in their CBDC exploration, the potential to connect the 1.4 billion unbanked individuals to the formal economy remains a primary driver of this financial revolution (Demirgüç-Kunt *et al.*, 2022).

Vietnam presents a particularly salient and compelling case for examining CBDC adoption. As one of Asia's most dynamic and rapidly growing economies, the nation is characterized by a young, digitally-native population and one of the highest smartphone penetration rates in the region. The Vietnamese government has explicitly prioritized the transition to a cashless society as a key national objective, aiming to foster digital economic growth and enhance monetary oversight (Dang and Pham, 2024). Despite this top-down push and the widespread availability of private-sector digital payment solutions, a significant paradox persists: a deep-seated consumer mistrust in non-state financial technologies acts as a major hurdle to widespread adoption (Nguyen *et al.*, 2020). This trust deficit, rooted in concerns over data security and platform stability, creates a unique opportunity for a government-backed CBDC. By offering a digital payment instrument that carries the full faith and credit of the State Bank of Vietnam (SBV), a CBDC could directly address the core anxieties of consumers, thereby aligning perfectly with the nation's strategic digitalization goals while potentially leapfrogging the trust barriers that have constrained the private sector.

However, the promise of a CBDC does not guarantee its successful adoption. A recurring and fundamental challenge in behavioral science is the well-documented gap between what individuals intend to do and the actions they ultimately take. In the domain of technology adoption, this phenomenon often manifests as an “intention–implementation gap,” where a user's positive inclination to adopt an innovation fails to translate into the formulation of specific, concrete plans for its use (Alhur *et al.*, 2025; Nguyen *et al.*, 2019; Perera *et al.*, 2023). Foundational theoretical frameworks, most notably the unified theory of acceptance and use of technology (UTAUT), have proven adept at identifying the rational antecedents of behavioral intention, such as perceived usefulness and ease of use (Venkatesh *et al.*, 2003). Yet, these models have been consistently criticized for their limited power in explaining the subsequent and arguably more critical, conversion of general intention into tangible user actions, often underestimating the powerful friction created by psychological dispositions and complex contextual variables (Ajzen and Fishbein, 2005; Dwivedi *et al.*, 2019). For a novel and high-stakes technology like a national digital currency, where widespread and sustained uptake is paramount for success, bridging this gap is not just an academic exercise but a matter of strategic national importance.

This study, therefore, endeavors to bridge this critical intention–implementation gap within the pre-launch context of a CBDC in Vietnam. We posit that a more complete understanding of this transition requires moving beyond direct predictors of intention to investigate the key moderating factors that act as gatekeepers between intention and planned behavior. Drawing on insights from our preliminary qualitative research with local experts and the broader literature on innovation resistance, we propose and test two such moderators that are theoretically crucial but empirically under-explored in the CBDC literature: resistance to change (RTC) and global brand presence (GBP). RTC captures an individual's dispositional tendency to resist disruptions to established routines – a powerful psychological inertia, particularly in the domain of financial habits. GBP, conversely, examines the counter-intuitive premise that in the unique, sovereign context of a national currency, the involvement of internationally recognized technology firms, far from being a signal of quality, may instead trigger socio-political anxieties that delegitimize the system in the eyes of local users and weaken their resolve to adopt it.

This research contributes to the digital finance literature in several ways. First, by explicitly framing the study around the intention-implementation gap in a pre-adoption setting, it offers a more precise and theoretically robust approach than is typical in studies of emerging financial

technologies. Second, it is the first empirical analysis to isolate and test the moderating effects of dispositional RTC and perceived GBP on the intention-to-plan linkage for CBDC adoption. In doing so, it uncovers a significant and counter-intuitive negative effect of global brand involvement that carries substantial policy weight. Finally, by grounding our analysis in a large, nationally representative sample of 1,547 consumers, this study generates robust, evidence-based insights of immediate practical value for policymakers in Vietnam and other emerging markets navigating the complex path toward digital currency implementation.

2. Theoretical framework and hypothesis development

2.1 Theoretical framework

To investigate the drivers of CBDC adoption, this study develops a conceptual model grounded in the UTAUT. The UTAUT framework, a synthesis of eight prominent technology acceptance theories, posits that four core constructs directly determine user acceptance and behavioral intention: Performance expectancy, effort expectancy, social influence and facilitating conditions. Its robustness has been validated across a wide array of technological contexts, including mobile banking (Baabdullah *et al.*, 2019), digital payments (Gupta and Arora, 2020), and, more recently, chatbot services in banking (Marak *et al.*, 2025). Given its proven explanatory power for user intention, UTAUT provides a solid foundation for the first stage of our model.

To improve the model’s explanatory power within the specific context of a novel financial technology in a developing economy, we extend the core framework with several validated constructs identified as critical in the literature. Recognizing that financial decisions are laden with considerations of security and value, we incorporate consumer trust in CBDC, perceived benefits and perceived risk as direct antecedents of behavioral intention. This aligns with recent findings that trust is a key driver in the adoption of state-of-the-art payment methods (Moriuchi, 2021). Furthermore, following established research that links an individual’s confidence in their own abilities to their perception of a system’s ease of use, we include self-efficacy as a key predictor of effort expectancy. The foundational component of our model (i.e. the antecedents of behavioral intention) is illustrated in the first stage of Figure 1.

