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The influences of intrinsic motivation, transformational leadership, and digital skills on the intention to use digital technologies of Vietnamese banks' employees via perceived usefulness and perceived ease of use

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Abstract: This study aims to investigate how intrinsic motivation, transformational leadership, and digital skills influence employees' intention to use digital technologies in Vietnamese banks through perceived usefulness and perceived ease of use. A survey involving 432 employees across 21 Vietnamese banks was conducted, and data analysis utilized PLS-SEM via SMART PLS 4.0. The findings demonstrate positive relationships between perceived ease of use, perceived usefulness, and intention to use digital technologies. Furthermore, intrinsic motivation, transformational leadership, and digital skills have a positive impact on perceived ease of use, whereas intrinsic motivation and transformational leadership have a positive influence on perceived usefulness. These results offer practical insights for Vietnamese banks to enhance digital technology adoption.

Keywords: *Digital skills, Intention to use, intrinsic motivation, Perceived ease of use, Perceived usefulness, Transformational leadership, Vietnamese banks.*

1. Introduction

The Vietnamese Communist Party and the Vietnamese government encourage the inevitable trend of digital transformation for widespread implementation. In line with the Vietnamese Communist Party's direction, the State Bank of Vietnam has issued a plan for the digital transformation of the banking industry by 2025, with a vision for 2030 (according to Decision No. 810/QD-NHNN dated May 11, 2021) [1]. This plan has set specific targets for the entire banking sector. Responding to the State Bank of Vietnam initiative, 81% of Vietnamese commercial banks have reported that they are in the process of developing digital transformation strategies, and 88% of these banks have opted for a comprehensive digital transformation, encompassing both front-end and back-end, with only 6% planning to digitize customer communication channels [2]. This proactive response underscores the banking industry's commitment to embrace digitalization as per the national agenda.

Digital transformation has a positive impact on the financial performance of banks [3]. However, the realization of these significant benefits requires the adaptation of employee habits and work processes to digital transformation policies [4]. Digital transformation necessitates that employees adapt to new technologies [5]. Some employees may adapt immediately, while others may take more time [6]. The implementation of digital transformation may encounter challenges stemming from employee resistance [7, 8]. Employees may consciously or unconsciously resist digital transformation [9].

The acceptance of the proposed technology led to the development of the Technology Acceptance Model (TAM), based on the Theory of Planned Behavior [10, 11]. According to the TAM, technology acceptance is characterized by perceived ease of use and perceived usefulness [10]. Perceived ease of use is defined as an individual's perception of using technology with minimal effort [10], while perceived usefulness is defined as an individual's perception that using technology will enhance their job performance [10]. Perceived ease of use and perceived usefulness have a positive impact on the intention

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to use technology [12, 13]. To date, the TAM model remains the most reliable framework for explaining technology acceptance [14, 15] and has been extended into TAM 2 [16] and TAM 3 [17] models.

Studies on the acceptance of digital transformation encompass two primary groups: consumers/customers [18-20] and employees [21, 22]. These studies explore a diverse range of technologies, including artificial intelligence (AI), big data [23], virtual reality (VR) [24, 25], and digital transformation technologies in general [5]. In the banking field, research has primarily focused on consumer technology acceptance, with limited attention to employee technology acceptance [14]. It is important to note that technology acceptance differs between consumers and employees. Consumers enjoy freedom of choice, whereas employees often face mandatory adoption of new technologies [26]. When new technology is mandatory for employees, those who do not wish to leave the organization have no choice but to wholeheartedly embrace the changes [27]. Individuals who only partially accept these changes may procrastinate, hinder implementation, express frustration, use the technology ineffectively, or even undermine the new system [27, 28]. This distinction highlights the critical role of employees in successfully adopting digital transformation within organizations.

