FACTORS INFLUENCING ACCOUNTING INFORMATION SYSTEMS IN SMALL AND MEDIUM ENTERPRISES: THE CASE IN HANOI, VIETNAM

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ABSTRACT
Purpose: The study aims to identify the factors influencing the accounting information system in small and medium-sized enterprises in Hanoi, Vietnam.

Theoretical framework: The paper is based on the theoretical framework of factors affecting the accounting information system which has been done before and applied in small and medium-sized enterprises in Hanoi, Vietnam.

Design/methodology/approach: The questionnaire was distributed to 350 small and medium-sized enterprises in Hanoi, and a total of 245 valid responses were collected. They included directors, chief accountants, and accounting staff. By multivariate regression analysis from SPSS 22 software, the results indicate that there are five factors affecting the effectiveness of the accounting information system in small and medium-sized enterprises in Hanoi.

Findings: The regression findings support the significant positive impacts of these factors influencing the accounting information system in small and medium-sized enterprises in Hanoi as follows: (1) Managerial knowledge, (2) External expert support, (3) Organizational characteristics, (4) User participation in the system, and (5) Managerial support.

Research, Practical & Social implications: The study provides factors influencing the accounting information systems in small and medium-sized enterprises in the case of Hanoi, Vietnam. This result provides useful references for relevant issues. The research results are the basis for proposing solutions to improve the Accounting Information Systems in Vietnam for making decisions.

Originality/value: The value of the study is providing an expansion of the factors influencing accounting information systems. Research results provide useful references for research on related issues. These findings can be useful for Vietnamese enterprises to take measures to improve their Accounting Information Systems, thereby improving business performance.

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FATORES QUE INFLUENCIAM OS SISTEMAS DE INFORMAÇÕES CONTÁBEIS EM PEQUENAS E MÉDIAS EMPRESAS: O CASO DE HANÓI, VIETNÃ

RESUMO
Objetivo: O estudo visa identificar os fatores que influenciam o sistema de informações contábeis em pequenas e médias empresas em Hanói, Vietnã.

Estrutura teórica: O artigo se baseia na estrutura teórica dos fatores que afetam o sistema de informações contábeis, que já foi feita anteriormente e aplicada em pequenas e médias empresas de Hanói, Vietnã.

Projeto/metodologia/abordagem: O questionário foi distribuído a 350 pequenas e médias empresas de Hanói, e um total de 245 respostas válidas foi coletado. Entre elas, estavam diretores, contadores-chefes e equipe de contabilidade. Por meio da análise de regressão multivariada do software SPSS 22, os resultados indicam que há cinco fatores que afetam a eficácia do sistema de informações contábeis em pequenas e médias empresas de Hanói.

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Conclusões: Os resultados da regressão apóiam os impactos positivos significativos desses fatores que influenciam o sistema de informações contábeis nas pequenas e médias empresas de Hanói, como segue: (1) Conhecimento gerencial, (2) Suporte de especialistas externos, (3) Características organizacionais, (4) Participação do usuário no sistema e (5) Suporte gerencial.

Implicações sociais, práticas e de pesquisa: O estudo fornece fatores que influenciam os sistemas de informações contábeis em pequenas e médias empresas no caso de Hanói, Vietnã. Esses resultados da pesquisa são a base para a proposta de soluções para melhorar os Sistemas de Informações Contábeis no Vietnã para a tomada de decisões.

Originalidade/valor: O valor do estudo é fornecer uma expansão dos fatores que influenciam os sistemas de informações contábeis. Os resultados da pesquisa fornecem referências úteis para pesquisas sobre questões relacionadas. Essas descobertas podem ser úteis para que as empresas vietnamitas tomem medidas para aprimorar seus Sistemas de Informações Contábeis, melhorando, assim, o desempenho dos negócios.


FACTORES QUE INFLUYEN EN LOS SISTEMAS DE INFORMACIÓN CONTABLE DE LAS PEQUEÑAS Y MEDIANAS EMPRESAS: EL CASO DE HANOI, VIETNAM

RESUMEN

Objetivo: El estudio pretende identificar los factores que influyen en el sistema de información contable de las pequeñas y medianas empresas de Hanoi, Vietnam.

