Factors Influencing the Acceptance of "1C" Software Applications in Small and Medium-Sized Enterprises in the former Thai Binh City, Vietnam

Tran Nguyen Thi Yen, Hoang Thi Mai Anh, Tran Minh Hue, Nguyen Thi Thu Trang & Phan Le Trang*

Faculty of Accounting and Business Administration, Vietnam National University of Agriculture, Hanoi 12400, Vietnam

Abstract

The study aimed to analyze the factors influencing the acceptance of 1C software in SMEs in the former Thai Binh city. A quantitative research approach was employed, involving 166 samples collected through direct surveying. After data collection and processing, exploratory factor analysis (EFA), confirmatory factor analysis (CFA), hypothesis testing based on the research model using structural equation modeling (SEM), and multi-group analysis were conducted with SPSS 20.0 and AMOS 24 software. To enhance analytical robustness, a multi-group structural analysis was employed to assess whether the effects of different factors varied between SMEs that have already adopted the software and those that have not. The results revealed that acceptance was influenced by seven determinants, among which accounting staff competence, technological infrastructure, and perceived ease of use exerted the most significant influence. Conversely, risk perception was identified as a key barrier to adoption in SMEs that have not yet implemented the software. Based on these findings, the study proposes the following solutions: (1) enhancing the qualifications and technological capabilities of accounting staff; (2) investing in and improving technological infrastructure; (3) increasing awareness of the software's ease of use; (4) raising awareness of its usefulness, legal compliance, and risk mitigation; and (5) optimizing investment costs.

Keywords

Technology acceptance, accounting software adoption, SMEs

Introduction

As part of Vietnam's recent digital transformation agenda, small and medium-sized enterprises (SMEs) in provincial areas have been encouraged to apply digital technologies to improve their financial management and competitiveness. In former Thai Binh province, a

fast-growing industrial and agricultural region in northern Vietnam, has witnessed increasing demand for solutions that enhance efficiency in working capital management, particularly in controlling cash flow, receivables, payables, and inventory. Many local firms still rely on manual accounting or fragmented software systems, which limit their ability to make timely financial decisions and manage liquidity effectively.

In SMEs, the application of digital management and accounting software has become increasingly important due to constraints in financial resources, human capital, and managerial capacity. Prior studies have indicated that digital technologies enable real-time access to operational and financial information, thereby improving data accuracy, process transparency, and managerial responsiveness (Appelbaum *et al.*, 2017). The adoption of enterprise management and accounting software also helps SMEs standardize internal processes, reduce information asymmetry, and enhance decision-making quality, which in turn contribute to improved operational efficiency and financial performance (Granlund & Malmi, 2002).

Accounting and enterprise resource planning (ERP) software systems have evolved from basic record-keeping tools into comprehensive managerial instruments that actively support organizational decision-making. For SMEs in former Thai Binh city, Vietnam, the adoption of digital accounting and financial management systems is no longer optional but has become a strategic necessity. However, the acceptance and actual utilization of such systems remain uneven across SMEs. While some firms have successfully implemented integrated accounting software such as "1C software" to enhance financial monitoring and internal management reporting, others remain hesitant due to limited information technology capabilities, insufficient managerial awareness, or perceived implementation risks. Understanding the factors underlying these differences in adoption is therefore critical to promoting digital transformation among SMEs.

The selection of 1C software for this study was based on its widespread market presence,

strong localization, and high accessibility for SMEs in Vietnam's provincial context. Although more sophisticated enterprise systems are available, 1C's affordability, modular architecture, and long-standing reputation as a robust, locally adapted solution have made it a common entry-level digital tool for SMEs in former Thai Binh city seeking to enhance financial efficiency and managerial control. Evidence gathered from market observations and semi-structured interviews indicated that local adopters increasingly utilize the system beyond basic bookkeeping functions, relying on its data outputs for short-term financial planning and internal management reporting. Accordingly, this study focused on examining the factors influencing the acceptance and effective use of this dominant local software solution, rather than conducting a comparative evaluation of alternative platforms, which lies beyond the scope of this research. Therefore, this study aimed to identify and analyze the key factors influencing the acceptance and utilization of the managerial features of the 1C accounting system among SMEs in former Thai Binh province, Vietnam. Specifically, the research examined how factors derived from the technology acceptance model (TAM), extended to incorporate organizational and contextual elements such as top management support, user training, system quality, perceived risk, and information technology infrastructure, affect perceived usefulness and the actual use of 1C software-generated information for managerial decision-making. By establishing this linkage, the study contributes theoretically by adapting the TAM framework to a localized digital accounting and financial management context in an emerging economy, and practically by providing implications for SMEs seeking to improve managerial decision-making and overall operational efficiency through the effective use of digital accounting software.

Methodolody

Theoretical basis and research model

The adoption and use of 1C accounting software in working capital management is becoming an unavoidable trend, especially amid

