



Accounting Information Security Control and Satisfaction of Accountants Regarding Accounting Information Systems

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Abstract

This study analyzes the factors affecting accountants' satisfaction with the accounting information system in Vietnamese enterprises. The research results of this study show that the factors affecting user satisfaction with the accounting information system are directly influenced by four factors: the quality of the accounting workforce, perception of usefulness, system quality, and information quality. The quality of the accounting workforce is the factor that has the greatest direct impact on the accountant's satisfaction. The second is the perceived usefulness factor. The third is the system quality factor, and the last is the information quality factor. In particular, the results of this study indicate that humans are an important factor. Knowledge of accounting information security control is directly proportional to accountants' satisfaction with the accounting information system. The results can be used to recommend enterprises improve accountants' satisfaction, helping to increase work efficiency. **Objectives:** The main objectives of this study include: (1) Identifying the factors influencing the satisfaction of accountants with the accounting information system in enterprises in Vietnam. (2) Determining the relationship between accounting information security and the satisfaction of accountants with the accounting information system. (3) Providing recommendations to enhance the satisfaction of accountants with the accounting information system in enterprises in Vietnam. **Methods:** This study uses qualitative and quantitative research. During the qualitative process, this study analyzed related works. Group discussions are used to provide initial assessments of measurement scales, concepts, and research hypotheses and to adjust, supplement, and explore influencing factors. The questionnaire and the research model are reviewed by the experts. Quantitative research involved data collection through survey investigations based on a designed questionnaire via Google Forms. The formal research survey was conducted using a stratified sampling method, encompassing businesses from various sectors. The quantitative research employed the Cronbach Alpha reliability test for the measurement scales, exploratory factor analysis (EFA), confirmatory factor analysis (CFA), and the use of structural equation modeling (SEM) to assess the structural relationships. Descriptive statistics and tests of significance were also utilized. **Findings:** The results of the study on the factors affecting user satisfaction with an accounting information system are directly influenced by four factors: system quality, information quality, quality of accountants, and perceived usefulness. The quality of the accounting workforce has the greatest direct impact on the accountant's satisfaction, followed by perceived usefulness, system quality, and information quality factors. **Novelty:** This study discovered a relationship between knowledge of accounting information security and the level of satisfaction among accountants regarding information technology systems in enterprises in Vietnam. This finding can assist enterprises in implementing strategies to provide more training on accounting information security for their employees.

Keywords:

Accounting Information Security;
Accounting Information System;
Satisfaction;
Relationship.

Article History:

Received:	26	June	2023
Revised:	05	September	2023
Accepted:	11	September	2023
Published:	01	October	2023

1- Introduction

Accounting information systems (AIS) play a crucial role in the modern business environment by providing a foundation for effective financial management and decision-making processes. These systems encompass the integration

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DOI: <http://dx.doi.org/10.28991/ESJ-2023-07-05-06>

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of accounting principles, technology, and business processes to capture, store, process, and report financial information. The use of AIS has become increasingly essential as organizations strive for accurate and timely financial data, compliance with regulatory requirements, and efficient operational performance. According to Romney et al. [1], an accounting information system can be used to collect, record, store, and process data to produce information. This information can be used by decision-makers. This system includes both manual and computer-based components, which work together to streamline financial transactions and generate meaningful reports. The integration of technology within AIS has revolutionized the accounting profession, enabling automation, data analysis, and enhanced data accuracy.

The primary objective of an accounting information system is to provide reliable and relevant financial information to internal and external stakeholders. Internal users, such as managers and executives, rely on the AIS to make informed decisions regarding resource allocation, performance evaluation, and strategic planning. External users, including investors, creditors, and regulatory bodies, use AIS-generated financial statements to assess an organization's financial health and compliance with accounting standards. Accounting information systems are facing new challenges and opportunities in this rapidly evolving digital era. Emerging technologies, such as cloud computing, blockchain, and artificial intelligence, are reshaping the AIS landscape, providing increased accessibility, efficiency, and security. Organizations must adapt to these changes by embracing technological advancements and ensuring the integrity and confidentiality of financial information.

In conclusion, accounting information systems form the backbone of financial management in organizations today. The integration of accounting principles and technology enables efficient data processing, reporting, and decision-making. As the business environment continues to evolve, AIS will continue to play a critical role in providing accurate, reliable, and timely financial information to support organizational success. Accounting information systems (AIS) are vital components of modern organizations responsible for capturing, processing, and reporting financial data. However, the increasing reliance on technology and interconnected networks has introduced a new set of security threats that can compromise the integrity, confidentiality, and availability of financial information. It is imperative for organizations to understand and mitigate these threats to effectively safeguard their accounting information systems.

Hall [2] states that security threats in accounting information systems refer to the risks and vulnerabilities associated with unauthorized access, disruption, disclosure, destruction, or modification of financial data. These threats can originate from both internal and external sources and have the potential to cause significant financial and reputational damage to organizations. Internal security threats primarily involve individuals within an organization who abuse their access privileges or engage in fraudulent activities. This could include employees manipulating financial records, misusing confidential information, or intentionally introducing errors or omissions in financial reports. A lack of internal control and inadequate segregation of duties can contribute to these vulnerabilities. External security threats, on the other hand, stem from external sources seeking to exploit weaknesses in an organization's AIS. These threats encompass a wide range of malicious activities, such as hacking, data breaches, malware attacks, social engineering, and phishing attempts. Cybercriminals target sensitive financial information to commit fraud, steal assets, or disrupt business operations.

The consequences of security breaches in the AIS are severe. Unauthorized access to financial data can lead to financial fraud, identity theft, or intellectual property theft. The alteration or destruction of financial records can result in inaccurate financial reporting, regulatory non-compliance, and legal ramifications. Furthermore, the loss of customer trust and damage to an organization's reputation can have long-term detrimental effects.

To mitigate security threats, organizations must implement robust control and security measures. This includes establishing strong user authentication mechanisms, implementing encryption protocols, regularly updating software and security patches, conducting periodic vulnerability assessments, and educating employees on the best practices in information security. Additionally, they should establish numerous incident response plans to not only detect but also respond to and promptly recover from security incidents. In conclusion, security threats in accounting information systems pose significant risks to organizations in today's interconnected world. Internal and external threats can compromise the integrity, confidentiality, and availability of financial data, potentially leading to financial loss and reputational damage. By understanding these threats and implementing appropriate security measures, organizations can protect their accounting information systems and ensure the reliability and trustworthiness of their financial information.

In this study, we analyzed the factors affecting accountants' satisfaction with the accounting information system. The results of this study show the relationship between accounting information security control and accountants' satisfaction with accounting information systems in Vietnamese enterprises.

2- Literature Review

Many studies have analyzed the factors that affect the quality of accounting information systems. However, they do not focus on the characteristics of the Fourth Industrial Revolution. They should analyze the role of information security in the security of accounting information. Nurhidayati et al. [3] analyzed the significance of Accounting Information Systems (AIS) in business processes and their influence on stakeholder decisions owing to the crucial role of financial

aspects. Employing the PRISMA methodology, they conducted a systematic literature review by gathering articles on AIS from Google Scholar's reputable databases. After applying the specific criteria, 36 relevant articles were selected. This review reveals the prevalence of modern AIS technologies in recent research and identifies the diverse factors that affect AIS quality. The analysis underscores the focus on data and information quality, along with management's influence on AIS implementation within organizations. Other studies have focused on analyzing the factors affecting the quality of accounting information [4-10].