Marco teórico: El documento se basa en el marco teórico de los factores que influyen en el sistema de información contable, que se ha realizado anteriormente y se ha aplicado en pequeñas y medianas empresas de Hanoi, Vietnam.

Diseño/metodología/enfoque: El cuestionario se distribuyó a 350 pequeñas y medianas empresas de Hanoi, y se recogió un total de 245 respuestas válidas. Entre ellos había directores, jefes de contabilidad y personal contable. Mediante el análisis de regresión multivariante del programa informático SPSS 22, los resultados indican que hay cinco factores que afectan a la eficacia del sistema de información contable en las pequeñas y medianas empresas de Hanoi.

Conclusiones: Los resultados de la regresión apoyan los impactos positivos significativos de estos factores que influyen en el sistema de información contable en las pequeñas y medianas empresas de Hanoi, como sigue: (1) Conocimientos de gestión, (2) Apoyo de expertos externos, (3) Características organizativas, (4) Participación de los usuarios en el sistema y (5) Apoyo de la dirección.

Implicaciones sociales, prácticas y de investigación: El estudio proporciona factores que influyen en los sistemas de información contable de las pequeñas y medianas empresas en el caso de Hanoi, Vietnam. Este resultado proporciona referencias útiles para las cuestiones pertinentes. Los resultados de la investigación son la base para proponer soluciones que mejoren los sistemas de información contable en Vietnam para la toma de decisiones.

Originalidad/valor: El valor del estudio consiste en proporcionar una ampliación de los factores que influyen en los sistemas de información contable. Los resultados de la investigación proporcionan referencias útiles para la investigación de temas relacionados. Estas conclusiones pueden ser útiles para que las empresas vietnamitas tomen medidas para mejorar sus sistemas de información contable, mejorando así el rendimiento empresarial.


INTRODUCTION

Background: The development of information technology (IT) has completely changed the accounting landscape, most clearly shown in the method of processing and providing accounting data, which has made great strides compared to the manual accounting process before. However, the accounting information system in Vietnamese enterprises in general, especially in small and medium-sized enterprises, still has many limitations. Therefore, it is necessary to build an effective accounting information system to provide accurate, complete,
and timely information to managers. By doing this, managers can make the right decisions, contributing to improving business efficiency and creating competitive advantages for businesses.

Justification: Small and medium enterprises play an important role in the economy of Hanoi, the capital of Vietnam, accounting for about 97% of the total number of enterprises operating in the municipality (Vietnam Government, 2009). But in fact, the accounting information system of small and medium-sized enterprises in Hanoi still has many limitations such as weak accounting qualifications, outdated computer systems, and software, placing importance on financial accounting only. Therefore, the accounting information system of enterprises has not fully played its role of providing useful information for managers in the decision-making process (Phi Anh, 2016; Binh V. T. T. et al, 2022). Hence, it is necessary to identify and quantify the influence of factors on the accounting information system, thereby proposing solutions to improve the efficiency of the accounting information system. An accounting information system (AIS) is a framework for coordinating resources (data, equipment, suppliers, personnel, and funding) to transform inputs into financial economic information used to carry out the activities of an entity and provide accounting information to stakeholders. Currently, Vietnamese small and medium enterprises have to compete not only with each other but also with large enterprises and powerful multinational corporations (Hieu & Anh, 2020). There is not a single industry or field escaping this pressure (Otley, 2016). To cope with the fiercely competitive environment, enterprises will increasingly use accounting information to support planning, control, and decision-making. However, in reality, the application of managerial accounting in Vietnamese small and medium-sized enterprises is still limited, only financial accounting be brought into focus, while managerial accounting has received little attention (Tran Ngoc Hung, 2016). Therefore, the question is whether, in the advent of fierce competitive pressure, Vietnamese small and medium enterprises will increase the use of management accounting information.