digital transformation and heightened demand for financial governance improvement. In particular, for SMEs in former Thai Binh province, 1C accounting software has emerged as one of the prominent solutions to enhance working capital management, offering capabilities for automating accounting processes, improving cash flow control, and ensuring compliance with evolving regulations. This contextual focus justifies its inclusion as the main subject of the current study rather than general technology adoption. The technology acceptance model (TAM), proposed by Davis (1989) and supported by several recent studies in Vietnam, identifies perceived usefulness and perceived ease of use as the two primary factors influencing the intention to use technology. In an accounting context, perceived usefulness relates to the ability to detect fraud and improve efficiency, while perceived ease of use affects the willingness to integrate technology. However, the TAM is a widely adopted theoretical framework for explaining technology acceptance through the constructs of perceived usefulness and perceived ease of use. However, owing to its parsimonious structure, TAM does not explicitly incorporate organizational and contextual factors that are particularly salient in shaping technology adoption decisions within SMEs. Prior research has indicated that technology acceptance in SMEs is strongly influenced by internal organizational capabilities, resource constraints, and external environmental pressures. Accordingly, to establish a more comprehensive theoretical foundation for analyzing the acceptance of accounting software in SMEs, this study extended TAM by incorporating additional constructs that capture relevant organizational, technological, and environmental conditions. This theoretical extension provided the basis for the development of a hybrid acceptance model, which was applied to examine SMEs' acceptance of the managerial features of 1C accounting software in the context of the former Thai Binh city. The selection of seven factors was the core mechanism by which TAM was adapted to the specific local context, drawing on extensive empirical evidence from Vietnamese SMEs to ensure relevance and explanatory power.

The acceptance of 1C software adoption was measured by the following scales:

AC1: The degree to which the enterprise is ready to adopt 1C software in its management and operational activities;

AC2: The enterprise's intention to continue and expand the use of 1C software in the near future to support management and decision-making; and

AC3: The extent to which the enterprise expects clear managerial and operational benefits from the application of 1C software.

Based on a synthesis of analytical frameworks, including the technology acceptance model (TAM), relevant technology adoption theories, and practical insights derived from empirical studies in Vietnam, the factors influencing the acceptance of 1C accounting software were identified and examined through seven key constructs. This synthesis integrated both academic literature and empirical evidence to ensure that the proposed model reflected a balance between theoretical rigor and practical relevance. The identified factors comprised perceived ease of use, accounting staff competency, investment cost, technological infrastructure, regulatory and tax policy pressure, perceived risk, and perceived usefulness. The selection of these constructs was supported by prior empirical studies in Vietnam, thereby ensuring contextual relevance rather than relying on generic factors applicable to technology adoption in general.

(1) Perceived Ease of Use: "Perceived ease of use" refers to the degree to which a user believes that using a particular system requires minimal effort. It is a core factor determining the intention to adopt technology. This factor was measured on the following four scales: 1C accounting software is easy to learn and use (EA1); operating the 1C accounting software does not require much effort (EA2); the software interface is friendly and easy to understand (EA3); and it is easy to become proficient in using 1C accounting software (EA4).

(2) Accounting Staff Competence: The competence of accounting staff is a critical factor influencing their ability to adopt and effectively

use accounting software within SMEs. Competence here encompasses not only specialized knowledge in accounting and finance but also information technology skills, adaptability to new technologies, and data processing capabilities. According to Jackson & Allen (2024), accounting personnel with higher professional expertise and prior exposure to accounting software during training or previous work tend to more readily accept and utilize such software. This factor was measured by the following scales: accounting staff in my enterprise possess software usage skills (AFC1); staff easily adapt to technological changes in their work (AFC2); staff readily adjust to technological changes in their tasks (AFC3); and the enterprise has a regular training plan for accounting software technology (AFC4).

(3) Investment Cost: Investment cost is a critical factor influencing the decision to adopt and implement accounting software, especially among SMEs. This cost includes not only the software license fees but also related expenses such as employee training, system maintenance and upgrades, and technical support. This factor was measured by the following scales: the annual software maintenance cost is too high (INV1); the enterprise faces difficulties balancing the budget for 1C accounting software (INV2); the annual software maintenance cost is high (INV3); and the benefits gained do not justify the costs incurred (INV4).

(4) Technological Infrastructure: According to Zhu & Kraemer (2005), technological infrastructure plays a crucial supporting role in technology acceptance models such as TAM or UTAUT, directly influencing the capability to adopt and sustain information systems within organizations. This factor was measured by the following scales: my enterprise has an appropriate network and computer infrastructure for using 1C accounting software (INF1); there is a technical support team available when software issues arise (INF2); and the current infrastructure is sufficient to effectively deploy the software (INF3).

(5) Regulatory and Tax Policy Pressure: In Vietnam, the Accounting Law, Enterprise Law, and related guiding documents require SMEs to maintain transparent, timely financial record-keeping, reporting, and declaration. Additionally, regulations concerning electronic tax declarations, e-invoicing, periodic financial reporting, and data standardization compel businesses to adopt technology, with accounting software serving as a core tool. This factor was measured by the following scales: using accounting software helps SMEs reduce legal risks and tax errors (P1); regulatory authorities encourage software applications in tax declaration processes (P2); and SMEs perceive the necessity of using software to comply with inspection and audit requirements (P3).

(6) Perceived Risk: Numerous scholars have highlighted the role of perceived risk in influencing technology acceptance and usage behavior. Featherman & Pavlou (2003) were among the first to extend the technology acceptance model (TAM) by incorporating perceived risk, arguing that risk can reduce users' intention to adopt a system even when its usefulness and ease of use are recognized. This factor was measured by the following scales: the use of accounting software may encounter technical errors affecting business operations (RISK1); I am concerned that accounting data may be leaked when using the software (RISK2); and I feel uneasy about information security when using the software (RISK3).

(7) Perceived Usefulness: Perceived usefulness is defined as the degree to which a user believes that using a particular system will enhance their job performance (Pratama & Yulianti, 2022). This factor was measured by the following working capital management-specific scales (replacing the irrelevant GFSC items): using 1C software provides real-time data for better cash flow control (USE1); using 1C software significantly improves the efficiency of managing receivables and payables (USE2); using 1C software helps reduce errors in inventory valuation and financial reporting (USE3); and the reports generated by 1C software enhance managerial decision-making (USE4).