Employee technology acceptance in the banking sector has been studied Bastari, et al. [5]; Anandarajan, et al. [29] and Tayal, et al. [30]. Bastari, et al. [5] conducted a study by collecting data from 375 employees across 91 branches of Kasel Bank in Indonesia to investigate how intrinsic motivation influences the intention to use digital transformation technology in the bank. The study's results revealed that intrinsic motivation impacts perceived ease of use and perceived usefulness, which in turn affects the intention to use. Anandarajan, et al. [29] surveyed 125 employees in six banks in Lagos, the largest urban city in Nigeria, and found that perceived ease of use, perceived usefulness, and social influence positively influence the intention to use. In contrast, intrinsic motivation did not impact on the intention to use. Tayal, et al. [30] conducted a questionnaire survey involving 378 employees from 10 banks in Uttarakhand, India, and found that transformational leadership style had a positive impact on technology acceptance.

This study adds several key aspects to the theory of technology acceptance in the banking sector. Firstly, it combines the Technology Acceptance Model (TAM) and the Motivational and Attitudinal Relevance System (MARS) to investigate technology acceptance. To the best of our knowledge, no prior research has utilized this combined framework. Secondly, the study focuses on the acceptance of technology by employees within the banking sector. Previous studies in the banking field have predominantly concentrated on customer technology acceptance. Lastly, this research explores the acceptance of digital transformation in commercial banks in Vietnam. As far as the author's knowledge goes, no prior study has been conducted on this topic.

2. Literature Review

2.1. Self-Determination Theory

Self-determination theory (SDT) posits that fulfilling one's basic needs leads to higher performance, health, and well-being levels. According to Deci, et al. [31] these needs include autonomy, competence, and relatedness, which are essential for optimal functioning and personal growth. Autonomy is the need to feel in control of one's own behaviors and goals; competence involves mastering challenging tasks; and relatedness refers to the desire for a sense of belonging and connection with others. Cultures consider these needs universal, yet they may prioritize and achieve them differently. The fulfillment of these needs leads to intrinsic motivation and well-being, while neglect can result in negative psychological effects [32, 33].

The theory distinguishes between intrinsic and extrinsic motivations and their impact on behavior and well-being. Intrinsic motivation arises from doing something inherently interesting or enjoyable, leading to a sense of satisfaction and well-being. On the other hand, external rewards or pressures drive extrinsic motivation. A critical aspect of SDT is the continuum of extrinsic motivation, which includes integrated, identified, introjected, and external regulation. Integrated and identified regulations are closer

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to intrinsic motivation due to the personal endorsement of values or goals, whereas introjected and external regulations are less autonomous and often associated with pressure and obligation [34, 35].

Furthermore, SDT introduces the concept of causality orientations, reflecting the degree to which individuals regulate their behavior autonomously or allow external factors to influence their actions. This orientation includes autonomous, controlled, and impersonal motivations (amotivation). We have expanded the theory to incorporate constructs such as mindfulness and vitality, highlighting how awareness and attention to inner needs can enable a transition from controlled to more autonomous orientations, thereby boosting one's vitality and energy by meeting basic psychological needs. This comprehensive framework underscores the importance of understanding motivational processes to foster well-being and effective functioning in various domains of life [34, 36].

SDT has proven to be a robust framework for understanding digital adoption across diverse contexts. In the educational domain, Chen and Jang [37] demonstrated that e-learning environments that meet students' autonomy, competence, and relatedness needs lead to enhanced intrinsic motivation and performance. In the workplace, Deci, et al. [31] found that employees are more inclined to adopt and effectively use new technologies when these systems support their psychological needs, suggesting that SDT can guide technology acceptance and utilization strategies. Similarly, Mullan, et al. [38] observed that health app users who perceive these tools as supportive of their autonomy, competence, and relatedness are more likely to engage with and find satisfaction in their use. These studies collectively affirm that using SDT in digital technology is reasonable.