While this extended UTAUT model provides a strong foundation for understanding the drivers of a consumer’s general intention to adopt a CBDC, a critical theoretical and practical challenge remains. A central tenet of behavioral science, established for decades, is that a

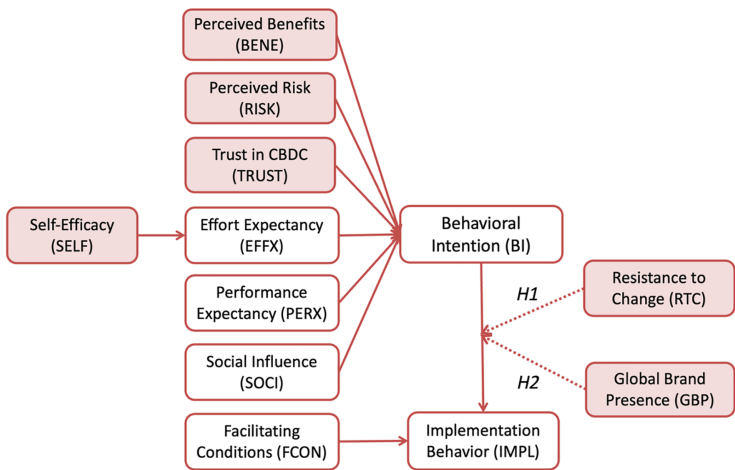


Figure 1. Conceptual model. Source: Authors’ proposition

positive intention does not automatically and reliably translate into a corresponding action. This phenomenon, broadly known as the “intention-behavior gap”, is a persistent limitation in technology acceptance research. Models like UTAUT consistently explain more variance in intention than in concrete behaviors, often because they do not fully account for the “post-intentional” factors that come into play when an individual moves from goal setting to goal striving. To address this, scholars have proposed focusing on intermediate variables like “implementation intention” or “action plan”, which represent a more concrete commitment to action and serve as a crucial bridge between a general desire and a specific behavior (Alhur *et al.*, 2025).

In a pre-adoption context such as ours, where the technology has not yet been launched and “actual behavior” cannot be measured, examining this intermediate step is not only logical but also necessary. Following this precedent, we define our final dependent variable not as actual use, but as implementation behavior (IMPL). We conceptualize this construct as the formulation of specific, self-regulatory plans to use a system for concrete tasks, specifying the “how, when, and where” of future actions (Gollwitzer, 1999). This approach allows us to investigate the more complicated research problem of the “intention-implementation gap” (Perera *et al.*, 2023). This gap poses a critical policy challenge for CBDC implementation; if a central bank designs a system that citizens intend to use but a large number fail to formulate specific plans to integrate it into their daily financial lives, the project’s core objectives could be undermined. Therefore, to explain the transition from a general willingness (behavioral intention) to a concrete plan (implementation behavior), research must look beyond direct antecedents to the contextual and dispositional factors that moderate this critical link.

2.2 Hypothesis development

To explain this intention–implementation gap, we theorize two crucial moderators that shape the relationship between a consumer’s general intention and their subsequent formulation of specific plans to use a CBDC.

2.2.1 Moderating role of resistance to change (RTC). First, we consider the role of RTC, defined as an individual’s dispositional trait involving a negative cognitive and affective reaction to altering established routines (Wronka, 2023). In technology adoption, a positive intention creates a “readiness to act”. However, a high level of RTC acts as a psychological friction or a higher “activation threshold” that this readiness must overcome. This is especially potent in the financial domain, where habits like using cash are deeply ingrained and represent a satisfactory status quo. The switch to a CBDC is not a low-involvement choice; it represents a significant disruption to a user’s core financial behavior, making psychological resistance a more formidable barrier than for more incremental innovations.

We propose that RTC functions not as a direct deterrent to forming an initial, abstract intention, but rather as a moderator that weakens the conversion of that intention into a concrete plan. This proposition is supported by empirical precedent; Shahbaz *et al.* (2019), in their study on big data analytics adoption, found that RTC negatively moderated the relationship between behavioral intention and actual use, acting as a key barrier during the implementation phase. While some studies on less disruptive technologies have found the moderating effect of RTC to be insignificant, likely due to a tech-savvy sample or the incremental nature of the change (Gani *et al.*, 2024), a CBDC represents a systemic shift. For a user with high RTC, even if they are rationally convinced of a CBDC’s benefits, the psychological friction of moving away from a familiar routine creates a powerful inertia. This friction diminishes the perceived immediacy and safety of the planned change, causing the user to defer planning and stick with the “safe” status quo, even if their general intention is positive. Therefore, we propose the following hypothesis:

- H1.** RTC negatively moderates the relationship between behavioral intention and the implementation behavior for a CBDC.

2.2.2 Moderating role of global brand presence (GBP). Second, we examine the counter-intuitive role of GBP, which refers to the perceived involvement of established international technology firms in the development or operation of a country's CBDC. Conventional branding theory suggests that such a partnership should enhance a new system's credibility, signal technical competence and quality and thereby strengthen the link between intention and behavior (Swoboda and Hirschmann, 2016). However, we argue that in the unique and highly symbolic context of a national sovereign currency, the opposite effect may occur. Unlike with consumer goods, where global brands signal quality, with a CBDC, they can signal a dilution of national control, turning a technical partner into a perceived socio-political risk. While a consumer's initial intention may be formed based on the CBDC's perceived benefits, the involvement of foreign corporations can introduce a new, conflicting set of perceived risks at the implementation stage. Such risks are not purely functional but are rooted in socio-political concerns, including: (1) data sovereignty, a deep-seated mistrust of foreign corporations handling sensitive national financial data; (2) national sovereignty, the perception that foreign involvement erodes national pride and cedes control over a critical symbol of the nation and (3) misaligned motives, the belief that a for-profit global firm's objectives will ultimately conflict with the public-interest mandate of a central bank.

This conflict aligns with branding literature that distinguishes between perceptions of "competence" (where global brands excel) and "warmth" or "trust" (where local entities are often preferred) (Sichtmann *et al.*, 2019). In the case of a CBDC, the competence signaled by a global brand is overshadowed by the lack of perceived warmth and trust. This cognitive dissonance weakens the motivational force of the original positive intention, making consumers hesitate to formulate specific implementation plans. Therefore, we propose:

- H2.* GBP negatively moderates the relationship between behavioral intention and the implementation behavior for a CBDC.

The full conceptual model, which covers the foundational UTAUT framework and the moderating relationships (per H1-2), is presented in Figure 1.