Other studies have analyzed the factors affecting the quality of accounting information in Vietnamese enterprises [11-16]. In addition, an analysis of the role of the Fourth Industrial Revolution in the implementation of accounting information security solutions was mentioned in related studies [17]. However, further studies are required in Vietnam. The relationship between accounting information security control and accountants' satisfaction with accounting information systems in Vietnamese enterprises should also be studied in depth. Bansah [18] studied the security risks of accounting information systems in the banking sector. They identified six major types and sources of risk-threatening AIS in the banking sector. These include employee risks, viruses, power outages, natural disasters, intentional disasters, and external threats.

With the development of blockchain technology, there have been many studies related to the application of blockchain technology to control the security of accounting information. Fuller et al. [19] studied blockchain applications for accounting and auditing. Pimentel & Boulianne [20] examine studies related to blockchain applications in accounting and auditing. Tiron-Tudor et al. [21] investigated the application of blockchain to change management in accounting. Haryanto & Sudaryati [22] researched the adaptation of accounting operations in the era of blockchain applications in AISs. Thus, studying the effects of technological factors during the Fourth Industrial Revolution on the control of accounting information security is necessary and of practical significance.

In addition, there are a wide range of studies on accounting information security control. Lawita [23] analyzed the influence of the accounting information system on a company's internal control. They confirmed that secure control of accounting information is important for ensuring system reliability. Hazaa & Jogdand [24] determined the availability of general control procedures (GCP) to protect the security of accounting information systems in commercial banks in Yemen. Descriptive analysis was used in this study. Data were collected through questionnaires distributed to department heads and specialists in information technology, finance, and internal auditors at the commercial bank headquarters in Yemen. The impact of internal control systems on fraud detection and fraud prevention has also been analyzed [25].

Kasasbeh [26] conducted a study evaluated the factors affecting AIS performance. They conducted empirical research in Jordan. They argue that the effectiveness of AISs is measured by their ease of use, security, storage, usability for distribution, and decision-making.

3- Theoretical Foundations and Research Hypotheses

3-1-Theoretical Foundations

3-1-1- User Satisfaction about Accounting Information System

DeLone & McLean [27] provided different reasons for using AIS to measure the effectiveness of accounting information systems. User satisfaction with an accounting information system is most closely related to its effectiveness. In general, an information system and AIS are designed to provide information to users. Therefore, user satisfaction represents the effectiveness of the accounting information systems. Developing appropriate and reliable measurement tools allows for more accurate assessment of user satisfaction. Therefore, satisfaction is considered an important measure for evaluating the effectiveness of accounting information systems.

Many studies have focused on building models of factors affecting user satisfaction with accounting information systems [28-30]. In addition, other experimental studies have been conducted. They adjusted the available models to fit reality. After the modification, the model was used to examine the influence of these factors on customer satisfaction. Related studies have also been conducted [31-33].

3-1-2- Successful Information System Theory

DeLone & McLean [27] proposed a successful information system model. Their model included six variables: information quality, system quality, system utilization, impact on individuals, user satisfaction, and impact on the organization. Petter et al. [34] clearly revealed the components as well as the intrinsic impact among the components in the successful information system model of DeLone & McLean. Through a quantitative meta-analysis to test each model's intrinsic relationship, the results showed that there are only some strong supportive relationships, including the effects of information quality, user satisfaction, and system quality on system use. Other relationships are only moderately supportive, weak, unsupported, or untested [35]. To improve the model, DeLone & McLean [28] produced a modified model in 2003, which added the variables of service quality and net profit and removed the variables of impact on individuals and the organization.

3-1-3-Technology Acceptance Model

Davis et al. [36] proposed a model called technology acceptance model (TAM). This model can be used to analyze the user acceptance of information systems using the theory of rational behavior. This model is a theory of behavioral science that argues for the impact of perceived usefulness and ease of use on individuals' use of information technology. According to Davis [37], TAM introduces two important factors: (1) The first factor is perceived usefulness, which reflects the extent to which individuals consider using a specific program to improve their effectiveness, and (2) ease of use, reflecting the extent to which people believe it is very simple to use a possible tool system. The TAM model shows that the perceived usefulness and ease-of-use factors impact the state of usage, usage orientation, and actual behavior.

3-2-Research Hypothesis and Proposed Model

Among the reference models, the DeLone and McLean model [28] is most commonly used. This model was used to evaluate information systems by assessing the user satisfaction. This model has been applied in several other related studies. Factors such as service quality, system quality, usage level, information quality, and user perception. In this study, we propose the following model (Figure 1).

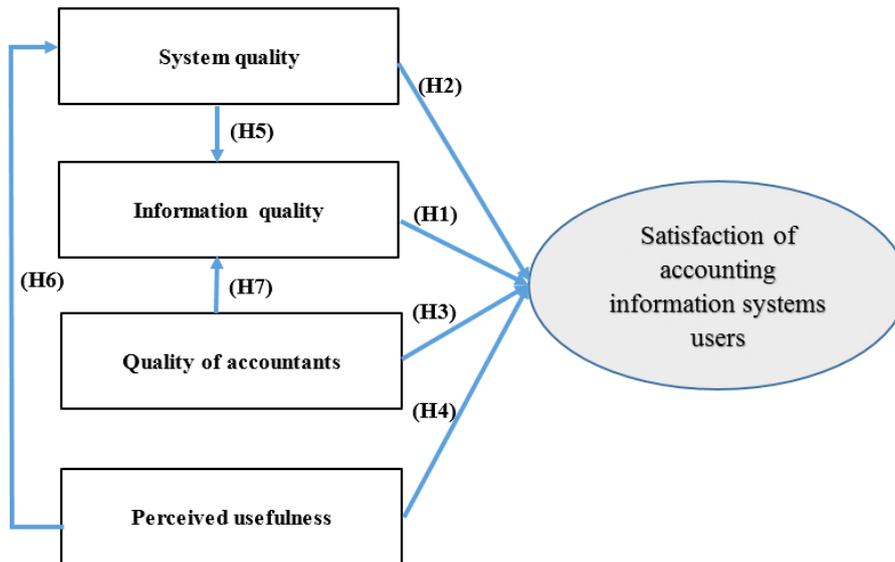


Figure 1. Proposed model

- **H1:** The quality of accounting information has a positive impact on the satisfaction level of the users of accounting information systems in Vietnamese enterprises.
- **H2:** The quality of the accounting information system has a positive impact on the satisfaction of users of the accounting information system in Vietnamese enterprises.
- **H3:** The quality of the accounting workforce has a positive impact on the level of user satisfaction with the accounting information systems of Vietnamese enterprises.
- **H4:** Perceived usefulness has a positive impact on the satisfaction level of users of accounting information systems in Vietnamese enterprises.
- **H5:** AIS quality of the AIS makes a positive impact on accounting information quality in Vietnamese enterprises.
- **H6:** The perceived usefulness of a system has a positive effect on system quality.
- **H7:** The quality of accounting workforce has a positive impact on the quality of accounting information in Vietnamese enterprises.

4- Research Methodology

4-1- Qualitative Research and Questionnaire Design

Qualitative research is a research method used in exploratory research designs [38]. One of the main goals of qualitative research is to gain preliminary insight into the problems under study. Qualitative research tends to focus on gathering important elements of primary data from relatively small sample sizes by asking questions or observing behavior. According to Boyce and Neale [39], the two main methods of qualitative research are focus group discussion and in-depth interviews. Qualitative research is used to correct and supplement observed variables in the measurement scales of factors affecting user satisfaction with accounting information systems in Vietnamese enterprises.