Based on a comprehensive synthesis of theory and practical foundations combining insights from TAM, empirical studies in Vietnam, and field observations in the former Thai Binh city, the research team proposed a

conceptual model comprised the seven factors (perceived ease of use, accounting staff competency, investment cost, technological infrastructure, legal and tax policy pressure, perceived risk, and perceived usefulness) influencing the acceptance of 1C software application in working capital management. "Practical foundations" here refer to the qualitative and quantitative findings from surveys and interviews with SMEs in the former Thai Binh city, as detailed in the methodology section (**Figure 1**).

Research hypotheses

H1: Perceived ease of use positively influences the acceptance of 1C software applications in SMEs in the former Thai Binh city.

H2: Accounting staff competency positively influences the acceptance of 1C software applications in SMEs in the former Thai Binh city.

H3: Investment cost negatively influences the acceptance of 1C software applications in SMEs in the former Thai Binh city.

H4: Technological infrastructure within SMEs positively influences the acceptance of 1C

software applications in SMEs in the former Thai Binh city.

H5: Legal and tax policy pressure positively influences the acceptance of 1C software applications in SMEs in the former Thai Binh city.

H6: Perceived risk negatively influences the acceptance of 1C software applications in SMEs in the former Thai Binh city.

H7: Perceived usefulness positively influences the acceptance of 1C software applications in SMEs in the former Thai Binh city.

Data collection

A convenience sampling approach was adopted in this study due to the absence of a comprehensive sampling frame of SMEs in the former Thai Binh city. Although this method may introduce potential bias, it was deemed appropriate given the practical constraints of data collection. To minimize such limitations, efforts were made to ensure diversity in the enterprise characteristics. Primary data were collected through direct surveys conducted between February and April 2025. The structured
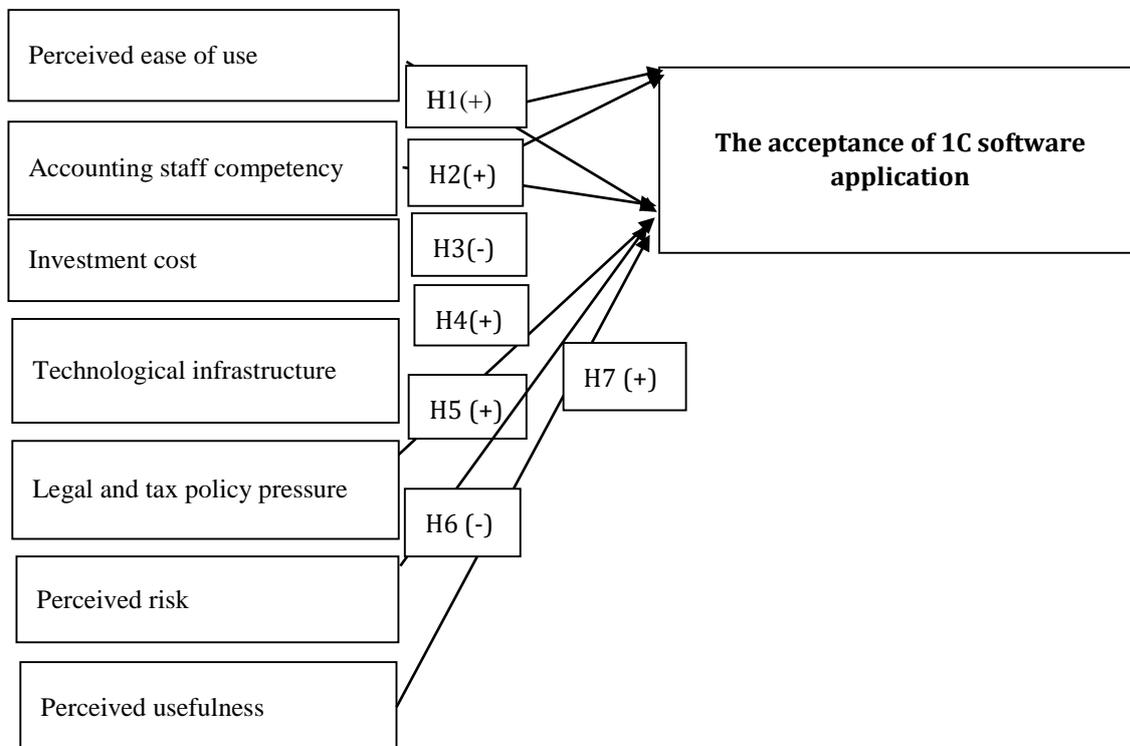

Figure 1. Research Model

questionnaire comprised four sections: (i) general enterprise information; (ii) physical infrastructure and human resources related to the adoption of 1C software in working capital management; (iii) factors influencing the acceptance and adoption of 1C software; and (iv) perceived benefits and challenges associated with its use. In total, 28 observed variables were designed to measure behavioral intention to adopt 1C software, distributed across seven independent constructs: perceived usefulness (five items), perceived ease of use (four items), facilitating conditions (four items), top management support (four items), organizational readiness (three items), subjective norms (four items), and perceived risk (four items). The dependent construct, behavioral intention, was measured with three items.

This sample size met the minimum requirement for hypothesis testing using multiple regression analysis, as recommended by Hair *et al.* (2014), which requires a subject-to-variable ratio of 5:1 or 10:1. Based on the proposed model, the behavioral intention to adopt 1C software was measured by 28 observed variables, indicating a minimum required sample size of approximately 140. Considering the practical conditions of the research area, a survey of 168 SMEs was conducted, including a 20% surplus over the minimum required sample. After data screening, 166 valid responses were retained for analysis.