2.2. The Technological Acceptance Model

The Technology Acceptance Model (TAM), introduced by Davis [11] is a significant framework for comprehending user acceptance of technology. Davis [11] posits that two key beliefs, perceived usefulness (PU) and perceived ease of use (PEU), primarily determine user acceptance and behavior towards technology. To reiterate, perceived usefulness is the extent to which an individual believes that employing a particular technology would improve their job performance, whereas perceived ease of use is the extent to which an individual believes that using a certain technology would require minimal effort [11]. These elements shape an individual's attitude toward technology adoption, influencing their intention to use technologies and, ultimately, their actual usage, as Davis [11] posits, these elements shape an individual's attitude toward technology adoption, influencing their intention to use technologies and, ultimately, their actual usage. Many contexts widely use TAM, with its extensive validation and reputation as a robust and reliable model, to understand and predict technology adoption behaviors [39].

Over time, the TAM has been extended and refined to better fit the rapidly evolving landscape of technology usage. Notably, the TAM2 and the Unified Theory of Acceptance and Use of Technology (UTAUT) have expanded upon the original model by incorporating additional factors such as social influence and facilitating conditions [16, 40]. These iterations accommodate a broader set of variables that influence technology acceptance, reflecting the complexity of user behavior concerning new technological advancements. Despite these advancements, the original TAM remains a fundamental, widely used framework for understanding the determinants of technology acceptance, reflecting its enduring relevance in the fields of information systems and human-computer interaction.

2.3. Hypothesis and Research Model

2.3.1. Perceived Usefulness and Intention to use

PU, defined as the degree to which a person believes that using a particular system would enhance their job performance [11] directly influences the intention to use technology. Empirical studies consistently affirm that individuals are more inclined to adopt and use technology when they perceive it to help enhance their performance [41, 42]. For instance, research by Gao and Bai [43] on IoT technologies demonstrated a significant positive relationship between PU and technology use intention, reinforcing the foundational assertion of TAM. Similarly, Karahoca, et al. [44] found that in the context of IoT, devices like smart thermostats, which provide tangible performance enhancements, are more likely

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to be employed due to their high perceived usefulness. These studies collectively substantiate that PU strongly predicts an individual's intention to use technology, thereby playing a crucial role in technology acceptance and adoption [45, 46].

Researchers have identified PU as a critical determinant influencing employees' intention to use technology in the organizational context. Studies demonstrate that when employees perceive technology as useful, they are more likely to integrate it into their work routines, aiming for improved efficiency and productivity [16, 40]. For instance, a study by Schepers and Wetzels [47] in the workplace setting revealed that PU significantly predicted employees' intentions to use a new software system, indicating that the value employees place on the utility of a system directly influences their adoption decisions. Similarly, research by Mun, et al. [48] on technology acceptance in the workplace confirmed the robustness of PU as a predictor of technology use intention, underscoring its importance in the employee's decision-making process. These findings collectively emphasize the crucial role of perceived usefulness in shaping employees' attitudes toward technology adoption and utilization, thereby affirming its positive impact on their intention to use it.

Based on the aforementioned analysis, the author proposes the following hypothesis:

Hypothesis 1: Perceived usefulness positively affects the intention to use digital technologies.

2.3.2. Perceived Ease of use and Intention to use

Employees' intention to use digital technology in the workplace is significantly predicted by perceived ease of use (PEU).As conceptualized in the Technology Acceptance Model (TAM), PEU refers to the degree to which a person believes that using a particular system would be free of effort [11]. When employees perceive technology as easy to use, they are more likely to expect positive interactions with it, thereby increasing their intention to use it [17]. This relationship is particularly evident in environments where rapid adaptation to new technologies is crucial for performance. For example, a study by Thompson, et al. [49] in a workplace setting found that ease of use significantly influenced individuals' perceptions of using technology, thus affecting their actual usage behavior. Similarly, Venkatesh, et al. [40] noted that ease of use is essential in employees' adoption decisions, especially in the initial stages of technology implementation. Contexts where users may be less familiar or comfortable with new technologies further underscore the importance of PEU, indicating that the less effort required to use the technology, the higher the likelihood of its acceptance and integration into daily work activities. Therefore, emphasizing ease of use in designing and implementing workplace technologies is crucial for fostering higher user acceptance and utilization rates.