The scales (quality of accounting information, quality of the system, perception of usefulness, quality of the accounting workforce, and user satisfaction with the accounting information system) have corresponding observable variables. These variables were selected based on interviewees' opinions. We collected information and directly interviewed a number of users of the accounting information system, such as leaders of the accounting department, general accountants, and accountants. Before the interviews began, the research team introduced a discussion. We encourage them to openly share what they really think about the statements for the scales to contribute ideas, and add new scales to each research concept.

Based on the interview results, two variables were added to the survey: the work experience variable (CLDN4) and the accounting information security training variable (CLDN5) of the accounting staff's quality scale.

4-2- Research Data

According to Bollen [40], five samples (preferably 10) were the minimum sample size for the parameter to be estimated. Accordingly, the theoretical model in this study had 24 observed variables with a sample size of 240. Therefore, the sample size of this study was determined to be $n = 250$.

The adjusted survey questionnaire was sent online through Google Forms. The questionnaire was sent to users of accounting information systems in Vietnamese enterprises between February and April, 2023. The preliminary survey questionnaire was primarily closed-ended questions. These questions were measured using a 5-point Likert scale. After more than two months of submitting the survey questions, we received 250 responses. Seven enterprises mistakenly accumulated answers (replying enterprises); therefore, the sample size used in the study was 243. Information related to the survey sample used in this preliminary study is presented in Table 1.

Table 1. The characteristics of the samples

Sample characteristics n=243		Statistical	
		Quantity	(%)
Business field of the enterprises	Manufacture	58	14.3%
	Commercial	192	47.3%
	Service	124	30.5%
	Construction	31	7.6%
	Other	1	0.2%
	Total	406	100%
Size of the enterprises	Small	87	35.8
	Medium	127	52.3
	Big	29	11.9
	Total	243	100%
Position	Head of financial accounting department	66	27.2
	General Accountant	68	28.0
	Accountant	109	44.8
	Total	243	100%
Accounting tools	Enterprise management software (ERP)	22	9.1
	Independent accounting software	154	63.4
	MS Excel	67	27.6
	Total	243	100%
Number of people working as accountants at the enterprise	Less than 5 people	24	9.9
	From 5 to 10 people	94	38.7
	More than 10 people	125	51.4
	Total	243	100%

Of the 243 samples, 192 enterprises (47.3%) engaged in commercial activities. Medium enterprises account for more than 50% of the 127 enterprises that participated in the survey. Accountants made up the majority of the respondents to the questionnaire, with 109 reaching 44.9%. A total of 154 enterprises (63.4%) use independent accounting software to support their accounting activities. A total of 125 enterprises (51.4%) had more than ten accountants.

4-3-Data Analysis Methods

First, draft scales were built based on observed variables. These variables were collected from the scales of related studies and built by the authors themselves to suit the research model and the characteristics of enterprises in Vietnam.

Preliminary research was conducted through in-depth interviews with people using accounting information systems to adjust and supplement the observed variables in the draft scale.

Finally, a formal study was conducted to re-test the scale model. The formal study was conducted using quantitative research methods with interviews and mailing techniques to collect information from users of AISs in enterprises in Vietnam through questionnaires. The collected information was processed using Statistical Package for Analysis of Moment Structures (AMOS) software (version 20.0; Social, Armonk, NY, USA). The results of the scale were obtained after evaluation using exploratory factor analysis (EFA), and Cronbach's alpha reliability coefficient method. A Confirmatory Factor Analysis (CFA) was performed to evaluate the scale model. We then analyzed the linear Structural Equation Model (SEM) using AMOS 20 software to verify the research model.

5- Results

5-1-Evaluation of the Scale Using Cronbach's Alpha

The Cronbach's alpha reliability coefficient was used to analyze the EFA factors to eliminate inappropriate variables. The coefficient of Cronbach Alpha from 0.6 to nearly 0.8 is usable [41, 42]. This coefficient served as the statistical test. This test was used to evaluate how closely the items in the scale correlated with each other. Table 2 shows the results of the Cronbach's alpha for the scale.

Table 2. The Cronbach's Alpha results

Variable	Code	Number of scales	Cronbach's Alpha reliability coefficient
System quality	CLTT	7	0.877
Information quality	CLHT	5	0.874
Quality of accountants	CLND	5	0.831
Perceived usefulness	NTHI	4	0.839
Satisfaction of accounting information systems users	SHL	3	0.887

When analyzing EFA exploratory factors, the following criteria should be taken into account:

- Factor loading was used as the criterion According to Hair [43], factor loading is an indicator of the practical significance of an EFA. This factor greater than 0.3 is considered minimal. A factor greater than 0.4 is considered important. This factor greater than or equal to 0.5 is considered to be of practical significance.
- Second, the *total variance extracted* $\geq 50\%$ [44].
- Third, consider the KMO value as an indicator of the suitability of EFA. If $0.5 \leq KMO \leq 1$, factor analysis is appropriate. Bartlett's test was statistically significant ($sig < 0.05$), and the observed variables were correlated with each other in the population.
- We relied on an eigenvalue to determine the number of factors. Only the factors with *Eigenvalue* > 1 were retained in the analytical model. The Eigenvalue represents the portion of variation explained by each factor. Any factor with *Eigenvalue* < 1 will not have a better summary of information than the original variable.

Before performing the EFA exploratory factor analysis, it was necessary to consider the statistical significance of the Bartlett test and Kaiser-Meyer-Olkin coefficient (KMO). Table 3 shows that the *KMO value* $= 0.909 > 0.5$, and Bartlett's test was statistically significant ($sig = 0.000 < 0.05$). Therefore, it can be confirmed that the data are suitable for exploratory factor analysis.

Table 3. KMO coefficient, Bartlett's test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.909
	Approx. Chi-Square	3264.106
Bartlett's Test of Sphericity	df	276
	Sig.	0.000

5-2-Exploratory Factor Analysis of EFA at the First Time

The results of the first rotation in the Pattern Matrix table (see Table 4) show that the observed variable CLDN5 has a value of $0.43 < 0.5$ and CLHT5 represents the value in two factors. Therefore, we removed CLDN5 and CLHT5 to perform the subsequent analysis.

Table 4. Exploratory factor analysis of EFA at the first time

	Pattern Matrix ^a				
	Factor				
	1	2	3	4	5
CLTT7	0.779	-	-	-	-
CLTT3	0.754	-	-	-	-
CLTT5	0.742	-	-	-	-
CLTT6	0.714	-	-	-	-
CLTT2	0.651	-	-	-	-
CLTT4	0.633	-	-	-	-
CLTT1	0.622	-	-	-	-
CLDN2	-	0.816	-	-	-
CLDN3	-	0.802	-	-	-
CLDN1	-	0.750	-	-	-
CLDN4	-	0.580	-	-	-
CLDN5	-	0.430	-	-	-
NTH1	-	-	0.864	-	-
NTH4	-	-	0.807	-	-
NTH2	-	-	0.702	-	-
NTH3	-	-	0.672	-	-
CLHT4	-	-	-	0.868	-
CLHT2	-	-	-	0.832	-
CLHT3	-	-	-	0.728	-
CLHT1	-	-	-	0.645	-
CLHT5	-	0.517	-	0.521	-
SHL1	-	-	-	-	0.906
SHL2	-	-	-	-	0.832
SHL3	-	-	-	-	0.737

Extraction Method: Principal Axis Factoring; Rotation Method: Promax with Kaiser Normalization; ^a Rotation converged in 7 iterations.

