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Factors Impact the Quality accounting Information System, Empirical Evidence in Garment Firms of Thai Nguyen Province, Vietnam

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Abstract: The accounting information systems in garment enterprises in Thai Nguyen Province, Vietnam has not fully promoted its role in providing useful information for managers in the economic decision-making process. Therefore, analyzing factors affecting the quality of accounting information systems and proposing recommendations to improve the quality of accounting information systems in garment enterprises in Thai Nguyen Province is necessary. Based on the research overview, the author has identified research gaps and identified four factors impacting the quality of accounting information systems in garment enterprises in Thai Nguyen Province: management supporting, management knowledge, information technology infrastructure, accountants knowledge. The research was conducted using qualitative and quantitative research. Research results show four factors affecting the quality of accounting information systems in garment enterprises in Thai Nguyen Province. In particular, management knowledge has the strongest influence and management supporting has the lowest influence. Based on the research results, the research team discussed and proposed recommendations for garment enterprises in Thai Nguyen Province to improve and enhance the quality of the accounting information system in the enterprise.

I. Introduction

The development of information technology in the era of the Fourth Industrial Revolution has strongly influenced the management information system in general and the accounting information system in particular. The development of information technology has created great challenges for businesses, especially managers including accountants because they play an important role in collecting and processing information. Manage and provide financial information to managers and stakeholders. Businesses have invested heavily in technology to perfect their accounting information system. However, the accounting information system still does not meet the expectations of business managers, because it does not fully match the requirements of the business, is not operated properly or is not used by the users of the accounting information system.

Research on the quality of accounting information systems is a research area of interest to many scholars, due to the need for high quality information for managers when making economic decisions. In previous studies, system quality was measured according to system capabilities, functions, applications and performance. According to Ismail (2009), system quality is often considered based on the system's technical characteristics, including: features; function; response time and system reliability. Although information systems in general and accounting information systems in particular have improved over time, the measurement of system quality in research has changed little. One of the commonly used scales to measure the quality of accounting information systems is through the perception of system users. However, direct and indirect users of the system have different system requirements depending on their positions and tasks. Designing and implementing a system that meets user requirements is not an easy task and may not be satisfactory compared to the resources invested. Technically, a quality system requires system components to function properly for users. When a system operates with a combination of many components, the performance quality of each component will affect the performance quality of the system. So, to improve the quality of accounting information systems in businesses, according to the research team, consider the influence of factors on the quality of accounting information systems in businesses.

Choosing the research context is garment enterprises in Thai Nguyen Province, with production and business activities coordinated by many departments, performing a series of tasks from generating orders, processing orders, and

manufacturing. and delivery and settlement of raw materials. As a specific manufacturing industry, production goes through many stages, each stage has its own and complex production process, so management issues for textile and garment enterprises are extremely important. In addition to the planning - business, technical, human resources departments... the accounting department in textile enterprises performs capital accounting tasks in cash, purchases, sales, debt, and salaries. , taxes... help businesses control their financial situation in a comprehensive, timely, accurate, complete manner, supporting the process of synthesizing and analyzing production and business results. Currently, garment businesses in Thai Nguyen Province have applied information technology to accounting work. The level of application of information technology in each garment enterprise is not the same, depending on the size of the enterprise, form of ownership, length of operation... So that garment enterprise managers in Thai Nguyen Province can have the Financial and accounting information is timely and accurate, meeting management requirements, the accounting information system in garment enterprises in Thai Nguyen Province needs to be focused. But in reality, accounting information system has not met users' expectations. A quality accounting information system is a system capable of providing information to serve the administration, organization, and control of managers (Median et al., 2014), meeting the requirements of users (Median et al., 2014; Rommey & Steinbart, 2017). To improve the quality of accounting information system in garment enterprises in Thai Nguyen Province, it is necessary to consider the level of factors affecting the quality of accounting information system, thereby proposing recommendations to Improve and enhance the quality of accounting information system.

II. Literature review

2.1. Quality of accounting information system

There are many perspectives on measuring the quality of accounting information systems in the world. Studies evaluating the quality of accounting information systems include suitability, timeliness, accuracy and completeness (Gelinas et al., 2012). According to Rommey and Steinbart (2012), a quality accounting information system is a reliable accounting information system that produces quality information. accounting information system quality is measured by ease of use, flexibility, relevance and accuracy. In the successful information systems model, DeLone and McLean (2003) proposed that system success is determined by system quality and the quality of system output. In the study of Petter and colleagues (2008), the author believes that system quality represents the desired characteristics of the system such as: ease of use, flexibility, reliability, ease of learning, sophistication and system response time. Ismail (2009) with research on factors affecting the effectiveness of accounting information systems in Malaysian small and medium-sized enterprises, has shown that the quality of accounting information systems is a component to evaluate the effectiveness of the accounting information system. In this study, the quality of accounting information system is evaluated according to reliability, characteristics, and response time; The quality of information is clear. Complete, useful, accurate. According to Syaifullah's (2014) model, the quality of accounting information systems is assessed depending on the combination of efficiency, usefulness and integration.