3. Research methods

3.1 Research design and scale development

To investigate the adoption of an anticipated technology like CBDC, this study employed a quantitative survey methodology initiated with a comprehensive instrument development stage. Given that users have no prior experience with CBDC, a preliminary exploratory process was essential for adapting established theoretical constructs to the unique cultural and financial landscape of Vietnam (Dang and Pham, 2020). This stage involved three focus groups with 18 demographically diverse participants and subsequent validation with five specialists from the State Bank of Vietnam (SBV). The primary purpose of this process was instrument refinement – specifically, to check the clarity of the translated items and ensure no major concepts were missing from the Vietnamese context. Additionally, given the novelty of the proposed moderators, these sessions provided an opportunity to gather initial qualitative insights from experienced financial experts and tech-savvy users to reinforce theoretical arguments for the negative moderating effects of RTC and GBP.

All constructs in the research model were then measured using scales adapted from established literature in technology adoption. A three-step validation process was followed: (1) items were selected from seminal studies for each construct; (2) a panel of seven academic and industry experts performed a content validation process and (3) the scales were contextually adapted for Vietnam and framed to capture anticipated intention and implementation behavior. All items were measured on a five-point Likert scale, and a professional translation and back-translation process ensured linguistic equivalence. A full description of the research constructs, measurement items and their sources is provided in Table A1 in the Appendix.

3.2 Data and sample

A nationwide survey was conducted between July and October 2023. A quota sampling strategy was applied to ensure the sample was representative of the national population in terms of age, gender, region and income, addressing known geographical variations in technology acceptance. A total of 4,500 questionnaires were distributed through both online and offline channels via partner universities, the “Big 4” Vietnamese banks and Provincial Youth Unions.

Being aware that CBDC is an unfamiliar technology to most respondents, we implemented a crucial technology conceptualization step. Before beginning the survey, each participant was provided with a clear and simple introduction: “CBDC is a type of electronic money issued by a country’s central bank. It has the same value as the country’s paper money and can be used for everyday transactions. Imagine you have a digital version of the Vietnamese Dong (VND) in an electronic wallet on your phone, backed directly by the State Bank of Vietnam”. This definition was supplemented with visual examples of potential interfaces and hypothetical usage scenarios to establish a consistent baseline of understanding for all participants.

Prior to analysis, the raw data underwent a rigorous cleaning process. Respondents were excluded if they exhibited any of the following characteristics: (1) completion times significantly below the median duration (less than half the average time); (2) discrepancies in their socio-demographic information; (3) straight-lined answers indicating a lack of attention or (4) response patterns with extremely low variance (standard deviation < 0.5) or a single response Likert value accounting for over 70% of all answers within an observation. After this screening process, 1,547 valid responses were retained for the final analysis. The demographic profile of the final sample is reported in [Table 1](#) in the [Supplementary material](#).

3.3 Analysis approach

The research model was analyzed using partial least squares structural equation modeling (PLS-SEM), a method well-suited for complex predictive models, especially in exploratory research ([Hair et al., 2017](#)) and widely applied in recent Vietnamese behavioral studies ([Nguyen et al., 2024](#)). We employed SmartPLS 4.0 software to conduct the analysis, following the recommended two-step approach: an assessment of the measurement model’s reliability and validity, followed by an evaluation of the structural model to test the hypotheses.

To ensure the robustness of our findings, several additional checks were carried out. First, to address potential common method variance (CMV), we conducted a full collinearity assessment. The variance inflation factor (VIF) for all constructs was calculated, and the results showed that all VIF values ranged from 1.334 to 2.696, well below the conservative threshold of 3.3 ([Kock, 2015](#)). This suggests that multicollinearity is not a major concern and that CMV is unlikely to have unduly influenced the results. Second, a complementary covariance-based SEM (CB-SEM) analysis was conducted as a robustness check to validate the main findings obtained from the PLS-SEM analysis. Finally, to explore potential differences between demographic groups, MGA was performed, preceded by a measurement invariance of composites (MICOM) test to ensure the validity of the group comparisons.

4. Main results

This section presents the research’s main findings. First, the measurement model is assessed for reliability and validity. Second, the structural model is evaluated to test the proposed hypotheses. Finally, the results of additional robustness and multi-group analyses are reported to ensure the rigor of the findings.

4.1 Measurement model assessment

Prior to hypothesis testing, the measurement model was assessed to ensure the quality of the scales using data from the final sample of 1,547 valid responses. As shown in [Table 1](#), the

Table 1. Cronbach's alpha, composite reliability and AVE

Construct	Cronbach's alpha	Composite reliability (rho_c)	Average variance extracted (AVE)
BENE	0.747	0.855	0.662
BI	0.604	0.834	0.715
EFFX	0.728	0.845	0.645
FCON	0.686	0.864	0.761
GBP	0.661	0.816	0.600
IMPL	0.732	0.832	0.554
PERX	0.715	0.873	0.775
RISK	0.794	0.860	0.606
RTC	0.712	0.836	0.633
SELF	0.902	0.928	0.763
SOCI	0.630	0.840	0.725
TRUST	0.622	0.798	0.569

Source(s): Authors' calculation

internal consistency reliability of the constructs was confirmed. All constructs exceeded the recommended 0.7 threshold for composite reliability. Convergent validity was established, as the average variance extracted (AVE) for each latent construct surpassed the minimum required value of 0.5.

On top of that, discriminant validity was confirmed using the heterotrait-monotrait ratio (HTMT) criteria. As seen in [Table 2](#), all HTMT values were well below the recommended threshold of 0.90, confirming that each construct in the model is statistically distinct. Collectively, these results indicate that the measurement model is both reliable and valid, providing a sound basis for testing the structural relationships.