From the above analysis, the author hypothesizes that:

Hypothesis 2: Perceived ease of use positively affects the intention to use digital technologies.

2.3.3. Intrinsic Motivation and Perceived Ease of use

Digital intrinsic motivation has a significant impact on perceived ease of use, which is a critical determinant of technology acceptance and continued use. Research indicates that when users are intrinsically motivated, they find technologies more engaging and easier to use. According to the Technology Acceptance Model (TAM), perceived ease of use is a fundamental predictor of user acceptance and is influenced by individual motivational factors Davis [11]. Ryan and Deci [50] further elaborate that intrinsic motivation, characterized by an inherent interest or enjoyment in the task itself, enhances performance and persistence in technology use. Empirical studies by Venkatesh and Davis [16] extend TAM by integrating intrinsic motivators, demonstrating that users' perceptions of ease of use improve as their intrinsic motivation increases.

Empirical research consistently supports the notion that intrinsic motivation positively correlates with perceived ease of use in technological contexts. Venkatesh and Speier [51] found that intrinsic motivation, characterized by enjoyment and interest in the task, significantly enhances the user's perception of the technology's ease of use. Similarly, a study by Saadé and Bahli [52] concluded that the enjoyment aspect of intrinsic motivation is a strong predictor of perceived ease of use, indicating that

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when users find pleasure in using technology, they are likely to find it less complex and more user-friendly. Moreover, Teo, et al. [53] demonstrated that intrinsic motivation improves ease of use and positively affects attitudes towards using technology, suggesting a broad impact on user technology acceptance. Collectively, these studies underscore the critical role of intrinsic motivation in shaping user perceptions and attitudes toward technology's ease of use.

From the above analysis, the author hypothesizes that:

Hypothesis 3: Intrinsic motivation positively affects perceived ease of use

2.3.4. Intrinsic Motivation and Perceived Usefulness

The influence of digital intrinsic motivation on employees' perceived usefulness of technology is a critical area of study within organizational behavior and technology acceptance models. Deci and Ryan's SDT posits that intrinsic motivation enhances engagement and positive outcomes in various workplace settings Ryan and Deci [50]. Empirically, a study by Zhang and Bartol [54] demonstrates that intrinsic motivation is a significant predictor of perceived usefulness and adoption of technology among employees, emphasizing that when employees enjoy using technology due to interest or satisfaction derived from the task itself, they are more likely to perceive the technology as useful. Further, research by Gagné and Deci [55] supports this, indicating that intrinsic motivation correlates with higher perceived ease of use and usefulness of digital tools, which are critical determinants of technology acceptance and sustained use in the workplace. These studies collectively highlight the importance of intrinsic motivation to enhance the perceived usefulness of digital technologies among employees.

From the above analysis, the author hypothesizes that:

Hypothesis 4: Intrinsic motivation positively affects perceived usefulness

2.3.5. Digital Skills and Perceived Ease of use

The correlation between digital skills and employees' perceived ease of using technology is an essential factor in technology acceptance and user satisfaction. According to Venkatesh and Davis [56] as part of the Technology Acceptance Model (TAM), perceived ease of use is significantly influenced by users' familiarity and proficiency with technology, suggesting that higher digital skills are likely to enhance the perceived ease of use. Empirical studies support this notion; for instance, Yu, et al. [57] found that employees with advanced digital skills are more inclined to perceive new technologies as easier to use, mainly due to their previous experiences and confidence in handling similar digital tools. Moreover, Tarafdar and Vaidya [58] demonstrated that training and skill development are critical in reducing anxiety and improving the perceived ease of use and overall acceptance of technology among employees, further highlighting the importance of digital skills in shaping technology perceptions. These findings underscore the necessity for organizations to invest in digital literacy programs to foster a technology-friendly environment where employees perceive digital tools as accessible and easy to use.