5-3-Exploratory Factor Analysis of EFA at the Second Time

Table 5 presents the exploratory factor analysis of the second EFA.

According to a study by Hair et al. [43], the indicators considered to evaluate Model Fit include: $CMIN/df \leq 2$ is good, $CMIN/df \leq 5$ is acceptable, $CFI \geq 0.9$, good, $CFI \geq 0.95$, very good, $CFI \geq 0.8$, acceptable, $GFI \geq 0.9$, good, $GFI \geq 0.95$, very good, $TLI < 0.9$ is good, $RMSEA \leq 0.08$ is good, $RMSEA \leq 0.03$ is very good.

The CFA results show $CMIN/df = 1.405$, $CFI = 0.969$, $GFI = 0.905$, $TLI = 0.964$ and $RMSEA = 0.041$. Thus, the CFA results showed that the research model was consistent with the data. In addition, it is necessary to consider additional issues regarding scale reliability, convergent validity, monism, and discriminant validity.

To assess the quality of the observed variables, the results from Confirmatory Factor Analysis (CFA) indicated that all observed variables had p -values < 0.05 , and *standardized regression weights* > 0.5 . Therefore, the observed variables were significant in the model and exhibited a high level of appropriateness. Following Hair et al. [43], we employ indices such as Composite Reliability (CR), Average Variance Extracted (AVE), Maximum Shared Variance (MSV), and the Fornell-Larcker table to evaluate convergent validity and discriminant validity.

Table 6 shows that $CRindex > 0.7$, $AVE > 0.5$ can conclude that the convergence meets the conditions. The MSV of the factors are all smaller than the corresponding AVE, and the square root AVE of a variable (shaded part) is larger than all values below it, so discriminability is also guaranteed. Thus, the indicators show the relevance of the data and can continue to conduct SEM model analysis.

Table 5. Exploratory factor analysis of EFA at the second time

Scale name	Pattern Matrix ^a				
	Factor				
	1	2	3	4	5
CLTT7	0.774	-	-	-	-
CLTT3	0.751	-	-	-	-
CLTT5	0.745	-	-	-	-
CLTT6	0.734	-	-	-	-
CLTT2	0.672	-	-	-	-
CLTT1	0.640	-	-	-	-
CLTT4	0.632	-	-	-	-
NTHI1	-	0.835	-	-	-
NTHI4	-	0.798	-	-	-
NTHI2	-	0.686	-	-	-
NTHI3	-	0.668	-	-	-
CLHT2	-	-	0.849	-	-
CLHT4	-	-	0.779	-	-
CLHT1	-	-	0.658	-	-
CLHT3	-	-	0.656	-	-
CLDN2	-	-	-	0.834	-
CLDN1	-	-	-	0.731	-
CLDN3	-	-	-	0.652	-
CLDN4	-	-	-	0.516	-
SHL1	-	-	-	-	0.884
SHL2	-	-	-	-	0.847
SHL3	-	-	-	-	0.719

Extraction Method: Principal Axis Factoring; Rotation Method: Promax with Kaiser Normalization; ^a Rotation converged in 7 iterations.

Table 6. Results of the Fornell and Larcker table

	CR	AVE	MSV	CLTT	CLDN	NTHI	CLHT	SHL
CLTT	0.878	0.507	0.358	0.712				
CLDN	0.805	0.508	0.376	0.505***	0.713			
NTHI	0.840	0.568	0.284	0.260**	0.447***	0.754		
CLHT	0.857	0.600	0.358	0.598***	0.399***	0.533***	0.775	
SHL	0.888	0.726	0.376	0.536***	0.613***	0.524***	0.557***	0.852

5-4- Test the Theoretical Model

The SEM was used to test the theoretical models to test the research hypotheses. SEM results (see Figure 2) show that $CMIN/df = 1.459 < 2$, $CFI = 0.964 > 0.9$, $GF I = 0.901 > 0.8$ and $RMSEA = 0.044 < 0.08$. Therefore, the measurement model fit the survey data.

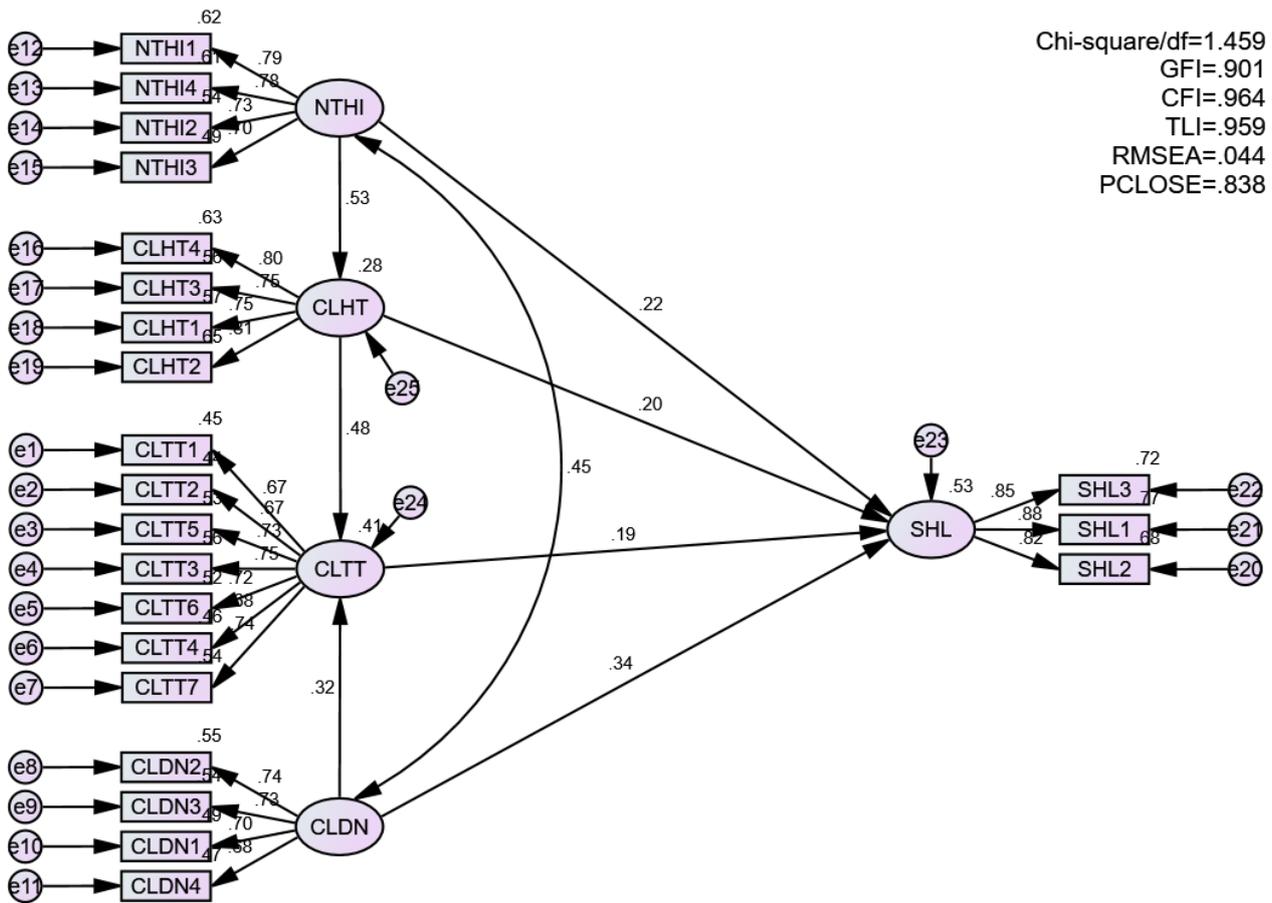


Figure 2. The SEM results

According to the analysis results in Table 7, all hypotheses H1 to H7 have *p-value* < 0.1, so the hypothesis is accepted (in AMOS, a *p-value* of approximately 0.000 is denoted by ***).