4.2 Structural model and hypothesis testing

The structural model was evaluated for its overall predictive power and the significance of its path coefficients using a bootstrapping procedure with 5,000 resamples. The model demonstrated substantial explanatory power for the key endogenous variables. As reported in [Table 3](#), the model explained 32.1% of the variance in behavioral intention (BI)

Table 2. Discriminant validity (HTMT)

Construct	1	2	3	4	5	6	7	8	9	10	11	12
1. BENE												
2. BI	0.63											
3. EFX	0.81	0.55										
4. FCON	0.83	0.60	0.80									
5. GBP	0.90	0.61	0.86	0.82								
6. IMPL	0.57	0.72	0.53	0.53	0.60							
7. PERX	0.82	0.58	0.86	0.79	0.80	0.50						
8. RISK	0.08	0.08	0.08	0.17	0.09	0.09	0.09					
9. RTC	0.06	0.06	0.09	0.18	0.23	0.07	0.07	0.87				
10. SELF	0.11	0.19	0.15	0.13	0.15	0.17	0.09	0.05	0.052			
11. SOCI	0.54	0.65	0.58	0.53	0.49	0.63	0.61	0.11	0.07	0.14		
12. TRUST	0.64	0.77	0.61	0.64	0.61	0.70	0.56	0.13	0.08	0.24	0.73	

Source(s): Authors' calculation

Table 3. Structural model results

Path	Main analysis: PLS-SEM			Robustness check: CB-SEM	
	β	t	f^2	β	CR
SELF → EFX	0.142**	6.167	0.021	0.076**	5.199
BENE → BI	0.174**	5.244	0.023	0.163**	2.660
RISK → BI	0.002	0.114	0.000	0.080	0.451
TRUST → BI	0.281**	8.054	0.080	0.523**	7.447
EFFX → BI	0.022	0.673	0.000	0.030	1.255
PERX → BI	0.097**	2.970	0.007	0.006	0.098
SOCI → BI	0.163**	5.178	0.028	0.186**	3.322
BI → IMPL	0.249**	7.470	0.072	0.866**	13.270
FCON → IMPL	0.084**	2.779	0.007	0.046	1.101
BI × RTC → IMPL (H1)	−0.029	0.999	0.002	−0.029	−1.581
BI × GBP → IMPL (H2)	−0.118**	8.407	0.104	−0.125**	−13.327

Model quality assessment	R^2 adjusted	Q^2 predict	SMC (R^2)
EFFX	0.020	0.018	0.027
BI	0.321	0.317	0.756
IMPL	0.377	0.326	0.629

Note(s): (1) β = Standardized path coefficient, t = T-statistic, f^2 = Effect size, CR = Critical ratio; (2) The SMC (squared multiple correlation) or R^2 justifies predictive power, while Q^2 predict reflects predictive relevance; (3) Given the violation of the multivariate normality assumption (confirmed via Mardia's, Kolmogorov–Smirnov and Shapiro–Wilk tests), we performed CB-SEM (as a robustness check) using robust maximum likelihood (MLR) method; (4) ** $p < 0.01$, * $p < 0.05$

Source(s): Authors' calculation

($R^2_{\text{adjusted}} = 0.321$) and 37.7% of the variance in implementation behavior (IMPL) ($R^2_{\text{adjusted}} = 0.377$). The model also demonstrated adequate predictive relevance, with all endogenous constructs achieving positive Q^2_{predict} values.

The results of the structural path analysis are presented in Table 3 (PLS-SEM column). The foundational paths of the extended UTAUT model were examined first. Key antecedents such as perceived benefits (BENE) ($\beta = 0.174, p < 0.01$), Trust in CBDC (TRUST) ($\beta = 0.281, p < 0.01$), performance expectancy (PERX) ($\beta = 0.097, p < 0.01$) and social influence (SOCI) ($\beta = 0.163, p < 0.01$) were all found to be significant positive predictors of behavioral intention (BI). This confirms the general applicability of these established drivers in the Vietnamese context. Conversely, perceived risk (RISK) and effort expectancy (EFFX) did not have a significant impact on BI. For the second stage of the model, behavioral intention (BI) was found to be a strong and significant predictor of implementation behavior (IMPL) ($\beta = 0.249, p < 0.01$), as was facilitating conditions (FCON) ($\beta = 0.084, p < 0.01$).

The analysis then proceeded to test the two core moderation hypotheses:

- (1) For H1, the interaction between behavioral intention and resistance to change (BI × RTC) did not have a significant effect on implementation behavior (IMPL) ($\beta = -0.029, p > 0.05$), leading to the rejection of H1.
- (2) For H2, the interaction between behavioral intention and GBP (BI × GBP) revealed a significant and negative effect on implementation behavior (IMPL) ($\beta = -0.118, p < 0.01$). This supports our hypothesis that the involvement of international firms negatively moderates the intention-implementation relationship. To further illustrate this effect, a simple slope analysis plot is presented in Figure 2 in the Supplementary

[material](#). The plot visualizes how the positive relationship between BI and IMPL (the slope of the line) becomes progressively weaker as the perception of global brand involvement increases from low (−1 SD) to high (+1 SD).

4.3 Additional analyses

To further validate the findings, a series of additional analyses were conducted. First, a robustness check was performed using covariance-based SEM (CB-SEM). The model demonstrated an acceptable fit to the data (e.g. GFI = 0.897, AGFI = 0.871, RMSEA = 0.066). As revealed in [Table 3](#), the results were largely consistent with the PLS-SEM findings; most importantly, the significant negative moderating effect of GBP remained highly significant ($\beta = -0.125, p < 0.01$), reinforcing the robustness of this core finding.

Second, to explore potential heterogeneity within the sample, we conducted a MGA across key demographic variables after establishing partial measurement invariance via the MICOM procedure ([Table 5](#) in [Supplementary material](#)). The PLS-MGA results ([Table 6](#) in [Supplementary material](#)) revealed several significant path differences. For instance, the effect of social influence (SOI) on BI was significantly stronger for individuals with higher education and the positive effect of facilitating conditions (FCO) on IMPL was significantly stronger for male respondents. These findings suggest that a “one-size-fits-all” communication and rollout strategy for a CBDC may be suboptimal. Notably, the heightened importance of social influence among the highly educated implies that even the most informed population segments may rely heavily on peer networks to navigate the uncertainties of a novel financial technology, highlighting the critical role of targeted community engagement in driving adoption.