The objective of the work or research problem: In this study, we want to evaluate the factors affecting the accounting information system of SMEs in Hanoi, Vietnam. The remainder of this paper is arranged as follows: Part 2. Theoretical foundations to develop theoretical models and hypotheses. Part 3 presents research methods, sampling procedures, data collection, and measurement of observed variables. Part 4 is the results of data analysis using the proposed model. Part 5 ends by summarizing the findings and conclusion.
RESEARCH MODELS AND HYPOTHESES

Organizational Characteristics

Size, organizational structure, and business strategy are three issues of organizational characteristics that many researchers on accounting information systems are particularly interested in. Regarding the size of the organization, large-sized companies often have financial and human resources, so they find it easier to accept and use accounting information systems more effectively (Wisna, 2015). Sunarta and Astuti (2023) examined the mediating role of accounting information quality in the relationship between accounting information system quality and organizational performance in rural banks in the Province of Bali-Indonesia with 99 participants. The results show that accounting information quality has a significant positive effect on organizational performance. In contrast, information system projects are less successful in small businesses because of limited resources and no formalized operating mechanism. In terms of organizational structure, a decentralized organizational structure will render managers more responsible for planning, operating, and controlling activities, and therefore they need more information to make decisions. decisions (Chenhall, 2003). Research by Binh V.T.T et al. (2022) shows that organizational structure has a positive influence on the accounting information system because at this time the system must work effectively to support managers in making the right and timely decisions. Regarding business strategy, Ismail et al. (2007) reveal that business strategies (pricing and product differentiation) have a significant influence on the design of accounting information systems. Besides, to design an effective information system, Lien (2021) reckons that small and medium enterprises need to build an IT strategy in line with their business strategy. In recent research, Binh V.T.T. et al (2022) also pointed out that organizational culture has a strong effect to enhance the quality of accounting information systems of Vietnamese firms. Therefore, the first proposed research hypothesis is:

Hypothesis H1: Organizational characteristics have a positive relationship with the effectiveness of the accounting information system.

Managerial Knowledge

Several studies in the world have been carried out and proved that the owner/manager is an important factor affecting the accounting information system in the enterprise. Ismail et al. (2007) also argue that the knowledge of managers/owners has an influence on accounting information systems in small and medium-sized manufacturing enterprises in Malaysia. Delone (1988) argues that the owner of a company is the key to the implementation of IT. The owner's
knowledge is not crucial for large enterprises, but for small and medium enterprises, the owner has more direct responsibility for the development of the accounting information system. Therefore, in businesses whose owners are familiar with accounting information systems (in terms of knowledge and experience), the implementation will be easier to succeed. To survive, small and medium enterprises need to constantly update accounting information to make accurate and timely decisions. The application of an accounting information system will assist businesses in updating information more quickly and accurately. Thong (1999) shows that one of the important factors affecting the application of accounting information systems is the managers' knowledge of information systems. In Vietnam, a study by Hieu and Anh (2020) concludes that managerial knowledge affects the effectiveness of accounting information systems in small and medium-sized enterprises in Ho Chi Minh City. Therefore, the second proposed research hypothesis is:

**Hypothesis H2:** Knowledge of managers/owners has a positive relationship with the effectiveness of the accounting information system.

**Managerial Involvement**

The involvement of managers/owners also plays an important role in the successful implementation of information systems in SMEs. Participation in the implementation and deployment of an accounting information system will encourage users to develop a positive attitude towards the use of an accounting information system and thus facilitate the implementation process. In addition, because of their dominant role, the involvement of managers/owners can help information system projects align with organizational goals and strategies (Jarvenpaa and Ives, 1991). Le Thi Ni (2014), and Hieu and Anh (2020) conclude that the involvement of managers in the implementation of the accounting information system has a positive influence on the effectiveness of the accounting information system of enterprises in Vietnam. Oleiwi, R. A. (2023) investigated the role of electronic data interchange in the project work of accounting systems in organizations through multiple case studies to observe various kinds of Data Interchange diffusion in Europe and Romani. The research indicated that management of European companies in assessing completion among the banking sector members using electronic data interchange must be adopted due to several advantages such as increased efficiency as seen in their accounting systems. Therefore, the third proposed hypothesis is:
Hypothesis H3: The involvement of managers/owners has a positive relationship with the effectiveness of the accounting information system.