Table 7. The Regression Weights tables

Hypotheses	Relationship	Estimate value	Standard deviation	Critical value	p-value	Results
H6	CLHT ← NTHI	0.644	0.093	6.929	***	Accept hypothesis
H5	CLTT ← CLHT	0.331	0.053	6.231	***	Accept hypothesis
H7	CLTT ← CLDN	0.254	0.058	4.415	***	Accept hypothesis
H4	SHL ← NTHI	0.210	0.078	2.705	0.007	Accept hypothesis
H3	SHL ← CLDN	0.314	0.072	4.391	***	Accept hypothesis
H1	SHL ← CLTT	0.222	0.092	2.414	0.016	Accept hypothesis
H2	SHL ← CLHT	0.163	0.066	2.454	0.014	Accept hypothesis

Table 8 presents the relationships between the concepts of Standardized Regression Weights.

Table 8. The relationship between the concepts of Standardized Regression Weights

Hypothesis	Relationship	Estimate
H6	CLHT ← NTHI	0.532
H5	CLTT ← CLHT	0.478
H7	CLTT ← CLDN	0.322
H4	SHL ← NTHI	0.217
H3	SHL ← CLDN	0.344
H1	SHL ← CLTT	0.192
H2	SHL ← CLHT	0.203

The order of the standardized regression coefficients indicates the order of the impact of the independent variables on the dependent variable. The larger the absolute value of the coefficient, the stronger the interaction between the variables.

Table 9 presents the findings from the table of the squared multiple correlations. The R-squared value pertaining to the dependent variable CLHT was 0.283, indicating that the independent variable NTHI accounted for 28.3% of the variability observed in the CLHT variable. For the dependent variable CLTT, the R-squared value was 0.406, implying that the combined influence of the independent variables CLHT and CLND explained 40.6% of the variability within the CLTT variable. Finally, the R-squared value associated with the dependent variable SHL was 0.525, signifying that the independent variables collectively explained 52.5% of the variability in the SHL variable.

Table 9. The Squared Multiple Correlations results

	Estimate
CLHT	0.283
CLTT	0.406
SHL	0.525

Table 8 presents the results of the hypothesis testing:

- *Hypothesis testing of H1:* The quality of accounting information has a positive impact on accountants' satisfaction with the accounting information system. Hypothesis H1 is accepted if the accounting information is relevant, accurate, reliable, complete, understandable, timely, and comparable; users of the accounting information system are more satisfied with the accounting information system. The results show that the estimated coefficient of this relationship was 0.192. This finding is consistent with the results of previous studies on user satisfaction with accounting information systems.
- *Hypothesis testing of H2:* The quality of the accounting information system has a positive impact on the satisfaction of users of the accounting information system in Vietnam. The estimated result of the relationship between the quality of the accounting system and the satisfaction of users with the information system is 0.203, and the hypothesis is accepted. The degree of impact of the system quality and satisfaction was relatively good in the model. This result shows that system quality, including processing speed, reliability, flexibility, integration, and security, positively affects users' satisfaction with accounting information systems. This result is consistent with those of previous studies.
- *Hypothesis testing of H3:* The quality of the accounting workforce has a positive impact on user satisfaction with the accounting information system in Vietnamese enterprises. The quality of the accounting workforce affects user satisfaction with a coefficient of 0.344. This hypothesis shows the role of professional qualifications, training and coaching, information technology qualifications of accountants in the model of user satisfaction with accounting information systems in enterprises in Vietnam.
- *Hypothesis testing of H4:* Perceived usefulness has a positive impact on the satisfaction level of users of accounting information systems in Vietnamese enterprises. The estimated result of the relationship between perceived usefulness and user satisfaction of an accounting information system is 0.217, and the hypothesis is accepted. The impact of perceived usefulness on satisfaction was good.
- *Hypothesis testing of H5:* The quality of the accounting information system has a positive impact on the quality of accounting information in Vietnamese enterprises. Hypothesis H5 is accepted, with the coefficient used to estimate the relationship between the quality of the accounting information system and the quality of accounting information being 0.478. When the quality of the system is better, it is obvious that the quality of information as a result of the system output also improves. That is, this relationship in the model makes sense and is consistent with theories of previous studies.
- *Hypothesis testing of H6:* The perceived usefulness of a system has a positive impact on system quality. Hypothesis H6 was accepted, with the level of impact between perceived usefulness and system quality being 0.532. This hypothesis was accepted, with the highest estimated coefficient. This shows that user awareness is decisive for the quality of the system. This affects user satisfaction with the accounting information system.
- *Hypothesis testing of H7:* The quality of the accounting workforce has a positive impact on the quality of accounting information in Vietnamese enterprises. Hypothesis H7 is supported, with an estimated coefficient of 0.322. Thus, the quality of the accounting workforce has a relatively high impact on the quality of information.

5-5-Discussion of Research Results

This study yielded significant and essential findings for AIS in Vietnamese companies through the collection, processing, and analysis of primary data. These findings aim to enhance user satisfaction, particularly among accountants. This study successfully addressed the following initial research questions:

First, four main factors directly impact accountants' satisfaction regarding AIS in Vietnamese companies: the quality of the accounting workforce, perception of usefulness, system quality, and information quality.

Second, the mentioned factors are aligned with market data and are well-utilized in constructing the structural model, reflecting the reliability of the relationships between the quality of the accounting workforce, perception of usefulness, system quality, information quality concerning AIS, and the satisfaction of accountants.

Third, the study constructed a Structural Equation Model (SEM) and analyzed the relationships among the factors influencing the satisfaction of accountants regarding AIS in Vietnamese companies. The findings reveal that the quality of the accounting workforce has the most significant impact, followed by the perception of usefulness, system quality as the third most influential factor, and information quality. Additionally, the perception of usefulness has the highest standardized regression coefficient of 0.532 when affecting system quality, and both system and accounting workforce quality have an impact on information quality.

5-5-1- About Quality of Accounting Workforce Factor

Regarding the Quality of Accounting Workforce factor, it has the highest level of influence on accountants' satisfaction with the AIS, with a standardized regression coefficient of 0.344. This result highlights a novel aspect of this study. This measurement, supplemented by in-depth interviews, included two variables: experience (CLDN4) and accounting information security training (CLDN5). This underscores that a high-quality accounting workforce yields the highest satisfaction among accountants. Thus, when recruiting positions such as Chief Accountant, General Accountant, and Accountant, businesses in Vietnam should emphasize candidates' professional qualifications, problem-solving abilities, experience in handling, and applying information technology proficiently. Simultaneously, enterprises should institute policies that encourage accounting personnel to regularly participate in training programs, enhance their professional expertise, and undergo training in accounting information security. This approach increases the quality of the workforce.