5. Discussion

This study set out to explain the factors shaping the potential adoption of a CBDC by consumers in Vietnam. Our primary goal was not simply to identify the antecedents of adoption intention but to address the more challenging theoretical problem of the intention-implementation gap. While our findings confirm several established drivers of technological intent within an extended UTAUT framework, the study’s core contribution lies in identifying the significant negative moderating role of GBP and offering a contextual explanation for the unexpected insignificance of resistance to change (RTC).

5.1 The foundations of adoption intention

In line with a large body of technology acceptance literature, our model affirms that the intention to adopt a CBDC is built on a logical foundation of trust, perceived value and social norms. The single strongest predictor of behavioral intention was consumer trust in the CBDC ($\beta = 0.281$). This is a particularly salient finding in the context of a developing economy like Vietnam, where skepticism towards non-traditional financial products can be high. This suggests that the government-backed nature of CBDC is its most significant asset, providing a level of assurance that private-sector digital payments may lack. This aligns with research emphasizing that trust is a cornerstone for consumer engagement with financial technologies, especially in markets where regulatory oversight is a primary concern ([Alkhowaiter, 2020](#); [Tam and Oliveira, 2017](#)).

Similarly, perceived benefits and performance expectancy emerged as powerful drivers of intention. This reinforces classic UTAUT logic: Vietnamese consumers are pragmatic and will form an intention to adopt a system if they believe it will improve their transaction efficiency and provide clear advantages over existing methods ([Patil et al., 2020](#)). The significant influence of social influence also confirms the relevance of the UTAUT model in the Vietnamese context, implying that peer and societal opinions play a meaningful role in shaping

adoption intentions. The confirmation of these foundational drivers serves to validate the first stage of our model, showing that the antecedents of intention for a CBDC in Vietnam operate in a manner consistent with established theory.

5.2 Explaining the gap: negative moderating role of global brand presence

While the antecedents above explain why a consumer might decide to adopt a CBDC, our most notable finding explains why they might ultimately hesitate to plan for its use. This study reveals a significant and negative moderating effect of GBP on the intention–implementation relationship ($\beta = -0.118$). Conventional branding theory suggests that partnerships with globally recognized brands should enhance a new product’s credibility, signal quality and foster trust, thereby strengthening adoption (Swoboda and Hirschmann, 2016). Our results show the opposite. In the sovereign context of a national currency, the involvement of foreign multinational corporations appears to trigger apprehension among Vietnamese consumers, weakening the translation of positive intentions into specific plans.

Several interrelated factors, grounded in both branding theory and our preliminary qualitative insights, can explain this counter-intuitive result. First is the theoretical trade-off between perceived “competence” and “warmth.” While global brands often signal high competence, local brands are typically perceived as possessing greater warmth, authenticity and trustworthiness (Sichtmann et al., 2019). For a product as sensitive as a national currency, which demands the highest level of public trust, the perceived lack of warmth and communal alignment from a foreign entity may overshadow any perceived technical competence. This leads to three specific socio-political concerns that become highly salient at the implementation stage:

- (1) *Threat to national sovereignty:* A digital currency issued by the SBV is not merely a financial tool; it is a symbol of national identity and technological prowess. The involvement of a foreign entity, as revealed in our focus groups, is perceived as ceding control over a critical piece of national infrastructure, thereby conflicting with feelings of national pride.
- (2) *Data privacy and sovereignty concerns:* Vietnamese consumers express deep-seated mistrust regarding the handling of their sensitive financial data by foreign, for-profit corporations. The fear that personal data could be stored overseas or used for purposes not aligned with citizens’ interests introduces a significant risk at the planning stage that is not fully captured when forming a general intention.
- (3) *Misalignment of motives:* The fundamental profit-driven motive of a global corporation is perceived as being in direct conflict with the public-service mandate of a central bank. This creates a cognitive dissonance that erodes the user’s motivation to commit to the new system.

This finding clearly illustrates that for national infrastructure projects, the established theories of brand trust may not apply. Instead, local trust, national identity and socio-political considerations appear to be far more powerful drivers, echoing broader findings that relationships with powerful external entities can have complex and context-dependent effects on innovation and adoption (Nguyen et al., 2025).

5.3 Unexpected insignificance of resistance to change

Contrary to our expectation (H1), RTC did not significantly moderate the relationship between intention and implementation behavior. While theoretically plausible, this non-significant result is itself an interesting finding that highlights the importance of context in technology adoption. We propose two potential explanations for this outcome. First, the demographic profile of our sample, which is heavily skewed towards younger (approximately 69% under 35), urban and digitally-literate individuals, may be a key factor. For this digitally-native

cohort, resistance to adopting a new digital financial tool may be dispositionally lower. Second, the “status quo” in urban Vietnam is no longer a simple cash-based system. The widespread adoption of private mobile wallets and sophisticated mobile banking services, particularly among youth (Pham and Bui, 2025), means that for many users, the transition to a CBDC is a shift from one digital platform to another, rather than a disruptive leap from physical cash to a digital-only world. This makes the innovation seem more incremental, thus failing to trigger strong dispositional resistance.

This finding aligns with recent studies that have also reported an insignificant effect of RTC or related “tradition barriers” in contexts where users are already tech-savvy or the innovation is not perceived as highly disruptive (Gani *et al.*, 2024; Marak *et al.*, 2025). This does not invalidate the theoretical importance of RTC. Rather, it suggests that RTC is a powerful barrier primarily in contexts involving a truly radical change in behavior or among demographics less accustomed to digital transformation, such as older populations (El Kalak *et al.*, 2025). We therefore posit that RTC would likely emerge as a significant moderator if the study were replicated among older or more rural populations in Vietnam, a valuable direction for future research.