Managerial Support

In a study on factors affecting the successful application of management information systems in organizations, Al-Mamary et al. (2014) indicated that senior managers’ support affects the perceived usefulness and satisfaction of management information system users. The support of managers is their willingness to provide the necessary resources (financial, human, and time) for the successful implementation of the project. The importance of managerial support for the effectiveness of accounting information systems has been recognized in the studies of Ismail and King (2007) and several other studies. Some studies that have been done in Vietnam have also demonstrated the importance of manager/owner's support. For example, Dang Thi Thuy Ha (2016), and Hieu and Anh (2020) conclude that the support of managers influences the effectiveness of the accounting information system in small and medium enterprises. Therefore, the fourth proposed research hypothesis is:

Hypothesis H4: The support of managers/owners has a positive effect on the effectiveness of the accounting information system.

User Participation in the System

The participation of system users is also an important factor for the successful implementation of an accounting information system. According to Al-Eqab and Ismail (2011), user participation is the intervention of users in the processes from planning and development to implementation of accounting information systems. These people are the direct users of the accounting information system, so they are the most knowledgeable about the requirements of an accounting information system for the job (Hieu & Anh, 2020). Besides, during operation, they know the shortcomings of the accounting information system, so their participation in the development process is necessary to improve the system. In addition, the team is required to have a deep understanding of the organizing process, production, and business activities of enterprises, be creative, flexible, and able to work in groups and coordinate with colleagues in other functional departments of the enterprise. Therefore, the fifth proposed research hypothesis is:

Hypothesis H5: The participation of system users has a positive relationship with the effectiveness of the accounting information system.
**External Expert Support**

The success of an information system implementation depends not only on the expertise of the accountants and owners inside the business but also on external IT support (Deni, 2015). External units that affect the application of accounting information systems in small and medium-sized enterprises include:

Suppliers and consultants: Many researchers have emphasized the importance of suppliers and consultants for computerization projects in small and medium enterprises (Breen et al., 2004).

Accountants Association and IT Training Institutions: Also play an important role in encouraging SMEs to computerize their book-keeping processes (Breen, 2004; Hamid, & Arash, 2018; Lien D. T. Q., 2021).

Government: Government support also plays an important role in promoting IT adoption among SMEs, especially in developing economies (Jarvenpaa & Ives, 1991).

Accounting firms: Accounting firms are also a source of advice for small and medium-sized enterprises in implementing and applying accounting information (Jarvenpaa & Ives, 1991; Hieu & Anh, 2020).

The support of these experts allows small and medium-sized businesses to gain a broader view of their information needs and information processing capabilities, so SMEs who receive support from external experts will achieve a higher degree of AIS alignment (Deni, 2015). Another finding indicates that external expertise is related to IT success (Delone, 1992). Therefore, technical support, training, and a harmonious working relationship with consultants can reduce the risk of failure in small and medium enterprises.

Hypothesis H6: The support of external experts has a positive effect on the effectiveness of the accounting information system.

Thus, based on understanding the theoretical overview of the accounting information system, the background theories along with the analysis of relevant research at home and abroad, the authors have identified 6 factors that are affecting the efficiency of the accounting information system of small and medium enterprises in Hanoi province. Figure 1 presents the research model.
RESEARCH METHODS