The collected data were processed using SPSS 20.0 and AMOS 24. This study employed seven scales for the independent variables, with 25 observed variables and three observed variables for the dependent construct. The measurement scales were assessed using four tests: exploratory factor analysis (EFA), reliability testing with Cronbach's alpha, normality testing, and confirmatory factor analysis (CFA).

Cronbach's alpha coefficient was applied to eliminate unsuitable variables within each group before further analysis. The criterion for analysis was that variables with an item–total correlation coefficient below 0.3 were eliminated, and scales with an alpha reliability coefficient of 0.6 or higher were deemed acceptable in cases where the construct under investigation was novel or

relatively unfamiliar to the respondents (Nunnally, 1978; Peterson, 1994; Slater, 1995). After reliability testing, EFA was applied to identify the variables that affect the adoption of 1C software. Variables with factor loadings below 0.4 were further removed. Additionally, the Kaiser–Meyer–Olkin (KMO) measure and Bartlett's test of sphericity were employed to assess the suitability of the dataset for factor analysis. Following EFA, the resulting factors were subjected to CFA to evaluate the influence of the identified factors on adoption. The multi-group structural analysis method was employed to examine whether there were differences in the effects of the various factors on the acceptance of 1C software between SMEs that have not yet adopted the software and those that have already implemented it.

Results and Discussion

Characteristics of the survey sample

The survey results (**Table 1**) showed that majority of the surveyed businesses were the size of SMEs, as out of the 166 businesses surveyed, SMEs accounted for over 98%. In terms of the types of businesses, the SMEs were distributed in different fields. The survey results were mainly SMEs in the field of trade and services (accounting for over 45%). Out of the 166 surveyed SMEs, 52 (31%) had adopted 1C software, while 114 (69%) had not. This indicates that adoption remains limited, with non-adopters constituting the majority. Adopters generally possessed stronger IT infrastructure, more skilled accounting staff, and greater awareness of the software's benefits.

According to **Figure 2**, SMEs that had adopted 1C accounting software generally demonstrated stronger capabilities in both technological infrastructure and human resources compared with those that had not adopted it.

In terms of technological infrastructure, the group of adopters achieved a higher mean score (3.84) than non-adopters (3.41). These SMEs were typically equipped with stable network systems, sufficient computer hardware, and available technical support teams that ensured the smooth operation of accounting software.

Table 1. Statistics of the surveyed enterprise characteristics

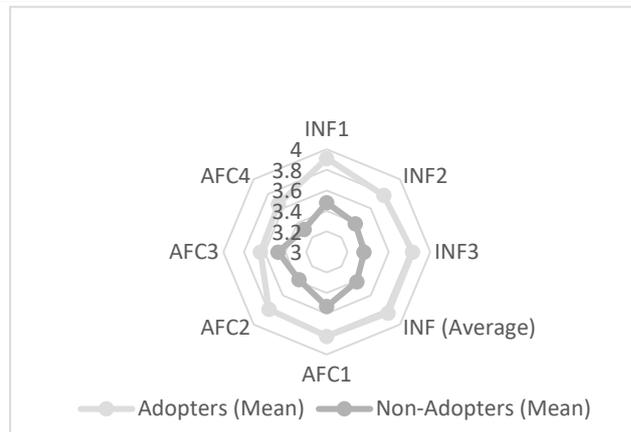|	Target	Quantity (enterprise)	Proportion (%)
Field	Agriculture, Forestry and Seafood	42	25.3
	Industry and construction	28	16.9
	Trade and services	96	57.8
Acceptance of 1C software	Adopters (DNAD)	52	31
	Non-Adopters (DNKAD)	114	69
Total		166	100

Figure 2. Differences in IT infrastructure and accounting staff competency between DNAD and DNKAD

Their higher level of readiness reflected a proactive investment in IT systems, which facilitated the effective implementation and maintenance of 1C software in accounting and working capital management. This technological preparedness is considered a fundamental condition for digital transformation in financial management, especially among SMEs operating in provincial areas.

Regarding accounting staff competency, the adopter group obtained an average score of 3.75, higher than the 3.46 for non-adopters. These SMEs had accounting staff with strong software skills, quick adaptability to technological changes, and a positive learning attitude supported by regular training programs on accounting technologies, including 1C applications. Such advantages enabled the SMEs to integrate digital tools more effectively into their accounting processes, thereby improving accuracy and responsiveness in working capital management.

Overall, the SMEs with modern technological infrastructure (mean = 3.84) and highly competent accounting staff (mean = 3.75) exhibited a greater capacity to adopt and sustain

digital transformation. Readiness in both technology and human capital forms a solid foundation for the successful implementation of 1C accounting software, contributing to enhanced efficiency, transparency, and control in working capital management.

Analysis of the factors affecting the acceptance of 1C software applications in working capital management at SMEs in former Thai Binh city

Accreditation of scale

The number of observed variables in the Cronbach's alpha analysis was 25 observed variables, belonging to the seven independent variables and one dependent variable with three observed variables. The result of Cronbach's alpha is shown in **Table 2**.