5-5-2- About Perception of Usefulness Factor

The direct impact of the Perception of Usefulness on accountants' satisfaction ranked second in influence, with a standardized regression coefficient of 0.217. This outcome aligns with the theoretical foundations and practical insights of Davis et al. [36, 37]. Moreover, the model revealed an indirect impact of the Perception of Usefulness on user satisfaction through its effect on System Quality. The perception of the usefulness of accounting information systems is relatively novel in Vietnam, and lacks extensive research. Nonetheless, accounting professionals in Vietnamese enterprises recognize the critical role, benefits, and impact of AIS on their operational effectiveness. In this context, Vietnamese enterprises should prioritize investing resources, particularly capital, in the quality of Information Technology applications, including AIS, within their organizations. Enhancing the efficiency of accounting information systems contributes to managerial activities, elevates efficiency, streamlines operations, and fosters business success.

5-6-3- About System Quality and Information Quality Factor

System Quality and Information Quality have a direct impact on accountants' satisfaction with AIS, ranking third and fourth in terms of influence. This finding corresponds to the theoretical research foundation of DeLone and McLean [27, 28] and the practical findings of earlier studies [45]. In this light, businesses in Vietnam aspiring to enhance their accounting workforce's satisfaction with the AIS must first upgrade and refine their information-processing systems. This enhancement leads to improved quality of accounting information.

6- Findings and Recommendations

6-1- Findings

The objective of this study is to analyze the relationship between accounting information security control and accountants' satisfaction with accounting information systems in Vietnamese enterprises. This study builds and evaluates the measurement scales of the component variables. A theoretical model is built and tested to confirm the impact of these components on accountants' satisfaction. This study builds a theoretical model to measure the success of an accounting information system through an accountant's satisfaction. Based on theory and practice, this study builds a model comprising five factors: system quality, information quality, quality of accountants, perceived usefulness, and satisfaction of accounting information system users.

The results of this study on the factors affecting user satisfaction with an accounting information system are directly influenced by four factors: system quality, information quality, quality of accountants, and perceived usefulness. The quality of the accounting workforce has the greatest direct impact on accountants' satisfaction, followed by perceived usefulness, system quality, and information quality factors.

The quality of the accounting workforce has the greatest influence on user satisfaction with the accounting information system. This is a new finding of research that shows that an accounting workforce with good quality that meets the requirements of the job will increase their satisfaction. This result suggests that enterprises in Vietnam need to focus on candidates' qualifications, experience, and information technology skills. In addition, it is necessary to pay attention to the internal training of the necessary knowledge and skills for accountants as well as accountants to help them effectively use the accounting information system. Training sessions on accounting information security should also be conducted to raise awareness among users about the security of accounting information.

The results show that the perceived usefulness variable affects the user satisfaction variable at the second level. This is consistent with the theoretical and practical bases of previous studies. In addition, the research model shows the indirect impact of the perceived usefulness variable on accountants' satisfaction through the system quality variable. However, accountants at enterprises in Vietnam have clearly seen the important role and benefits as well as the impact of the accounting information system on the performance of their enterprises. Improvement in the efficiency of the accounting information system contributes to supporting management activities and improving efficiency to ensure the success of the enterprise.

In addition, two factors, system quality and information quality, also positively affect the satisfaction of accountants with the accounting information system. This result is consistent with the theoretical and practical results of previous studies. Accounting information systems must be equipped with new technological elements. Software companies also need to be equipped with new technologies such as blockchain and cloud computing to improve system quality. In addition, the application of artificial intelligence will also help improve the quality of information, helping users obtain more accurate, faster, and more effective information in decision-making.

Investing in an accounting information system requires considerable time and capital; however, its effectiveness is not clear, which limits the need to learn and improve the accounting information system.

6-2-Recommendations

Based on the research results, recommendations to improve accountants' satisfaction with the accounting information system of enterprises in Vietnam are as follows:

- Regarding the quality of the accounting workforce, there should be a combination of the state, schools, and employers, specifically enterprises in Vietnam, to improve the quality of accounting staff. The State should issue policies, decrees, and ethical standards for schools to develop appropriate training programmes. Meanwhile, employers need to clearly state the job description, candidate requirements, and career development roadmap of the staff so that the school has appropriate training programs. Companies should implement policies that encourage accounting staff to participate in training courses to improve their knowledge, skills, and awareness. Knowledge of information technology and security in the context of enterprises moving to build companies on the foundation of digital transformation.
- Perceived usefulness: To update current technology trends, both accountants and administrators must participate in seminars and forums to apply information technology to accounting work. From there, we can understand the benefits and increase investment in the accounting information system of enterprises ready for national digital transformation. Enterprises need to carry out evaluation, inspection, and reporting to compare improvements in the accounting information system over time. This helps to clearly recognize the effectiveness of the accounting information system before and after improving the system to measure the benefits of accounting activities for enterprises.
- Information quality is an important asset for a business. Valuable information helps businesses make accurate decisions and increases their advantages. The accounting information must be collected and processed completely and honestly. In addition, accounting information must be regularly checked and compared between the system and reality to limit or timely detect deviations affecting accounting data. Apply new technologies such as blockchain technology to distributed storage and ensure the integrity and traceability of accounting operations. This makes accounting information available and highly secure [46]. Applying Blockchain infrastructure to building solutions to increase transparency and availability in information management.

System quality: Enterprises must regularly update and maintain accounting information systems. Enterprises also need to set up full backup schedules to prevent the risk of data loss owing to information security incidents and natural disasters. Enterprises must be equipped with computer virus scanning software and regularly update the data to avoid threats from malicious code. Enterprises also need to establish a decentralized mechanism to use the appropriate accounting information system, which helps limit the abuse of power in the process of interacting with accounting information through a software system.

7- Conclusion

The main purpose of this study is to identify the factors that influence the satisfaction of accountants with the accounting information system in Vietnam. This research developed and assessed measurement scales for component variables. A theoretical model was constructed and tested to confirm the impact of these component variables on accountants' satisfaction. In this study, a theoretical model is built on the theoretical foundation to measure the success of the accounting information system through accountant satisfaction. Based on theory and practical evidence, this study constructed a model consisting of five factors: the quality of the accounting workforce, perceived usefulness, system quality, information quality, and user satisfaction. To carry out the research methods used to construct, measure the scales, and test the model, this study implemented two main steps: (1) The preliminary research was conducted through in-depth interviews to refine the draft scales. (2) Formal research was conducted through a questionnaire survey and responses were received from 243 users of the accounting information system. The results of the formal research were used to analyze, evaluate, and measure the components affecting user satisfaction through Cronbach's alpha reliability coefficient, exploratory factor analysis (EFA), testing the theoretical model, and hypotheses.

The results of this study revealed key factors, including system quality, information quality, quality of the accounting workforce, and perceived usefulness. The results show that the accounting workforce quality factor has the greatest influence. The analysis results also indicated that knowledge of information security helps users to be more satisfied. Based on these findings, this study also makes recommendations to governments, companies, and universities.

However, this study had some limitations. The study was conducted over a period of almost a year. The number of survey samples is still lower than expected, so the representative capacity of the sample is still not high, and there may be errors in the process of reflecting reality based on the data. In the future, the survey sample size must be expanded to increase accuracy.