6. Conclusion and implications

This study sought to fill a critical gap in the CBDC literature by providing a consumer-centric analysis of adoption in Vietnam, focusing specifically on the intention–implementation gap. By extending the UTAUT model with two novel moderators, our research demonstrates that while building user intention is founded on the established pillars of trust and perceived benefits, the successful conversion of that intention into concrete plans is a more complex process. The formulation of implementation behavior is significantly hindered by socio-political anxieties related to the involvement of global brands, a powerful finding for any nation considering such partnerships. By understanding such aspects, central banks can better navigate the path toward the successful integration of CBDCs into the digital economy.

This research offers marked contributions to the theoretical understanding of technology adoption. First, it addresses a persistent limitation in the literature by explicitly modeling and explaining the “intention–implementation gap” in a pre-adoption context, providing an empirically tested framework for understanding why user intent may fail to convert into action. Second, this study enriches rational-choice models like UTAUT by introducing and validating crucial contextual and dispositional layers. The finding that RTC’s effect is context-dependent, and more importantly, that GBP has a significant negative moderating effect, demonstrates the necessity of integrating socio-political constructs into technology adoption models. Finally, the study’s central finding challenges the conventional wisdom of branding theory by providing a critical boundary condition where, for products of national sovereign interest, factors like local trust and data security can override the established signaling power of global brands.

From these findings, several actionable implications could be drawn for the State Bank of Vietnam (SBV) and other monetary authorities. First, the strong influence of trust and perceived benefits on intention underscores the need for transparent and benefit-oriented communication strategies. To build this essential foundation, official campaigns should clearly articulate a CBDC’s security measures, data protection policies and its tangible advantages over existing payment methods, such as reduced transaction costs and enhanced security (Alkhowaiter, 2020). Second, the negative moderating effect of GBP provides the most critical policy insight. This does not preclude international collaboration but dictates that it must be managed with extreme strategic communication. Any partnership with foreign technology firms must be publicly framed to emphasize unwavering national control, direct local benefit and absolute data security. To preempt consumer backlash rooted in sovereignty concerns, the role of any global partner should be carefully positioned as one of technical supports rather than strategic control. This aligns with Brazil’s approach to its “Drex” project, where a consortium of domestic banks and technology firms leads the development, fostering local ownership and trust.

Alternatively, the insights from our MGA suggest that a “one-size-fits-all” rollout strategy may be suboptimal. The finding that social influence is more potent among the highly educated suggests that initial pilot programs could be effectively targeted at university communities and professional networks, leveraging peer effects to build credibility and momentum. This could be combined with lessons from China’s e-CNY pilots, where offering small amounts of “e-VND” in digital “red envelopes” could be used in targeted campaigns to break initial user inertia and build new payment habits within these influential communities.

Finally, this study has several limitations that provide clear avenues for future research. The sample was skewed towards a younger, urban and digitally-literate population, which may limit the generalizability of the findings and could explain the non-significant moderating effect of RTC. Future research should replicate this model with older and more rural populations, where dispositional resistance to change is likely to be a more formidable barrier. Additionally, our study measured implementation behavior (an action plan) rather than actual use. A longitudinal study conducted after a potential CBDC launch would be invaluable to track the conversion from planned to actual behavior. Future studies could also expand the model to explore other socio-political factors, such as media sentiment or pre-existing levels of institutional trust, that may also influence the complex process of CBDC adoption.

Ethics declaration

All procedures performed in this study (involving human participants) were in accordance with the ethical standards of the national research committee and the 1964 Helsinki Declaration (and its subsequent amendments). Participants provided informed consent prior to starting the procedure by agreeing to proceed with the surveys and after having read the informed consent form.

Acknowledgments

The authors would like to thank Assoc. Prof. Hung V. Nguyen (Editor-in-Chief of JED) and the two anonymous reviewers for their valuable suggestions and comments on this paper. Special thanks are also extended to the following people for their insight and support at different stages of the project: Anh Trung Nguyen, Nhat-Linh Nguyen, Linh Phan, Trong-Nhan Nguyen, and Lan Nguyen. This publication represents a homage of the authors (both alumni of the intake 05-08) to their alma mater, Hanoi-Amsterdam High School for the Gifted, in celebration of its four-decade milestone. The first author gratefully acknowledges the financial support from the Banking Academy of Vietnam.

Supplementary material

The supplementary material for this article can be found online.

References

- Ajzen, I. and Fishbein, M. (2005), “The influence of attitudes on behavior”, in Albarracín, D., Johnson, B.T. and Zanna, M.P. (Eds), *The Handbook of Attitudes*, Lawrence Erlbaum Associates, pp. 173-221.
- Alhur, M., Abudoush, A.N., Alqirem, R. and Mostafa, M.M. (2025), “Beyond theory: leveraging business intelligence tools to uncover actionable pathways for mapping the intention–behavior gap in behavioral sciences”, *Human Behavior and Emerging Technologies*, Vol. 2025 No. 1, 5224549, doi: [10.1155/hbe2/5224549](https://doi.org/10.1155/hbe2/5224549).
- Alkhowaiter, W.A. (2020), “Digital payment and banking adoption research in Gulf countries: a systematic literature review”, *International Journal of Information Management*, Vol. 53, 102102, doi: [10.1016/j.ijinfomgt.2020.102102](https://doi.org/10.1016/j.ijinfomgt.2020.102102).
- Auer, R. and Böhme, R. (2020), “The technology of retail central bank digital currency”, *BIS Quarterly Review*, March.
- Baabdullah, A.M., Alalwan, A.A., Rana, N.P., Kizgin, H. and Patil, P. (2019), “Consumer use of mobile banking (M-Banking) in Saudi Arabia: towards an integrated model”, *International Journal of Information Management*, Vol. 44, pp. 38-52, doi: [10.1016/j.ijinfomgt.2018.09.002](https://doi.org/10.1016/j.ijinfomgt.2018.09.002).