Samples and Methods of Data Collection

Quantitative research was carried out to evaluate the scale and analyze factors to discover and test the influence of factors on the accounting information system in small and medium enterprises in Hanoi. After having completed the survey from the qualitative research step, the author distributes the survey to the directors, chief accountants, and accounting staff who are knowledgeable about the accounting information system. The study sample size depends on the analytical method, this study uses exploratory factor analysis (EFA) and multivariate linear regression analysis methods. First of all, in exploratory factor analysis, the sample size is determined based on the minimum size and the number of observed variables included in the analysis. According to Hair et al. (2010), the minimum sample size is 50, preferably 100. The observation sample size must be at least 4 or 5 times the number of variables in the factor analysis. Therefore, the authors determined the minimum sample size included in the exploratory factor analysis is 5 times the number of observed variables. Based on the number of observed variables of the independent variables in this study is 24, the required number of samples is \( n = (24 \times 5) = 120 \). Next, in multivariate linear regression analysis, the most commonly used formula to determine the sample size is \( n \geq 50 + 8k \), where \( n \) is the sample size, \( k \) is the number of independent variables included in the model (according to Green (1991))
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quoted in Dinh Phi Ho (2014)). Our study has 6 independent variables, so the minimum number of samples included in the linear regression analysis is \( n = 50 + (8 \times 6) = 98 \).

After determining the sample size to include in exploratory factor analysis and multivariable linear regression analysis, the author will compare to select the largest sample size suitable for both analyses above. According to the above calculation, the number of samples required for the EFA step is 120 samples, while the number of samples required for the multivariable linear regression analysis step is only 98. To improve the reliability of the research, the author decides to choose a sample size of 250 individual surveyed subjects, selected by random sampling method.

To achieve the above sample size, 350 questionnaires were distributed. To collect research data, the author directly distributed survey questionnaires to respondents at enterprises and collected them immediately after the questionnaires were answered. In addition, the author also emailed the survey questionnaire to the survey subjects that the author knew. As a result, 283 survey votes were obtained (reaching the rate of 80.86%), of which 245 were valid. Invalid questionnaires were discarded such as blank votes, incomplete answer sheets, or votes that only selected one level for all statements, etc.

Table 1. Descriptive statistics of the study sample

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Operating time</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 5 years</td>
<td>112</td>
<td>45.72</td>
</tr>
<tr>
<td>From 5 to 10 years</td>
<td>93</td>
<td>37.96</td>
</tr>
<tr>
<td>Over 10 years</td>
<td>40</td>
<td>16.32</td>
</tr>
<tr>
<td><strong>2. Areas of operation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade and services</td>
<td>171</td>
<td>69.8</td>
</tr>
<tr>
<td>Industry and construction</td>
<td>57</td>
<td>23.27</td>
</tr>
<tr>
<td>Agriculture, forestry, and fisheries</td>
<td>14</td>
<td>5.71</td>
</tr>
<tr>
<td>Other areas</td>
<td>3</td>
<td>1.22</td>
</tr>
<tr>
<td><strong>3. Size</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Micro</td>
<td>67</td>
<td>27.35</td>
</tr>
<tr>
<td>Small</td>
<td>113</td>
<td>46.12</td>
</tr>
<tr>
<td>Medium</td>
<td>65</td>
<td>26.53</td>
</tr>
<tr>
<td><strong>4. Level of IT application in accounting work</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use manual accounting</td>
<td>32</td>
<td>13.06</td>
</tr>
<tr>
<td>Use Excel, Access (automatically render reports)</td>
<td>41</td>
<td>16.73</td>
</tr>
<tr>
<td>Use accounting software</td>
<td>167</td>
<td>68.16</td>
</tr>
<tr>
<td>Using ERP system</td>
<td>5</td>
<td>0.01</td>
</tr>
<tr>
<td><strong>5. Surveyed person's position</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accountant</td>
<td>185</td>
<td>75.51</td>
</tr>
<tr>
<td>General Accountant</td>
<td>47</td>
<td>19.18</td>
</tr>
<tr>
<td>Head/Deputy Head of Accounting Department</td>
<td>9</td>
<td>3.67</td>
</tr>
<tr>
<td>Director/Deputy Director</td>
<td>4</td>
<td>1.64</td>
</tr>
</tbody>
</table>