From the above analysis, the author hypothesizes that:

Hypothesis 5: Digital skills positively affect perceived ease of use

2.3.6. Transformational Leadership and Perceived Ease of use

The impact of transformational leadership on employees' perceived ease of use of technology has been a subject of increasing interest in the fields of organizational development and technology management. Transformational leaders, known for their ability to inspire and motivate followers toward innovative and creative solutions, significantly influence the acceptance and adoption of new technologies in the workplace. Bass [59] first defined the components of transformational leadership, which include intellectual stimulation and individual consideration, both of which are conducive to creating a supportive environment for exploring and adopting new technologies. Avolio, et al. [60] found that transformational leadership is positively associated with employees' willingness to embrace new technologies, largely due to the leaders' role in reducing fears and increasing understanding related to technology use. Furthermore, research by Purvanova and Bono [61] demonstrates that transformational leaders, by

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fostering a culture of learning and innovation, can significantly enhance employees' perceived ease of use and proficiency with new digital tools. These studies collectively illustrate the pivotal role of transformational leadership in shaping positive technology perceptions and increasing the perceived ease of use among employees.

From the above analysis, the author hypothesizes that:

Hypothesis 6: Transformational leadership positively affects perceived ease of use

2.3.7. Transformational Leadership and Perceived Usefulness

Employees' perceived usefulness of workplace initiatives and technologies significantly increases under transformational leadership, creating an environment that values and actively seeks innovation and efficiency. Bass and Avolio [62] highlighted that transformational leaders, through inspirational motivation and intellectual stimulation, encourage employees to see the value and usefulness of new ideas and technologies. This is particularly relevant in the adoption of new technologies, where Jiang, et al. [63] found that transformational leadership is positively related to employees' perceived usefulness of information systems, as leaders effectively communicate the benefits and encourage the skills needed to use these systems. Bennis and Nanus [64] underscored that transformational leaders foster a vision and a sense of purpose that aligns with employees' personal objectives, thereby augmenting their perception of the utility of their tasks and the tools they receive. Collectively, these studies demonstrate the positive impact transformational leadership has on employees' perceptions of the usefulness of new technologies.

From the above analysis, the author hypothesizes that:

Hypothesis 4: Transformational leadership positively affects perceived usefulness.

The research model is shown in Figure 1.