- Dang, T.T. and Pham, A.D. (2020), "What make banks' front-line staff more customer oriented? The role of interactional justice", *International Journal of Bank Marketing*, Vol. 38 No. 4, pp. 777-798, doi: [10.1108/ijbm-09-2019-0321](https://doi.org/10.1108/ijbm-09-2019-0321).
- Dang, A.T.Q. and Pham, A.D. (2024), "Exchange rate pass-through and inflation: policy insights for Vietnam based on comparative analyses across Asia", *Asian Academy of Management Journal*, Vol. 29 No. 1, pp. 95-125, doi: [10.21315/aamj2024.29.1.4](https://doi.org/10.21315/aamj2024.29.1.4).
- Demirgüç-Kunt, A., Klapper, L., Singer, D. and Ansar, S. (2022), *The Global Findex Database 2021: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19*, World Bank Publications, Washington, DC.
- Dwivedi, Y.K., Rana, N.P., Jeyaraj, A., Clement, M. and Williams, M.D. (2019), "Re-examining the unified theory of acceptance and use of technology (UTAUT): towards a revised theoretical model", *Information Systems Frontiers*, Vol. 21 No. 3, pp. 719-734, doi: [10.1007/s10796-017-9774-y](https://doi.org/10.1007/s10796-017-9774-y).
- El Kalak, I., Nourallah, M. and Timmerman, I. (2025), "Personal financial planning and the propensity of central bank digital currency adoption", *International Journal of Bank Marketing*, pp. 1-24.
- Gani, M.O., Bhuiya, N., Swarna, A.A., Alam, M.I. and Faruq, M.O. (2024), "Determinants of adopting eCourier services: the moderating role of resistance to change", *Digital Transformation and Society*, Vol. 3 No. 2, pp. 145-163, doi: [10.1108/dts-07-2023-0053](https://doi.org/10.1108/dts-07-2023-0053).
- Gollwitzer, P.M. (1999), "Implementation intentions: strong effects of simple plans", *American Psychologist*, Vol. 54 No. 7, pp. 493-503, doi: [10.1037/0003-066x.54.7.493](https://doi.org/10.1037/0003-066x.54.7.493).
- Gupta, K. and Arora, N. (2020), "Investigating consumer intention to accept mobile payment systems through unified theory of acceptance model: an Indian perspective", *South Asian Journal of Business Studies*, Vol. 9 No. 1, pp. 88-114, doi: [10.1108/sajbs-03-2019-0037](https://doi.org/10.1108/sajbs-03-2019-0037).
- Hair, J.F., Hult, G.T.M., Ringle, C.M. and Sarstedt, M. (2017), *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, 2nd ed., Sage, Los Angeles.
- Kock, N. (2015), "Common method bias in PLS-SEM: a full collinearity assessment approach", *International Journal of e-Collaboration*, Vol. 11 No. 4, pp. 1-10, doi: [10.4018/ijec.2015100101](https://doi.org/10.4018/ijec.2015100101).
- Kpodar, K.R. and Imam, P.A. (2022), "How do transaction costs influence remittances?", IMF Working Papers No. 2022/218, International Monetary Fund, Washington, DC.
- Marak, Z.R., Pahari, S., Shekhar, R. and Tiwari, A. (2025), "Factors affecting chatbots in banking services: the UTAUT2 and innovation resistance theory perspective", *Journal of Innovation and Entrepreneurship*, Vol. 14 No. 47, pp. 1-27, doi: [10.1186/s13731-025-00514-8](https://doi.org/10.1186/s13731-025-00514-8).
- Moriuchi, E. (2021), "An empirical study of consumers' intention to use biometric facial recognition as a payment method", *Psychology and Marketing*, Vol. 38 No. 10, pp. 1741-1765, doi: [10.1002/mar.21495](https://doi.org/10.1002/mar.21495).
- Nguyen, H.V., Nguyen, C.H. and Hoang, T.T.B. (2019), "Green consumption: closing the intention-behavior gap", *Sustainable Development*, Vol. 27 No. 1, pp. 118-129, doi: [10.1002/sd.1875](https://doi.org/10.1002/sd.1875).
- Nguyen, T.T., Nguyen, H.T., Mai, H.T. and Tran, T.T.M. (2020), "Determinants of digital banking services in Vietnam: applying UTAUT2 model", *Asian Economic and Financial Review*, Vol. 10 No. 6, pp. 680-697, doi: [10.18488/journal.aefr.2020.106.680.697](https://doi.org/10.18488/journal.aefr.2020.106.680.697).
- Nguyen, H.V., Le, M.T.T., Pham, C.H. and Cox, S.S. (2024), "Happiness and pro-environmental consumption behaviors", *Journal of Economics and Development*, Vol. 26 No. 1, pp. 36-49, doi: [10.1108/jed-07-2021-0116](https://doi.org/10.1108/jed-07-2021-0116).
- Nguyen, H.T., Dang, T.T., Nguyen, D.N. and Truong, Q.T. (2025), "Do government connections improve or impede small businesses' innovation?", *Journal of Economics and Development* Vol. 27 No. 3, pp. 210-232.
- Ozili, P.K. (2024), "Digital innovations for increasing financial inclusion: CBDC, cryptocurrency, embedded finance, artificial intelligence, WaaS, fintech, BigTech, and DeFi", in *Impact of Artificial Intelligence on Society*, 1st ed., Chapman and Hall/CRC, p. 11.
- Patil, P., Tamilmani, K., Rana, N.P. and Raghavan, V. (2020), "Understanding consumer adoption of mobile payment in India: extending Meta-UTAUT model with personal innovativeness, anxiety,