8- Declarations

8-1- Author Contributions

Conceptualization: V.T.T.N. and T.P.; methodology, V.T.T.N., N.N.K.D., and T.P.; formal analysis, V.T.T.N. and T.P.; writing—original draft preparation, V.T.T.N., N.N.K.D., and T.P.; writing—review and editing, V.T.T.N., N.N.K.D., and T.P. All authors have read and agreed to the published version of the manuscript.

8-2- Data Availability Statement

The data presented in this study are available on request from the corresponding author.

8-3- Funding

The authors received financial support for this research from the University of Finance Marketing, Ho Chi Minh City, Vietnam.

8-4- Acknowledgements

We would like to thank our colleagues at the University of Finance-Marketing, Industrial University of Ho Chi Minh City, and Ho Chi Minh City University of Industry and Trade.

8-5- Institutional Review Board Statement

Not applicable.

8-6- Informed Consent Statement

Not applicable.

8-7- Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this manuscript. In addition, the ethical issues, including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, and redundancies have been completely observed by the authors.

9- References

- [1] Romney, M., Steinbart, P., Mula, J., McNamara, R., & Tonkin, T. (2012). Accounting Information Systems Australasian Edition. Pearson Higher Education AU, Hoboken, United States.
- [2] Hall, J. A. (2015). Accounting information systems. Cengage Learning, Boston, United States.
- [3] Nurhidayati, F., Sensuse, D. I., & Noprison, H. (2017). Factors influencing accounting information system implementation. 2017 International Conference on Information Technology Systems and Innovation (ICITSI). doi:10.1109/icitsi.2017.8267957.

- [4] Meiryani, & Susanto, A. (2018). The Influence of Information Technology on the Quality of Accounting Information System. *Proceedings of the 2018 2nd High Performance Computing and Cluster Technologies Conference*. doi:10.1145/3234664.3234671.
- [5] Al-Chahadah, A. R., Soda, M. Z., & Omari, R. Al. (2018). The Impact of the Internal Audit on the Quality of Accounting Information in the Jordanian Commercial Banks. *International Journal of Economics and Finance*, 10(9), 157. doi:10.5539/ijef.v10n9p157.
- [6] Algrari, A. Y., & Ahmed, M. R. M. (2019). The impact of Accounting Information Systems' Quality on Accounting Information Quality. *Journal of Information Technology Management*, 11(3), 62-80.
- [7] Carolina, Y., Rapina, R., Silaban, B. T., Sada, C., Widyaningsih, G., & Ayu, F. (2020). Internal Control, AIS Quality and Accounting Information Quality. *Proceedings of the 2020 3rd International Conference on Big Data Technologies*. doi:10.1145/3422713.3422755.
- [8] Arif, D., Yucha, N., Setiawan, S., Oktarina, D., Martah, V., & Muttaqin, N. (2020). Applications of goods mutation control form in accounting information system: A case study in sumber indah perkasa manufacturing, Indonesia. *Journal of Asian Finance, Economics and Business*, 7(8), 419–424. doi:10.13106/JAFEB.2020.VOL7.NO8.419.
- [9] Abdelraheem, A. A. E., Hussaien, A. M., Mohammed, M. A. A., & Elbokhari, Y. A. E. (2021). The effect of information technology on the quality of accounting information. *Accounting*, 191–196. doi:10.5267/j.ac.2020.9.017.
- [10] Meiryani, M., Chang, A., Alfred Lorenzo, B., & Daud, Z. M. (2021). Analysis of Technology Acceptance Model (TAM) Approach to the Quality of Accounting Information Systems. *The 2021 9th International Conference on Computer and Communications Management*. doi:10.1145/3479162.3479168.
- [11] Binha, V. T. T., Tranb, N. M., Thanhc, D. M., & Phamd, H. H. (2020). Firm size, business sector and quality of accounting information systems: Evidence from Vietnam. *Accounting*, 6(3), 327–334. doi:10.5267/j.ac.2020.2.002.
- [12] Ta, Q. B., & Nguyen, T. T. (2020). Impact of factors on the quality of accounting information system in civil engineering construction enterprises. *Management Science Letters*, 10(13), 2985–2992. doi:10.5267/j.msl.2020.5.027.
- [13] Ngo, H. T., Luu, D. H., & Truong, T. T. (2021). The Relationship between Internal Control and Accounting Information Quality: Empirical Evidence from Manufacturing Sector in Vietnam. *Journal of Asian Finance*, 8(10), 353–0359.
- [14] Ranganath, G. D. M., & Rajeshwaran, N. (2022). Quality of accounting information systems and organizational effectiveness in an emerging country. *SMART Journal of Business Management Studies*, 18(1), 22–29. doi:10.5958/2321-2012.2022.00003.3.
- [15] Li, J., Xia, T., & Wu, D. (2021). Internal Control Quality, Related Party Transactions and Accounting Information Comparability. *Procedia Computer Science*, 199, 1252–1259. doi:10.1016/j.procs.2022.01.159.
- [16] Vu, T. K. A., Dam, B. H., & van Ha, T. T. (2022). Factors Affecting the Application of Strategy Management Accounting in Vietnamese Logistics Enterprises. *Journal of Distribution Science*, 20(1), 27–39. doi:10.15722/jds.20.01.202201.27.
- [17] Nguyen, X. T., & Luu, Q. K. (2020). Factors affecting adoption of industry 4.0 by small-and medium-sized enterprises: A case in Ho Chi Minh city, Vietnam. *Journal of Asian Finance, Economics and Business*, 7(6), 255–264. doi:10.13106/JAFEB.2020.VOL7.NO6.255.
- [18] Bansah, E. A. (2018). The threats of using computerized accounting information systems in the banking industry. *Journal of Accounting and Management Information Systems*, 17(3), 440–461. doi:10.24818/jamis.2018.03006.
- [19] Fuller, S. H., & Markelevich, A. (2020). Should accountants care about blockchain? *Journal of Corporate Accounting & Finance*, 31(2), 34–46. doi:10.1002/jcaf.22424.
- [20] Pimentel, E., & Boulianne, E. (2020). Blockchain in Accounting Research and Practice: Current Trends and Future Opportunities. *Accounting Perspectives*, 19(4), 325–361. doi:10.1111/1911-3838.12239.
- [21] Tiron-Tudor, A., Deliu, D., Farcane, N., & Dontu, A. (2021). Managing change with and through blockchain in accountancy organizations: a systematic literature review. *Journal of Organizational Change Management*, 34(2), 477–506. doi:10.1108/JOCM-10-2020-0302.
- [22] Haryanto, S. D., & Sudaryati, E. (2020). The Ethical Perspective of Millennial Accountants in Responding to Opportunities and Challenges of Blockchain 4.0. *Journal of Accounting and Investment*, 21(3), 452–470. doi:10.18196/jai.2103159.
- [23] Lawita, N. F. (2020). The Influence of Accounting Information System (AIS) on Internal Control in a Company. *Scientific Journal of Management, Economics, & Accounting*, 4(3), 459-471.
- [24] Hazaa, Y. M. H., & Jogdand, D. A. (2020). Availability of General Control Procedures of the Security of Accounting Information System (AIS): Evidence from Yemen. *Journal of Economic Cooperation & Development*, 41(2), 67-90.
- [25] Rashid, C. A. (2022). The role of internal control in fraud prevention and detection. *Journal of Global Economics and Business*, 3(8), 43–55. doi:10.31039/jgeb.v3i8.40.