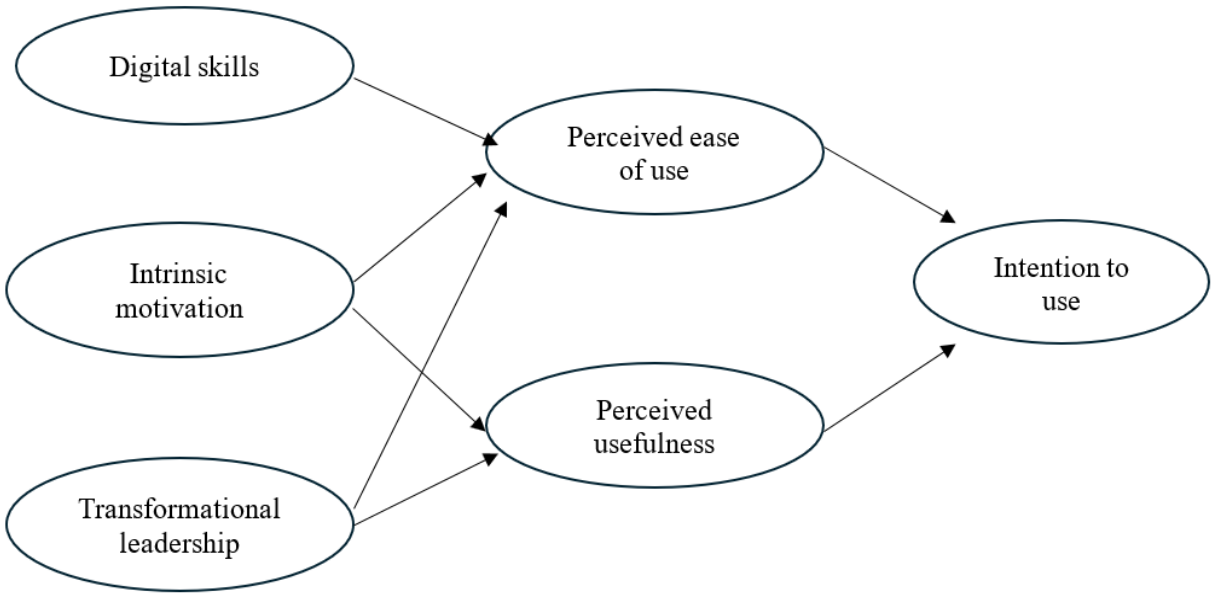

Figure 1.
Research model.

3. Methodology

3.1. Sample

Table 1 presents the sample demographic.

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Table 1.
Sample demographic.

No	Variables/ Criteria	Frequency	Percentage
1	Banks		
	Agribank	46	10.6
	ACB	16	3.7
	Bac A bank	8	1.9
	BIDV	45	10.4
	GP bank	10	2.3
	HD bank	10	2.3
	Techcombank	12	2.8
	LienViet Post bank	19	4.4
	SHB	23	5.3
	MB	36	8.3
	MSB	23	5.3
	NCB	18	4.2
	Viettin	36	8.3
	Vietcombank	32	7.4
	VIB	21	4.9
	Tien Phong bank	15	3.5
	VP Bank	19	4.4
	Sacombank	19	4.4
	Oceanbank	11	2.5
	OCB	9	2.1
	SEA Bank	4	0.9
2	Sex		
	Male	188	43.5
	Female	244	56.5
3	Education		
	College	2	0.5
	Undergraduate	342	79.2
	Postgraduate	88	20.8
4	Positions		
	Staff	300	69.4
	First-line managers	98	22.7
	Middle managers	29	6.7
	Top managers	5	1.2

The sample demographic provided in the table encompasses various characteristics of study participants. Firstly, the study revealed a diverse range of banks represented by the participants, with Agribank having the highest frequency (46 participants), followed by BIDV (45 participants) and MB (36 participants). This distribution reflected a diverse sample of banking institutions. Regarding the participants' gender, there was a relatively balanced representation, with 188 (43.5%) males and 244 (56.5%) females, ensuring a diverse gender perspective in the study. In terms of education, the majority of participants were undergraduates (79.2%), followed by postgraduates (20.8%), with a small percentage having completed college (0.5%). Finally, the majority of participants (69.4%) held staff positions within the banks, with the remaining participants distributed among first-line managers (22.7%), middle managers (6.7%), and top managers (1.2%). This diversity in positions ensures a comprehensive view of the workforce within the banking sector.

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3.2. Measures

In this paper, we employ a range of measurement scales to assess various constructs. We describe these measurement scales as follows: Davis [11] and Davis [65] adopted scales to measure intention to use, PU, and PEU. Three statements each measured the intention to use. One of the three statements was, "I intend to use digital technologies next month." We measured PU using a 6-item scale. An example of six statements was, "Using digital technologies helps me to complete the task faster.We measured PEU using a scale of six items. . One item among those six was "Learning how to operate digital technology will be easy for me."

Intrinsic motivation was measured employing the scale developed by Gagné, et al. [66]. Gagné, et al. [66] proposed 3 statement scale for intrinsic motivation. One of 3 statements was, "I use digital technologies because I enjoy using them." Transformational leadership was measured using the scale of Carless, et al. [67]. Carless, et al. [67] proposed 7 statements to assess transformational leadership, including "My manager communicates a clear and positive vision for the future." Digital skill was measured by adapting to the scale of Van Deursen, et al. [68]. Van Deursen, et al. [68] suggested 8 items to measure digital skills consisting of "I know what information to share online."