- trust, and grievance redressal”, *International Journal of Information Management*, Vol. 54, 102144, doi: [10.1016/j.jinfomgt.2020.102144](https://doi.org/10.1016/j.jinfomgt.2020.102144).
- Perera, E.D., Moglia, M., Glackin, S. and Woodcock, I. (2023), “The intention-implementation gap for community involvement in urban waterways governance: a scoping review”, *Local Environment*, Vol. 28 No. 4, pp. 495-517, doi: [10.1080/13549839.2022.2155941](https://doi.org/10.1080/13549839.2022.2155941).
- Pham, A.A. and Bui, D. (2025), “Understanding mobile banking loyalty among Vietnamese Gen Z and Millennials: the impact of service quality and relative advantage”, *Journal of Global Information Technology Management*, Vol. 28 No. 4, pp. 322-339, doi: [10.1080/1097198x.2025.2568338](https://doi.org/10.1080/1097198x.2025.2568338).
- Shahbaz, M., Gao, C., Zhai, L., Shahzad, F. and Hu, Y. (2019), “Investigating the adoption of big data analytics in healthcare: the moderating role of resistance to change”, *Journal of Big Data*, Vol. 6 No. 1, pp. 1-20, doi: [10.1186/s40537-019-0170-y](https://doi.org/10.1186/s40537-019-0170-y).
- Sichtmann, C., Davvetas, V. and Diamantopoulos, A. (2019), “The relational value of perceived brand globalness and localness”, *Journal of Business Research*, Vol. 104, pp. 597-613, doi: [10.1016/j.jbusres.2018.10.025](https://doi.org/10.1016/j.jbusres.2018.10.025).
- Swoboda, B. and Hirschmann, J. (2016), “Does being perceived as global pay off? An analysis of leading foreign and domestic multinational corporations in India, Japan, and the United States”, *Journal of International Marketing*, Vol. 24 No. 3, pp. 1-30, doi: [10.1509/jim.15.0088](https://doi.org/10.1509/jim.15.0088).
- Tam, C. and Oliveira, T. (2017), “Literature review of mobile banking and individual performance”, *International Journal of Bank Marketing*, Vol. 35 No. 7, pp. 1044-1067, doi: [10.1108/ijbm-09-2015-0143](https://doi.org/10.1108/ijbm-09-2015-0143).
- Venkatesh, V., Morris, M.G., Davis, G.B. and Davis, F.D. (2003), “User acceptance of information technology: toward a unified view”, *MIS Quarterly*, Vol. 27 No. 3, pp. 425-478, doi: [10.2307/30036540](https://doi.org/10.2307/30036540).
- Wronka, C. (2023), “Central bank digital currencies (CBDCs) and their potential impact on traditional banking and monetary policy: an initial analysis”, *Digital Finance*, Vol. 5 No. 3, pp. 613-641, doi: [10.1007/s42521-023-00090-0](https://doi.org/10.1007/s42521-023-00090-0).

Further reading

- Ajzen, I. (2020), “The theory of planned behavior: frequently asked questions”, *Human Behavior and Emerging Technologies*, Vol. 2 No. 4, pp. 314-324, doi: [10.1002/hbe2.195](https://doi.org/10.1002/hbe2.195).
- Compeau, D.R. and Higgins, C.A. (1995), “Computer self-efficacy: development of a measure and initial test”, *MIS Quarterly*, Vol. 19 No. 2, pp. 189-211, doi: [10.2307/249688](https://doi.org/10.2307/249688).
- Davis, F.D. (1989), “Perceived usefulness, perceived ease of use, and user acceptance of information technology”, *MIS Quarterly*, Vol. 13 No. 3, pp. 319-340, doi: [10.2307/249008](https://doi.org/10.2307/249008).
- Dimofte, C.V., Johansson, J.K. and Bagozzi, R.P. (2010), “Global brands in the United States: how consumer ethnicity mediates the global brand effect”, *Journal of International Marketing*, Vol. 18 No. 3, pp. 81-106, doi: [10.1509/jimk.18.3.81](https://doi.org/10.1509/jimk.18.3.81).
- Farah, M.F., Hasni, M.J.S. and Abbas, A.K. (2018), “Mobile-banking adoption: empirical evidence from the banking sector in Pakistan”, *International Journal of Bank Marketing*, Vol. 36 No. 7, pp. 1386-1413, doi: [10.1108/ijbm-10-2017-0215](https://doi.org/10.1108/ijbm-10-2017-0215).
- Özsomer, A. and Altaras, S. (2008), “Global brand purchase likelihood: a critical synthesis and an integrated conceptual framework”, *Journal of International Marketing*, Vol. 16 No. 4, pp. 1-28, doi: [10.1509/jimk.16.4.1](https://doi.org/10.1509/jimk.16.4.1).
- Shin, D.H. (2009), “Towards an understanding of the consumer acceptance of mobile wallet”, *Computers in Human Behavior*, Vol. 25 No. 6, pp. 1343-1354, doi: [10.1016/j.chb.2009.06.001](https://doi.org/10.1016/j.chb.2009.06.001).
- Söilen, K.S. and Benhayoun, L. (2021), “Household acceptance of central bank digital currency: the role of institutional trust”, *International Journal of Bank Marketing*, Vol. 40 No. 1, pp. 172-196, doi: [10.1108/ijbm-04-2021-0156](https://doi.org/10.1108/ijbm-04-2021-0156).
- Tronnier, F., Harborth, D. and Hamm, P. (2022), “Investigating privacy concerns and trust in the digital Euro in Germany”, *Electronic Commerce Research and Applications*, Vol. 53, 101158, doi: [10.1016/j.elerap.2022.101158](https://doi.org/10.1016/j.elerap.2022.101158).

Upadhyay, N., Upadhyay, S., Abed, S.S. and Dwivedi, Y.K. (2022), "Consumer adoption of mobile payment services during COVID-19: extending meta-UTAUT with perceived severity and self-efficacy", *International Journal of Bank Marketing*, Vol. 40 No. 5, pp. 960-991, doi: [10.1108/ijbm-06-2021-0262](https://doi.org/10.1108/ijbm-06-2021-0262).

Venkatesh, V., Thong, J.Y. and Xu, X. (2012), "Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology", *MIS Quarterly*, Vol. 36 No. 1, pp. 157-178, doi: [10.2307/41410412](https://doi.org/10.2307/41410412).

Corresponding author

Anh Pham can be contacted at: anhpd@hvnh.edu.vn