In Laudon and Jane's (2015) study, accounting information system quality was measured based on information system quality. When evaluating a quality accounting information system, it can be seen from the characteristics of the accounting information system such as flexibility, practicality, usability, and usability. Nusa (2015) believes that the quality of accounting information system is measured by technique, ease of use, functionality, reliability, flexibility.

2.2. Impact factors

Accounting information system is a subsystem of management information system, so in addition to synthesizing research on factors affecting the quality of accounting information system, the author also synthesizes research. Research on factors affecting the quality and effectiveness of information systems, information technology and Enterprise Resources Planning (ERP). Furthermore, measuring the quality of accounting information system has been mentioned as equivalent to measuring the quality of information system, so finding the factors that determine the effectiveness of the system, information quality, and system quality, ..., to the implementation and operation of the system, the success of the system is also considered by the author.

Ismail (2009) with research on factors affecting the effectiveness of the implementation of accounting information system in Malaysia, shows that there is a positive relationship between the knowledge of the chief accountant and the effectiveness of the accounting information system in Malaysia. supplier and the effectiveness of the accounting firm to the effectiveness of the accounting information system; did not find a significant relationship between the sophistication of the accounting information system, the manager's participation in implementing the accounting information system, the knowledge of the manager, effective consultants, and government agencies with the effectiveness of accounting information systems. In contrast to the research of De Guinea et al. (2005), Ismail (2009) believes that there is no significant relationship between consultants and the effectiveness of accounting information

systems in small and medium-sized businesses. This reason according to Ismail (2009) may be due to the development of information technology and the system providing friendly, easy-to-use features during system operation.

The capacity of a system user is one of the most important factors of accounting information systems (Tosth, 2012). The capacity of system users includes: professional capacity, communication capacity, and experience (Azizi et al., 2012). Information sharing and information processing between accountants and others in the same accounting information system is important (Daoud & Triki, 2013). In addition to communication skills, users of accounting information systems are required to have skills in information technology because currently, organizations have applied information technology in their operations. Technology skills will help users of accounting information systems effectively use information technology applications, especially providing high quality information for decision making (Sajady et al., 2008). They are not only responsible for providing information upon request but also need to know how to present and explain the information provided, so an understanding of the operation of information systems is essential (Daoud and Triki, 2013).

Lutfi et al. (2016) researched the influence of technological, organizational and environmental factors on accounting information systems in Jordanian small and medium-sized enterprises, showing that a group of organizational factors (availability) organizational readiness, commitment or management support) have a positive impact on the use of accounting information systems. In this study, the level of involvement of managers and understanding of the importance of accounting information systems will increase the ability of businesses to use accounting information systems. Besides, the research also shows that manager support is an important factor in deciding to use accounting information system. From there, it can be seen that the factor of manager support is important in relation to the effectiveness of the accounting information system.

In the context of Vietnam, some studies on factors affecting the effectiveness of accounting information systems such as: Nguyen Huu Hoang Tho (2012) with the topic of factors affecting successful implementation resource planning (ERP) system in Vietnam, has shown the influence of training factors, system quality and information quality on successful ERP implementation. Among them, the training factor has the greatest influence. Research also shows that the attitude to using ERP affects the net benefits of businesses. Vu Thi Thanh Binh (2020) with research on factors affecting the quality of accounting information systems at small and medium-sized enterprises in Hanoi City, shows that the two most notable factors are information technology and the participation of administrators have the strongest influence on the quality of accounting information systems. Luong Duc Thuan (2019) with research evaluating a number of factors affecting the quality of accounting information systems - evidence from Vietnam, has identified factors affecting the quality of accounting information systems, including: the participation of accounting information system users, external experts and organizational structures. Based on a combination of qualitative and quantitative research methods, the author tests the hypothesis by multiple linear regression analysis showing that there is only the factor of user participation in the accounting information system and the structure of the system. Organizations have an impact on the quality of accounting information system and the level of impact is almost the same.

III. Research Methodology

The research chooses qualitative research methods combined with quantitative research, in which quantitative research is mainly.