The results of the exploratory factor analysis indicated that the independent variables had sufficiently high Kaiser-Meyer-Olkin (KMO) measures of sampling adequacy at 0.775 (**Table 3**). Bartlett's test of sphericity was significant ($P = 0.00 < 0.05$), confirming the appropriateness of the data for factor analysis. Consequently, the measurement scales demonstrated satisfactory

Table 2. Summary of the Cronbach's alpha results for the accreditation of scales

No.	Scale	Construct code	Number of items	Mean	Cronbach's Alpha	Retained items
1	Perceived Ease of Use	EASE	4	3.72	0.865	EA1, EA2, EA3, EA4
2	Accounting Staff Competency	AFC	4	3.59	0.834	AFC1, AFC2, AFC3
3	Investment Cost	INVESTMENT	4	3.59	0.812	INV1, INV2, INV3, INV4
4	Technological Infrastructure	INFRACTURE	3	3.65	0.785	INF1, INF2, INF3
5	Legal and Tax Policy Pressure	POLICY	3	3.57	0.752	P1, P2, P3
6	Perceived Risk	RISK	3	3.96	0.761	RISK1, RISK2, RISK3
7	Perceived Usefulness	USE	4	2.84	0.778	USE1, USE2, USE3
8	Acceptance of the 1C Software Application	AC	3	3.91	0.883	AC1, AC2, AC3

Table 3. The results of the KMO and Bartlett's test

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.775
Bartlett's test of sphericity	Approx. Chi-square	13634.976
	Df	300
	Sig.	0.000
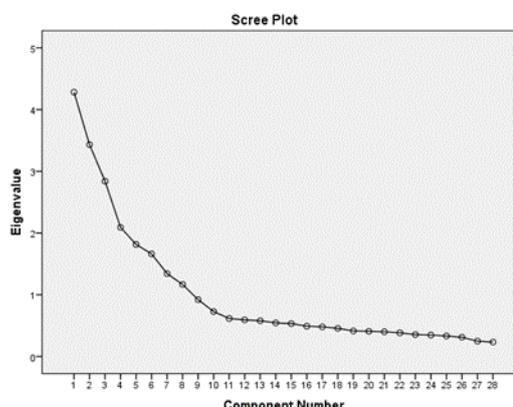
convergent validity, allowing the extraction of the seven independent factors and one dependent factor, with a total of 28 observed variables. All statistical criteria were satisfactorily met, and the findings were statistically significant.

Based on the results presented in **Table 4**, it can be observed that the exploratory factor analysis (EFA) indicated that the factors remained consistent with the original structure and showed that there were no changes.

Testing of the Research Hypotheses

After analyzing the reliability of the scale through Cronbach's alpha coefficient, exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were performed. The adjusted model after removing the variable did not meet the reliability and convergence value, so the study conducted an analysis of the SEM linear structure model to test the research hypotheses. The results of the SEM linear structural model analysis (**Figure 2**)

showed that the Chi-square/df = 4.954 (< 5); CFI = 0.914 (~1); GFI = 0.928 (~1); and RMSEA= 0.052 (<0.08). These indicators all satisfied the condition of good fit, so it can be concluded that the measurement model was suitable for the survey data of the SMEs.

Based on the results presented in **Table 5**, showing that EASE, AFC, INFRACTURE, INVESTMENT, and USE positively influence ACEPT, with AFC having the strongest effect, while RISK negatively affects ACEPT; however, POLICY is not statistically significant ($P > 0.05$).

The structural equation modeling (SEM) results indicated that all seven hypothesized factors significantly influenced the acceptance behavior of 1C accounting software for working capital management within SMEs (**Table 6**).

Firstly, accounting staff competency (β = 0.243, *P*-value <0.01) exerted the strongest positive effect on acceptance behavior. SMEs with accounting teams proficient in their professional duties, equipped with IT skills, and

Table 4. Rotated component matrix[a]

	Component						
	1	2	3	4	5	6	7
EA3	.850						
EA4	.845						
EA1	.794						
EA2	.763						
AFC1		.833					
AFC4		.820					
AFC3		.815					
AFC2		.811					
INV2			.831				
INV1			.805				
INV3			.788				
INV4			.682				
INF2				.824			
INF1				.816			
INF3				.805			
P3					.881		
P2					.809		
P1					.786		
RISK1						.837	
RISK2						.788	
RISK3						.761	
USE1							.662
USE4							.632
USE3							.630
USE2							.608

Note: Extraction Method: Principal component analysis

   Rotation Method: Varimax with Kaiser normalization

   a. Rotation converged in five iterations

experienced with modern software were better capable of utilizing 1C to accurately track current assets (like inventory and receivables) and current liabilities (like payables). This operational expertise is essential for effective working capital management. This finding aligns with the study by Ifinedo (2011), which identified staff expertise as a core determinant in accounting software implementation decisions.

Secondly, information technology infrastructure (β = 0.231, *P* <0.01) was also a significant positive factor. The availability of reliable IT infrastructure (hardware, network connectivity) ensured the stable deployment and operation of 1C, which is crucial for real-time data processing needed for dynamic working

capital decisions. This foundational factor directly determined the feasibility of deploying 1C software technology. This result is consistent with the evaluation of the role of IT infrastructure in the implementation of accounting software systems by AlQirim (2007).

Thirdly, perceived ease of use (β = 0.203, *P* <0.01) positively influenced acceptance. Simple, user-friendly interfaces in 1C reduced psychological barriers, allowing staff to quickly master WCM-related modules (managing accounts payable, receivable cycles). This outcome supports the findings of Venkatesh & Davis (2000) who reported that simplicity in use reduces psychological barriers and enhances technology acceptance.
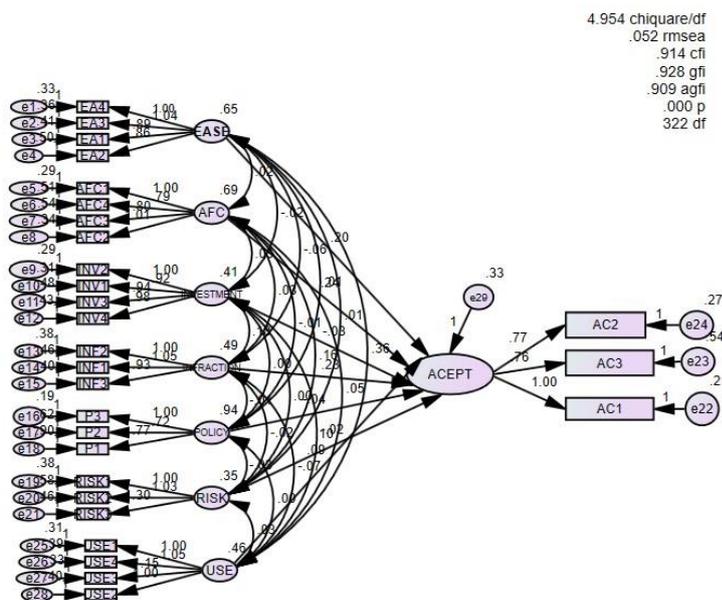
Figure 2. SEM linear structural model analysis results