Source: Prepared by the author (2023)
Measurement of Observed Variables

In addition, the organizational structure, as well as the business strategies of the enterprise, will affect and set requirements for an accounting information system compatible with it. Therefore, we design a scale of organizational characteristics through three observed variables: (1) Size (2) Organizational structure; and (3) Business Strategy

Through group discussion with experts, the experts commented on additional observed variables (4) Qualifications of accountants. Experts believe that the qualifications of accountants in different businesses are not the same and have an important influence on the successful implementation of an accounting information system. The scale of independent variables is measured by 24 observed variables, specifically, organizational characteristics (4 observed variables), managerial knowledge (5 observed variables), managerial involvement (4 observed variables), managerial support (3 observed variables), the system user participation (4 observed variables) and external expert support (4 observed variables). In addition, to measure the dependent variable of the effectiveness of the accounting information system, the study uses a scale of 6 observed variables.

RESEARCH RESULTS AND DISCUSSION

Result of Factor Analysis

The initial analysis results for the scale of factors affecting the accounting information system in small and medium-sized enterprises have Cronbach’s Alpha coefficient of 0.770 (> 0.6). The total correlation coefficient of the remaining observed variables is greater than 0.3.

<table>
<thead>
<tr>
<th>Observed variables</th>
<th>Average value if item deleted</th>
<th>Variance if item deleted</th>
<th>Total variable correlation</th>
<th>Cronbach’s Alpha if the item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>DDTC1</td>
<td>10.27</td>
<td>3.993</td>
<td>.542</td>
<td>.735</td>
</tr>
<tr>
<td>DDTC2</td>
<td>10.30</td>
<td>4.089</td>
<td>.639</td>
<td>.680</td>
</tr>
<tr>
<td>DDTC3</td>
<td>10.20</td>
<td>4.207</td>
<td>.582</td>
<td>.710</td>
</tr>
<tr>
<td>DDTC4</td>
<td>10.11</td>
<td>4.464</td>
<td>.533</td>
<td>.735</td>
</tr>
<tr>
<td>KTQL1</td>
<td>12.95</td>
<td>8.465</td>
<td>.624</td>
<td>.833</td>
</tr>
<tr>
<td>KTQL2</td>
<td>13.13</td>
<td>7.732</td>
<td>.761</td>
<td>.796</td>
</tr>
<tr>
<td>KTQL3</td>
<td>12.93</td>
<td>8.094</td>
<td>.684</td>
<td>.817</td>
</tr>
<tr>
<td>KTQL4</td>
<td>13.18</td>
<td>8.550</td>
<td>.600</td>
<td>.839</td>
</tr>
<tr>
<td>KTQL5</td>
<td>13.06</td>
<td>8.152</td>
<td>.657</td>
<td>.825</td>
</tr>
<tr>
<td>TGQL1</td>
<td>10.27</td>
<td>3.778</td>
<td>.715</td>
<td>.737</td>
</tr>
</tbody>
</table>
In summary, the results of testing the scale value through Cronbach’s Alpha coefficient show that 25 observed variables of 6 independent variables and 6 observed variables of dependent variable meet the requirements, so they should be kept for further EFA analysis.

Test for Direct and Indirect Impacts of Variables

The results of data analysis show that the adjusted R2 coefficient is 48.7% (Table 3), which means that the independent variables in the model (Organizational characteristics, Managerial knowledge, managerial support, system user participation, external expert support) explained 48.7% of the variation of the dependent variable (Effectiveness of the accounting information system), the rest is explained by factors not considered in the model.

Table 3. Multivariate regression analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>R coefficient</th>
<th>R^2 coefficient</th>
<th>Adjusted R^2 coefficient</th>
<th>Standard deviation</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.707a</td>
<td>.500</td>
<td>.487</td>
<td>.49502</td>
<td>1.784</td>
</tr>
</tbody>
</table>

a. Independent variables: DDTC, KTQL, HTQL, NDHT, CGBN
b. Dependent variables: HTTT

Source: Prepared by the author (2023)

Next, we perform the F-test on the fitting of the overall linear regression model. This test tells us whether the dependent variable is linearly correlated with all the independent variables.