4. Results

4.1. Measurement Model

Table 2 displays the quality, reliability, convergence validity, and discriminant validity of the measurements used in this study.

Table 2.
Outer loadings, cronbach alpha, CR, AVE, and HTMT.

Items	Outer loadings	Cronbach alpha	CR	AVE	HTMT
DS1	0.734	0.888	0.894	0.561	0.251 – 0.441
DS2	0.797				
DS3	0.760				
DS4	0.765				
DS5	0.748				
DS6	0.674				
DS7	0.769				
DS8	0.740				
IU1	0.772	0.663	0.663	0.597	0.355 – 0.573
IU2	0.772				
IU3	0.774				
MI1	0.917	0.878	0.878	0.804	0.073 – 0.578
MI2	0.886				
MI3	0.886				
PEU1	0.811	0.857	0.860	0.585	0.264 – 0.753
PEU2	0.691				
PEU3	0.798				
PEU4	0.820				
PEU5	0.740				
PEU6	0.718				
PU1	0.827	0.893	0.897	0.652	0.329 – 0.765
PU2	0.798				
PU3	0.796				
PU4	0.833				
PU5	0.732				

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Items	Outer loadings	Cronbach alpha	CR	AVE	HTMT
PU6	0.853				
TL1	0.812	0.923	0.925	0.683	0.073 – 0.765
TL2	0.816				
TL3	0.822				
TL4	0.846				
TL5	0.807				
TL6	0.832				
TL7	0.851				

As displayed in Table 2, outer loadings of all items are greater than the threshold of 0.5 proposed by Hair Jr, et al. [69]. Hair Jr, et al. [69] suggest that if outer loadings are greater than 0.5 but smaller than 0.7, the researchers should consider CR and AVE to support the final decision to eliminate items. Outloadings of DS6 and PEU2 are smaller than 0.7 but greater than 0.5; moreover, the CR and AVE coefficients of digital skill and perceived ease of use satisfy the cut-offs proposed by Hair Jr, et al. [69]. Hence, the author decides to retain DS6 and PEU6 for further analysis.

To assess the reliability of scales used in this study, the author employs the Cronbach alpha and composite reliability coefficients; according to Hair Jr, et al. [69] Cronbach alpha and CR should be greater than 0.7 to ensure reliability. As shown in Table 2, all Cronbach alpha and CR coefficients are greater than 0.7, indicating sufficient reliability.

To evaluate the convergence of scales used in this study, the author utilizes AVE (average variance extracted), as suggested by Hair Jr, et al. [69]. The AVE coefficients should be greater than 0.5, as recommended by Hair Jr, et al. [69]. As illustrated in Table 2, all AVE coefficients are greater than 0.5, indicating sufficient convergence.

The author employs HTMT(Heterotrai—Monotrait) ratios to assess scale discriminant. According to Hair Jr, et al. [69] the HTMT ratios should be smaller than 0.9. As Table 2 shows, all HTMT ratios are smaller than 0.9, indicating a satisfied discriminant.

4.2. Hypothesis Testing

Table 3 displays the hypothesis testing results.

Table 3.
Hypothesis testing.

Relationships	Adjusted β	P	Decisions
PU → IU	0.351	0.000	Accept H_1
PEU → IU	0.406	0.000	Accept H_2
MI → PEU	0.425	0.000	Accept H_3
MI → PU	0.386	0.000	Accept H_4
DS → PEU	0.213	0.000	Accept H_5
TL → PEU	0.168	0.000	Accept H_6
TL → PU	0.679	0.000	Accept H_7