Table 5. Regression weights

	Relationship		Estimate	S.E.	C.R.	P
ACEPT	<---	EASE	0.203	0.036	5.640	***
ACEPT	<---	AFC	0.243	0.026	9.346	***
ACEPT	<---	INVESTMENT	0.074	0.035	2.114	0.034
ACEPT	<---	INFRACTURE	0.231	0.034	6.794	***
ACEPT	<---	POLICY	0.037	0.020	1.850	0.064
ACEPT	<---	RISK	-0.100	0.039	-2.564	0.010
ACEPT	<---	USE	0.087	0.044	1.977	0.048

*Note: *** P <0.001.*

Fourthly, perceived risk (β = -0.1, P = 0.01) had a significant negative impact. Concerns related to data security for sensitive financial information (cash balances and customer debts) or software malfunctions substantially reduced the willingness to adopt 1C for critical working capital management tasks, consistent with Pavlou (2003).

Fifthly, perceived usefulness (β = 0.087, P = 0.049) also influenced acceptance behavior in working capital management. When users perceived that 1C software delivers clear benefits, such as improving transaction processing efficiency and enhancing accuracy in working capital management, they were more likely to accept the software. This finding is consistent with the technology acceptance model (TAM) of Davis (1989), which highlights the importance of perceived usefulness in technology adoption.

Moreover, legal and tax policy pressure, as well as investment costs, were found to have statistically significant positive effects on acceptance behavior in working capital management. The increasing legal requirements for SMEs to ensure transparency and standardization in financial information have led to a greater demand for professional management software. This aligns with ongoing digitization policies and reforms in financial and tax administrative procedures, which are driving the adoption of 1C software.

Table 6. The results of testing the research hypotheses

	Hypothesis	Normalized regression coefficient	P_value	Relationship	Result
H1	Perceived ease of use positively influences the acceptance of 1C software applications in working capital management among SMEs in former Thai Binh city.	0.203	***	Favorable	Accept
H2	Accounting staff competency positively influences the acceptance of 1C software applications in working capital management among SMEs in former Thai Binh city.	0.243	***	Favorable	Accept
H3	Investment cost negatively influences the acceptance of 1C software applications in working capital management among SMEs in former Thai Binh city.	0.074	0.025	Favorable	Accept
H4	Technological infrastructure within SMEs positively influences the acceptance of 1C software applications in working capital management among SMEs in former Thai Binh city.	0.231	***	Favorable	Accept
H5	Legal and tax policy pressure positively influences the acceptance of 1C software applications in working capital management among SMEs in former Thai Binh city.	0.037	0.034	Favorable	Accept
H6	Perceived risk negatively influences the acceptance of 1C software applications in working capital management among SMEs in former Thai Binh city.	-0.100	0.010	Unfavorable	Accept
H7	Perceived usefulness positively influences the acceptance of 1C software applications in working capital management among SMEs in former Thai Binh city.	0.087	0.049	Favorable	Accept

*Note: *** P <0.001.*

Furthermore, the investment cost, including initial expenses for software licensing, training, and system maintenance, was a key consideration for SMEs in the former Thai Binh city when deciding to implement 1C software in working capital management. Organizations carefully weighed these costs against the anticipated benefits of the software to ensure a positive return on investment.

Overall, the findings suggest that factors such as perceived usefulness, legal and tax policy pressure, and investment costs play crucial roles in shaping acceptance behavior towards 1C software in the context of working capital management. SMEs need to evaluate these factors carefully to make informed decisions about adopting technology solutions for improved financial management.

Testing the differences between SMEs that have adopted (DNAD) and not adopted (DNKAD) 1C software in working capital management

Table 7 shows that the p-value is below the 0.05 threshold indicating that there were significant differences between adopters and non-adopters in the evaluation of the SEM model. In particular, the impact of adopting the 1C software application was reflected in the relationships among the structural factors, as illustrated in **Table 8**.

Table 8 highlights significant differences between SMEs that have already adopted 1C software (DNAD) and those that have not yet adopted it (DNKAD), underscoring the heterogeneous determinants of adoption. For adopters, perceived ease of use ($\beta = 0.292***$), accounting staff competency ($\beta = 0.246***$), and perceived usefulness ($\beta = 0.122***$) exerted stronger positive effects, suggesting that user-friendly system design, skilled human capital, and practical benefits are central to sustaining continued utilization. In contrast, non-adopters were more strongly influenced by technological infrastructure ($\beta = 0.312***$), policy support ($\beta = 0.228*$), and perceived risk ($\beta = –0.119**$), indicating that readiness in infrastructure, institutional incentives, and concerns over uncertainty remain critical preconditions for adoption.