Hypothesis H0 is: $\beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = \beta_6 = 0$
If hypothesis H0 is rejected, we can conclude that the independent variables in the model can explain the change of the dependent variable, which means that the model is suitable for the data set of variables.

The results of testing the reliability of the scale by Cronbach's Alpha coefficient, all scales are kept unchanged for inclusion in the next step of the analysis. The scale ensures reliability with Cronbach's Alpha coefficient greater than 0.6 and a total variable correlation coefficient greater than 0.3.

As the results of exploratory factor analysis (EFA), fortunately, out of 24 observed variables of the independent component proposed 6 independent variables and 6 observed variables of the independent factors also regressed 1 dependent factor as proposed by the original model.

The results of testing the linear regression model have 5 factors that have a positive relationship with the effectiveness of the accounting information system in descending order from large to small as follows: managerial knowledge, external experts' support, organizational characteristics, system user participation, and managerial support. Particularly, the managerial involvement factor is not statistically significant because of $\text{sig.} > 0.05$, however, when testing the correlation, it is found that this factor correlates with the effectiveness of the accounting information system. The results of testing the multivariate linear regression model have 5 factors that have a positive influence on the effectiveness of the information system. The results of the accounting information system with the order from large to small are summarized in Table 5.1 below. Particularly, the managerial involvement factor is not statistically significant because of $\text{sig.} > 0.05$, however, when we check the correlation, we find that this factor correlates with the effectiveness of the accounting information system.

<table>
<thead>
<tr>
<th>No.</th>
<th>Factors</th>
<th>Impact of factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Managerial knowledge</td>
<td>$\beta = 0.242$</td>
</tr>
<tr>
<td>2</td>
<td>External expert support</td>
<td>$\beta = 0.181$</td>
</tr>
<tr>
<td>3</td>
<td>Organizational characteristics</td>
<td>$\beta = 0.175$</td>
</tr>
<tr>
<td>4</td>
<td>System user participation</td>
<td>$\beta = 0.161$</td>
</tr>
<tr>
<td>5</td>
<td>Managerial support</td>
<td>$\beta = 0.132$</td>
</tr>
</tbody>
</table>

Source: Prepared by the author (2023)

The results are similar to some previous research in Vietnam, such as Hieu and Anh (2020), and Binh V. T T et al (2022).
The results of this study are the basis for the authors to propose recommendations to improve the efficiency of the accounting information system to improve the quality of accounting information provided to stakeholders.

CONCLUSION

Based on theoretical understanding and published studies related to the topic, we have identified 6 factors affecting the effectiveness of accounting information systems in small and medium-sized enterprises: organizational characteristics, managerial knowledge, managerial involvement, managerial support, system user participation, and external expert support.

The research was carried out in two phases: (1) Qualitative research was carried out by interviewing experts. The purpose of this step is to complete the survey form to prepare for the quantitative research step; (2) Quantitative research was conducted by sending questionnaires to 350 directors/deputy directors, chief accountants, general accountants, and accountants. From the obtained 245 valid votes, we conducted the following analysis steps: descriptive statistics, scale reliability assessment, exploratory factor analysis, and multivariate regression analysis.

The results of the data analysis show that there are 5 factors affecting the effectiveness of the accounting information system of small and medium enterprises in Hanoi. Which, the influence of the factors is arranged in order from large to small as follows: (1) Managerial knowledge; (2) External expert support; (3) Organizational characteristics; (4) System user participation; and (5) Managerial support. Particularly, the factor of managerial involvement is not statistically significant because of sig. > 0.05, however, when we check the correlation, we find that this factor correlates with the effectiveness of the accounting information system.

Based on the research results, the author also proposed some recommendations to small and medium enterprises in Hanoi, external experts, and educational institutions. Although the study has achieved certain results, there are inevitably limitations that need to be overcome in future studies such as sample size, sampling method, and data processing method.

REFERENCES