- [26] Kasasbeh, F. I. O. (2017). Impact of Corporate Governance on the Effectiveness of Accounting Information System in Jordanian Industrial Companies. *International Business Research*, 10(10), 1. doi:10.5539/ibr.v10n10p1.
- [27] DeLone, W. H., & McLean, E. R. (1992). Information Systems Success: The Quest for the Dependent Variable. *Information Systems Research*, 3(1), 60–95. doi:10.1287/isre.3.1.60.
- [28] DeLone, W. H., McLean, E. R. (2003). The DeLone and McLean Model of Information Systems Success: A Ten-Year Update. *Journal of Management Information Systems*, 19(4), 9–30. doi:10.1080/07421222.2003.11045748.
- [29] Kotler, P. (2003). *A framework for marketing management*. Pearson Education India, Noida, India.
- [30] Droge, C. (1998). Know your customer: new approaches to understanding customer value and satisfaction. *Journal of the Academy of Marketing Science*, 26(4), 351.
- [31] Baroudi, J. J., Olson, M. H., & Ives, B. (1986). An Empirical Study of the Impact of User Involvement on System Usage and Information Satisfaction. *Communications of the ACM*, 29(3), 232–238. doi:10.1145/5666.5669.
- [32] Sedera, D., Gable, G., & Chan, T. (2004). A factor and structural equation analysis of the enterprise systems success measurement model. *Proceedings of the 10th Americas conference on information systems*, 6-8 August, 2004, New York, United States.
- [33] Iivari, J. (2005). An empirical test of the DeLone-McLean model of information system success. *ACM SIGMIS Database: The DATABASE for Advances in Information Systems*, 36(2), 8–27. doi:10.1145/1066149.1066152.
- [34] Petter, S., DeLone, W., & McLean, E. (2008). Measuring information systems success: Models, dimensions, measures, and interrelationships. *European Journal of Information Systems*, 17(3), 236–263. doi:10.1057/ejis.2008.15.
- [35] Petter, S., & McLean, E. R. (2009). A meta-analytic assessment of the DeLone and McLean IS success model: An examination of IS success at the individual level. *Information and Management*, 46(3), 159–166. doi:10.1016/j.im.2008.12.006.
- [36] Davis, F. D. (1985). *A technology acceptance model for empirically testing new end-user information systems: Theory and results*. PhD Thesis, Massachusetts Institute of Technology, Cambridge, United States.
- [37] Davis, F. D. (1989). *User Acceptance of Information Systems: Technology acceptance model (TAM)*. Working Paper #529. University of Michigan, Ann Arbor, United States.
- [38] Hair, J. F., Bush, R. P., & Ortinau, D. J. (2008). *Marketing research*. McGraw-Hill Higher Education, New York, United States.
- [39] Boyce, C., & Neale, P. (2006). *Conducting in-depth interviews: A guide for designing and conducting in-depth interviews for evaluation input (Vol. 2)*. Pathfinder international, Watertown, United States.
- [40] Bollen, K. A. (1989). *Structural Equations with Latent Variables*. John Wiley & Sons, Hoboken, United States. doi:10.1002/9781118619179.
- [41] Peterson, R. A. (1994). A meta-analysis of Cronbach's coefficient alpha. *Journal of Consumer Research*, 21(2), 381-391. doi:10.1086/209405.
- [42] Slater, S. F., & Narver, J. C. (1995). Market Orientation and the Learning Organization. *Journal of Marketing*, 59(3), 63. doi:10.2307/1252120.
- [43] Hair, J. F. (2009). *Multivariate data analysis*. Available online: <https://digitalcommons.kennesaw.edu/facpubs/2925/> (accessed on July 2023).
- [44] Anderson, J. C., & Gerbing, D. W. (1988). Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach. *Psychological Bulletin*, 103(3), 411–423. doi:10.1037/0033-2909.103.3.411.
- [45] Hanh, H. T. H. (2018). User satisfaction of accounting information systems: research on enterprises in Da Nang. *Journal of Science and Technology - University of Danang*, 41-45.
- [46] Ruangkanjanases, A., Hariguna, T., Adiandari, A. M., & Alfawaz, K. M. (2022). Assessing Blockchain Adoption in Supply Chain Management, Antecedent of Technology Readiness, Knowledge Sharing and Trading Need. *Emerging Science Journal*, 6(5), 921–937. doi:10.28991/ESJ-2022-06-05-01.

Appendix I: Questionnaire

The main information in the questionnaire is:

PART I: GENERAL INFORMATION

1. Full name:
2. Email address:
3. Company name:
4. Company address:
5. Main fields of operation of your company:
 - Production
 - Commercial
 - Services
 - Construction
 - Other:
6. Classification of business size
 - Micro business
 - Small Business
 - Medium business
 - Big business
7. What is your position in the company?
 - Business leaders (Board of Directors or Board of Directors).
 - Leaders in the financial accounting department
 - General Accounting
 - Accountant
8. The current accounting work of enterprises is mainly performed by:
 - Enterprise management software (ERP)
 - Independent counting software.
 - Excel
 - Manual
9. Number of people doing accounting work at the unit
 - Less than 5 people
 - From 5 to 10 people
 - More than 10 people

PART II: INTERVIEW QUESTIONS

Please indicate how much you agree with your statements regarding your company's current accounting information system.

Completely disagree	Disagree	No opinion	Agree	Completely agree
1	2	3	4	5

Question Code	Question content	Level of agreement				
		1	2	3	4	5
CLTT1	The accounting information is suitable for the job's requirements.	<input type="radio"/>				
CLTT2	The accounting figures are provided accurate.	<input type="radio"/>				
CLTT3	Accounting information is honest and objective	<input type="radio"/>				
CLTT4	Accounting information provided in full accordance with the requirements.	<input type="radio"/>				
CLTT5	Accounting information is presented clearly and comprehensibly.	<input type="radio"/>				
CLTT6	Accounting information is provided promptly upon request.	<input type="radio"/>				
CLTT7	Accounting information ensures comparability	<input type="radio"/>				
CLHT1	The accounting information system has a good information processing speed.	<input type="radio"/>				
CLHT2	The accounting information system processes information reliably.	<input type="radio"/>				
CLHT3	The accounting information system is flexible in responding to changes.	<input type="radio"/>				
CLHT4	The accounting information system can connect with other information systems within the company.	<input type="radio"/>				
CLHT5	The accounting information system ensures the safety and security of accounting information.	<input type="radio"/>				
CLDN1	The individuals involved in accounting tasks have appropriate professional qualifications.	<input type="radio"/>				
CLDN2	The individuals involved in accounting tasks participate in specialized training and development courses.	<input type="radio"/>				
CLDN3	The individuals involved in accounting tasks have the necessary IT skills to meet the requirements of using the accounting information system.	<input type="radio"/>				
CLDN4	The individuals involved in accounting tasks have extensive experience.	<input type="radio"/>				
CLDN5	The company regularly conducts training on accounting information security.	<input type="radio"/>				
NTHI1	The accounting information system actively supports the management and operation of the business.	<input type="radio"/>				
NTHI2	The accounting information system helps connect activities and functional departments within the business.	<input type="radio"/>				
NTHI3	The accounting information system contributes to enhancing the efficiency of the business operations.	<input type="radio"/>				
NTHI4	The efficient functioning of the accounting information system contributes to the success of the business.	<input type="radio"/>				
SHL1	I believe that the accounting information system has effectively carried out my tasks.	<input type="radio"/>				
SHL2	The accounting information system meets my expectations.	<input type="radio"/>				
SHL3	I am satisfied with the current accounting information system of my company.	<input type="radio"/>				