Table 7. Differences in model fit indices between the unconstrained and constrained models across adopters and non-adopters

Model	Chi-square	Degrees of freedom (df)	P-value
Unconstrained model	184.493	6	<0.001
Constrained model	210.999	13	<0.001
Difference value	26.506	7	<0.001

Interpretation: The chi-square difference test yields a statistically significant result, confirming that the structural model differs across groups

Table 8. Differences in structural relationships between adopters SMEs and non-adopters SMEs

Relationship	DNAD (β)	DNKAD (β)	Difference in Beta	Difference in P-Value	Discussion
EASE _X1 → ACEPT_Y1	0.292***	0.129**	0.163	0.008	This suggests that ease of use is a more decisive factor for SMEs already applying 1C, indicating that perceived ease of use interfaces play a critical role in sustaining adoption.
AFC _X2 → ZKQPTC_Y1.	0.246***	0.160***	0.086	0	This indicates that accounting staff competency not only facilitates adoption but also strengthens the continuous use of 1C.
INVESTMENT _X3 → ACEPT_Y1.	0.024	0.075	-0.051	0	This implies that while investment cost is often perceived as a barrier in theory, it does not play a decisive role in actual adoption decisions when compared to human and technological factors.
INFRACTURE _X4 → ACEPT_Y1.	0.228***	0.312***	-0.084	0.023	This suggests that not adopting 1C software information technology infrastructure is a prerequisite for adoption, whereas adopters may already have baseline infrastructure in place.
POLICY _X5 → ACEPT_Y1.	0.130*	0.228*	-0.098	0.005	This indicates that governmental or institutional incentives could be particularly effective in encouraging adoption among hesitant SMEs.
RISK _X6 → ACEPT_Y1.	0.016**	-0.119**	0.135	0.003	This paradox suggests that adopters may view perceived risk as a challenge that can be managed through experience, whereas non-adopters see it as a deterrent.
USE _X7→ ACEPT_Y1.	0.122***	0.036*	0.086	0.025	This indicates that perceived usefulness becomes more salient once SMEs have actual experience with 1C software.

*Note: † P <0.100, * <0.05, ** <0.01, *** <0.001.*

Regarding perceived risk, the results presented an interesting contrast between the two groups. For "DNKAD", perceived risk negatively affected adoption decisions ($\beta = -0.119$, $P <0.05$), which aligns with hypothesis H6 and previous literature suggesting that uncertainty, data security concerns, and potential operational disruptions hinder technology adoption.

For "DNAD", however, the coefficient of perceived risk ($\beta = 0.019$, $P <0.01$) was positive but very small, suggesting that the relationship was weak and should not be interpreted as contradicting H6. Instead, this reflected that SMEs already using 1C software were more

aware of potential risks and actively managed them through planning, training, and technical safeguards. In this sense, risk perception does not drive adoption but rather represents a heightened awareness that accompanies experienced users' efforts to ensure system stability and reliability.

This difference implies that perceived risk plays a dual role depending on the enterprise's stage of adoption: it discourages adoption among inexperienced firms but promotes better management and sustained use among experienced ones.

Interestingly, investment cost exhibited no statistically significant effect in either group,

implying that financial barriers are less decisive than human and technological factors. Collectively, these findings suggest that while adopters rely primarily on human capital and experiential learning to overcome challenges, non-adopters remain cautious, emphasizing external support mechanisms and risk mitigation before committing to adoption.

Recommendations

Enhancing the technological competency of accounting staff

For SMEs that have already adopted 1C accounting software, enhancing the technological competency of accounting staff is essential to ensure sustained usage and optimal system performance. These firms should organize advanced training programs focusing on both software functionality and broader IT skill development. For non-adopting SMEs, introductory and hands-on training sessions can help reduce psychological barriers and build confidence in using digital accounting tools. Training programs should be differentiated according to user groups, ranging from new users to experienced staff seeking to upgrade their proficiency. In addition, incentive mechanisms such as performance-based rewards, recognition of innovative practices, and peer-learning platforms can further encourage proactive learning and knowledge sharing. Collectively, these measures can enhance operational effectiveness and foster a positive attitude toward continuous digital engagement.

Investment in and improvement of technology infrastructure

For both adopters and non-adopters, a reliable IT infrastructure is a prerequisite for the stable and secure operation of 1C accounting software. SMEs should consider upgrading computers, internal networks, and internet systems to ensure efficient and secure data processing. The adoption of automated data backup solutions, firewalls, and antivirus protection is critical to minimize cybersecurity risks. Implementation should follow a phased approach including pilot testing, performance evaluation, and refinement before full deployment. To support this process, SMEs may established internal IT support teams or collaborate with external service providers for timely technical assistance. For non-adopters, building baseline digital infrastructure should be prioritized before software investment. In parallel, policymakers should continue providing financial incentives and digital transformation support programs to facilitate these upgrades.

Increasing awareness of software ease of use

This recommendation is primarily directed to software providers and developers. To promote acceptance of 1C accounting software, providers should prioritize optimizing user interfaces and simplifying operational workflows. Designing clear navigation menus, intuitive layouts, and concise instructions can help users adapt more quickly and minimize errors. Providers should also develop comprehensive user support materials, including manuals, video tutorials, FAQs, and online help systems, to assist users in self-learning and troubleshooting. For SMEs, it should be encouraged that accounting staff utilize these resources, as doing so can enhance their familiarity and confidence, thereby improving user experience and ensuring sustained adoption.

Raising awareness of software usefulness, legal compliance, and risk mitigation

For non-adopting SMEs, perceived risk can be mitigated through structured training, pilot programs, and transparent communication regarding data security, privacy protection, and system reliability. These measures can help diminish uncertainty and foster trust in digital solutions. For adopters, perceived risk should be managed proactively through regular system monitoring, periodic updates, and knowledge-sharing sessions among accounting personnel. These transform risk awareness into a preventive mechanism for maintaining system stability.