Table 3 summarizes the hypothesis-testing outcomes. Perceived usefulness (PU) positively influences intention to use ($\beta = 0.351$, $p < 0.001$), confirming Hypothesis 1. Similarly, perceived ease of use (PEU) significantly correlates with intention to use ($\beta = 0.406$, $p < 0.001$), supporting Hypothesis 2. Intrinsic motivation (MI) also shows a significant association with perceived ease of use ($\beta = 0.425$, $p < 0.001$), validating Hypothesis 3. Additionally, the relationship between intrinsic motivation and perceived usefulness is significant ($\beta = 0.386$, $p < 0.001$), confirming Hypothesis 4. Digital skills' impact on perceived

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ease of use (PEU) is notable ($\beta = 0.213$, $p < 0.001$), supporting Hypothesis 5. Transformational leadership (TL) significantly relates to perceived ease of use (PEU) ($\beta = 0.168$, $p < 0.001$), indicating Hypothesis 6. Lastly, TL's relationship with PU is highly significant ($\beta = 0.679$, $p < 0.001$), leading to the acceptance of Hypothesis 7. These findings empirically support the proposed relationships.

5. Discussions and Limitations

5.1. Discussions

The purpose of this study is to examine the impacts of intrinsic motivation, transformational leadership, and digital skills on the intention to use digital technologies of employees working for Vietnamese banks via perceived ease of use and perceived usefulness. The findings of this research reveal that both perceived usefulness and perceived ease of use have a positive effect on intention to use. These findings are in light of prior studies [11, 17, 40, 48]. The findings of this study have several practical implications for Vietnamese banks and organizations aiming to promote digital adoption among their employees. Firstly, it underscores the importance of making digital tools perceived as both useful and user-friendly. Vietnamese banks should invest in user-friendly interfaces and provide clear demonstrations of the utility of these tools.

The study's findings reveal that intrinsic motivation positively influences PU and PEU; in turn, PU and PEU positively affect intention to use. These research outputs are in light of previous findings [16, 51-53, 55]. This suggests that employees who are intrinsically motivated are more likely to find digital technologies easy to use and perceive them as useful. It emphasizes the importance of fostering intrinsic motivation among employees to facilitate digital adoption. Vietnamese banks should foster intrinsic motivation among employees through recognition, autonomy, and meaningful work, which can enhance their willingness to embrace digital technologies.

Additionally, we find that digital skills significantly affect PEU, highlighting their role in shaping the ease with which employees use digital tools. This finding is in light of previous studies [57, 58]. This underscores the need for targeted training and development programs to enhance employees' digital skills.

Transformational Leadership is revealed as a strong influencer of both PEU and PU, indicating that effective transformational leadership can positively impact employees' perceptions of ease of use and usefulness of digital technologies. These results are in light of prior studies [61, 63]. This finding underscores the critical role of transformational leadership in facilitating employees' digital adoption, indicating that the leaders in Vietnamese banks should adopt the transformational leadership style in this period.

5.2. Limitations

Although this study contributes to the literature and practice of digital adoption in Vietnamese banks, readers should be aware of the following limitations when interpreting its findings: First, this study employs self-reported scales. This may lead to hype about the results. Second, this study utilizes cross-sectional data collection. The cross-sectional design restricts causal inferences and temporal dynamics, potentially resulting in a common variance bias [70]. Future research that employs longitudinal research may prove to be more valuable than current research. Third, the sample size of 432 Vietnamese bank employees, while substantial, may only partially represent the country's banking industry's diversity. For instance, this research predominantly uses a sample of graduates. Future research collecting data from other groups, such as college-level employees, may be more valuable. Fourth, this research uses the Snowball sampling technique, a nonrandom sampling method; future research employing a random sampling method is more beneficial. Finally, the study's time sensitivity and limited examination of external factors warrant consideration in future research, which should aim for a more comprehensive understanding of digital adoption dynamics across diverse contexts.

Although this research contains the above limitations, the author believes that it is still valuable for the literature and practice of Vietnamese digital transformation.

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Institutional Review Board Statement:
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Transparency:
The author confirms that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

Competing Interests:
The author declares that there are no conflicts of interests regarding the publication of this paper.

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