Furthermore, both groups can benefit from leveraging government and local policies, such as digital transformation grants, tax incentives, and training subsidies. Collaboration with industry associations and public–private

partnerships can provide access to expert consultancy and technical support. Integrating compliance assurance with policy incentives not only mitigates regulatory risks but also facilitates sustainable 1C software adoption.

Optimizing investment costs

This recommendation mainly targets SMEs. Implementation should be guided by a detailed budgeting plan for each phase, balancing costs against expected efficiency gains. Phased deployment strategies starting with pilot testing can reduce initial investment pressure and allow firms to evaluate system performance before scaling up. SMEs should seek financial support from software vendors, local authorities, or national digital transformation programs. Meanwhile, providers and policymakers can assist by developing cost-sharing mechanisms or preferential pricing models to alleviate financial constraints, particularly for SMEs.

Conclusions and Policy Implications

The analysis results revealed that the acceptance of 1C software is influenced by seven factors, among which accounting staff competency, technology infrastructure, and perceived ease of use have the most significant effects. This study applied the technology acceptance model to examine the determinants of 1C software adoption among provincial SMEs in the former Thai Binh city. Based on these findings, several practical implications were proposed to enhance the application of 1C software. SMEs should invest in improving the technological competency of accounting staff, strengthening the IT infrastructure, and enhancing awareness of software usefulness and ease of use. These actions are expected to promote sustained adoption and more effective utilization of digital accounting systems.

Despite its contributions, this study had several limitations that should be acknowledged. First, the survey sample was restricted to SMEs operating in former Thai Binh city, which may limit the generalizability of the findings to other provinces or regions with different economic and technological conditions. Second, the study

primarily focused on identifying the determinants of software acceptance rather than examining how 1C software is actually utilized in specific managerial and accounting practices.

As a result, the current research did not explicitly assess the extent to which the adoption of 1C software contributes to improvements in liquidity management, receivables, payables, and inventory. Future research could therefore extend the analytical framework by investigating how digital accounting systems such as 1C software are functionally integrated into SMEs' operational and financial processes. In addition, the use of longitudinal data would allow for the examination of changes in adoption behavior over time and provide deeper insights into the long-term impacts of accounting software usage, thereby enhancing the robustness and generalizability of future findings.

Acknowledgements

References

Al-Qirim N. (2007). The Adoption of eCommerce Communications and Applications Technologies in Small Businesses in New Zealand. Electronic Commerce Research and Applications. 6(4): 462-473. DOI: 10.1016/j.elerap.2007.02.012.

Appelbaum D. Kogan A., Vasarhelyi M. A. & Yan Z. (2017). Impact of business analytics and enterprise systems on managerial accounting. International Journal of Accounting Information Systems. 25: 29-44. DOI: 10.1016/j.accinf.2017.03.003.

Davis F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly. 13(3): 319-340. DOI: 10.2307/249008.

Duong T. T. H. & Nguyen T. H. S. (2022). Factors affecting the adoption of accounting software in hotels in Da Nang city: An overview and research directions. Journal of Accounting Research and Practice. 12(1): 45-60.

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. DOI: 10.1016/S1071-5819(03)00111-3.

Granlund M & Malmi T. (2002). Moderate impact of ERPS on management accounting: A lag or permanent outcome? Management Accounting Research. 13(3): 299-321. DOI: 10.1006/mare.2002.0199.

Ifinedo P. (2011). An empirical analysis of factors influencing the acceptance of enterprise resource planning systems in manufacturing and service organizations. International Journal of Production Economics. 130(1): 110-120. DOI: 10.1016/j.ijpe.2010.10.014.

Nunnally J. C. (1978). Psychometric theory (2nd ed.). New York: McGraw-Hill.

Ngo T. T. H, Vu T. H, Tran Q. T, Vu M. C & Nguyen T. H. N (2020). Factors affecting the capacity of accounting software in controlling frauds and errors in small and medium enterprises (SMEs): A case study of SMEs in Hanoi, Vietnam. Vietnam Journal of Agricultural Sciences. 3(3): 746-755. DOI: 10.31817/vjas.2020.3.3.08.

Peterson R. A. (1994). A meta-analysis of Cronbach's coefficient alpha. Journal of Consumer Research. 21(2): 381-391. DOI: 10.1086/209405.

Pavlou P. A. (2003). Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model. International Journal of Electronic Commerce. 7(3): 101-134. DOI: 10.1080/10864415.2003.11044275.

Slater S. F. (1995). Issues in conducting marketing strategy research. Journal of Strategic Marketing. 3(4): 257-270. DOI: 10.1080/09652549500000016.

Phan L. T., Phi T. D. H., Tran N. T. Y. & Nguyen T. H. B. (2022). Factors influencing the adoption of information technology in accounting in small and medium enterprises in Hanoi. Vietnam Journal of Agricultural Science. 20(5): 665-676. DOI: 10.31219/osf.io/3n5u8 (in Vietnamese).

Pratama M. R. A. & Yulianti R. (2022). Study of the use of accounting software with Technology Acceptance Model (TAM) approach on SMEs in the City of Mataram. Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences. 5(1): 631-639. DOI: 10.33258/birci.v5i1.3837.

Zhu K. & Kraemer K. L. (2005). Post-adoption variations in usage and value of e-business by organizations: cross-country evidence from the retail industry. Information Systems Research. 16(1): 61-84. DOI: 10.1287/isre.1050.0045.

Venkatesh V. & Davis F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. Management Science. 46(2): 186-204. DOI: 10.1287/mnsc.46.2.186.11926.