Qualitative research is conducted by two methods: synthesis, theoretical analysis and expert interview method.The method of synthesis and theoretical analysis starts from the idea of researches. After building a preliminary research model, the research team collected information from research subjects through interviews. To save interview time, easily control interview content, and easily synthesize and analyze data, the research team chose a semi-structured interview method. This method is based on a pre-designed list of questions to clearly identify the issues that need to be collected.To achieve this goal, the research team conducted interviews with the following target groups: (1) Experts in accounting information systems in businesses and garment technology; (2) leaders and staff of the information technology/information systems department, finance and accounting department staff (chief accountants, accountants) of garment enterprises in Thai Nguyen Province.Based on interview data converted from audio recordings and directly recorded data, the research team conducted checks and comparisons. The data were rearranged and processed on Microsoft Word.

Quantitative research was conducted based on a set of data collected from the survey process through survey questionnaires sent to garment enterprises in Thai Nguyen Province. Collected data is processed and analyzed by SPSS 20 software to evaluate the current status of accounting information system quality and influencing factors, determining the level of influence of factors on system quality. accounting information and testing research hypotheses.During the research process, the research team used a convenient random sampling method to collect data. Data was collected through a survey designed as a 5-level Likert scale.

IV. Research hypothesses and research Model

From the overview of the above studies on factor impacting the quality of accounting information system, it can be seen that the factors impacting the quality of accounting information system are quite diverse but the studies have not yet been concluded which factors have strongest impact on the quality of accounting information system. At the same time, studies in garment enterprises in Thai Nguyen Province with this topic are limited in recent years. Therefore, the article presents the following research hypotheses:

H_1: Management Supporting has a positive impact on the quality of accounting information system in in garment enterprises in Thai Nguyen Province

H_2: Management Knowledge has a positive impact on the quality of accounting information system in in garment enterprises in Thai Nguyen Province

H_3: Information technology Infrastructure has a positive impact on the quality of accounting information system in in garment enterprises in Thai Nguyen Province

H_4: Accountants Knowledgehas a positive impact on the quality of accounting information system in in garment enterprises in Thai Nguyen Province

This paper studies the factors of the quality of accounting information system. Research model is shown in Fig.1

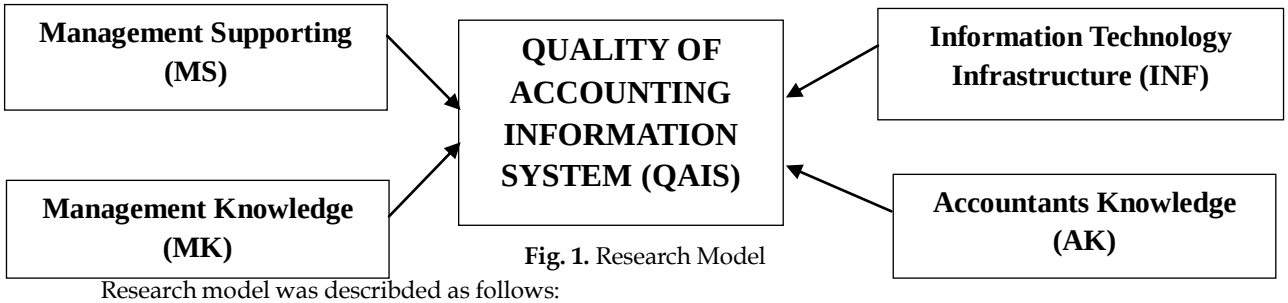

Fig. 1. Research Model

Research model was describded as follows:

$$QAIS = \beta_0 + \beta_1 MS_i + \beta_2 MK_i + \beta_3 INF_i + \beta_4 AK_i + €$$

Of which:

QAIS: Quality of accounting information system

MS_i: Management Supporting of firm i

MK_i: Management Knowledge of firm i

INF_i: Information Technology Infrastructure of firm i

AK_i: Accountants Knowledge of firm i

V. Results and Dicussion

5.1. Testing the reliability of the scale

The analysis results show that the factors MS, MK, INF, AK and QAIS are all reliable with the initial observed variables (Cronbach's Alpha coefficients are greater than 0.6 and the smallest correlation coefficients are greater than0.3). Detailed results are shown in the Table 1 below:

Table 1: Testing the reliability of the scale

Variables	Cronbach's Alpha	Items deleted
MS	.827	-
MK	.861	-
INF	.855	-
AK	.754	-
QAIS	.906	-

Source: Data processing results of author

5.2. Results of explore factor analysis

Factor analysis indicates the analysis results are appropriate when KMO coefficients are greater than 0.5; total analytical variance is greater than 50%.The results of explore factor analysis analysis for the independent variables (Table 2) show that:

Table 2: Results from explore factors analysis of for the independent variables

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.821
Bartlett's Test of Sphericity	Approx. Chi-Square	1488.246
	df	91
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.746	41.041	41.041	5.746	41.041	41.041	3.364	24.026	24.026
2	1.705	12.176	53.216	1.705	12.176	53.216	2.577	18.404	42.430
3	1.581	11.294	64.510	1.581	11.294	64.510	2.476	17.685	60.116
4	1.083	7.737	72.247	1.083	7.737	72.247	1.698	12.131	72.247
5	.788	5.626	77.873						
6	.561	4.004	81.878						
7	.523	3.733	85.611						
8	.457	3.263	88.874						
9	.387	2.766	91.640						
10	.343	2.448	94.088						
11	.256	1.827	95.915						
12	.226	1.615	97.530						
13	.182	1.298	98.828						
14	.164	1.172	100.000						

Source: Data processing results of author

The results of explore factor analysis analysis for the dependent variable (Table 3) show that:

Table 3: Results from explore factors analysis of for the dependent variables

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.855
Bartlett's Test of Sphericity	Approx. Chi-Square	918.232
	df	21
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.522	64.606	64.606	4.522	64.606	64.606
2	.833	11.894	76.501			
3	.488	6.976	83.477			
4	.394	5.626	89.103			
5	.327	4.676	93.779			
6	.279	3.991	97.770			
7	.156	2.230	100.000			

Source: Data processing results of author

5.3. Descriptive Statistics

Through the statistical description table, the authors assess the status of the influence of factors on the quality of accountinginformation systems as well as the performance of firms.

Table 4: Descriptive Statistics

Variables	N	Mean	Std
MS	205	3.4171	.75437

MK	205	3.2068	.73040
INF	205	3.3106	.84825
AK	205	3.4683	.78604
QAIS	205	3.3951	.69287

Source: Data processing results of author

5.4. Testing the Model fit

Data analysis results show that the adjusted R2 Square is 52.9% (Table 5) which means that the independent variables in the model (MS, MK, INF, AK) explains 52.9% of the change in the dependent variable (QAIS), the remaining is explained by other factors. not considered in the model.

Table 5: Results from test the Model fit

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.734[a]	.538	.529	.47551	1.760

a. Predictors: (Constant), MS, MK, INF, AK

b. Dependent Variable: QAIS

Source: Data processing results of author

The author performed an F-test on the appropriateness of the general linear regression model. This test shows whether the dependent variable is linearly correlated with the independent variables.

Hypothesis H0: $\beta1 = \beta2 = \beta3 = \beta4 = 0$

If the hypothesis H0 is rejected, it is concluded that the independent variables in the model can explain the change in the dependent variable, which means that the built model is suitable for the data set of variables.

Table 6: Results of ANOVA analysis

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	52.713	4	13.178	58.284	.000[b]
	Residual	45.221	200	.226		
	Total	97.934	204			

a. Dependent Variable: QAIS

b. Predictors: (Constant), MS, MK, INF, AK

Source: Data processing results of author

The research results in Table 6 show that the F-test is statistically significant with the Sig value. = 0.000 < 0.05. This shows that the built regression model is suitable for the collected data set and the variables included in the model are all statistically significant at the 5% significance level, so the hypothesis H0 is rejected. The independent variables in the model are linearly correlated with the dependent variable, or in other words, the independent variables can explain the change in the dependent variable.

5.5. Testing of Multiple Linear Regression

Table 7 shows that independent variables (MS, MK, INF, AK) all have the same influence on quality of accounting information system in garment enterprises in Thai Nguyen Province, with significance level Sig. very small (< 0.05). Besides, the variance magnification factor VIF is low (< 2), proving that multicollinearity does not occur with the independent variables.

Table 7: Results from Testing of Multiple Linear Regression

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.524	.196		2.665	.008		
	MS	.116	.054	.126	2.133	.034	.662	1.509
	MK	.332	.056	.349	5.969	.000	.674	1.485

	AK	.169	.049	.192	3.453	.001	.745	1.342
	INF	.249	.045	.305	5.590	.000	.774	1.292

Source: Data processing results of author

Therefore, hypotheses H1, H2, H3, H4 are all accepted. The regression equation has the following form:

QAIS = 0,126MS + 0,349MK + 0,192AK + 0,305INF

To compare the influence of factors on the quality of accounting information system in garment enterprises in Thai Nguyen Province, the research team based on the standardized β coefficient. Any factor with a larger standardized β coefficient means that factor has a stronger influence on the dependent variable. According to Table 7, among the four factors affecting the quality of accounting information system in garment enterprises in Thai Nguyen Province, the factor of manager knowledge (KQL) has the strongest influence on the quality of the accounting information system with coefficient β = 0.349; Next is the factor of information technology infrastructure with coefficient β= 0.305; The accountant knowledge factor has the third strongest influence with coefficient β = 0.192 and the managerment support factor has the lowest influence with coefficient β = 0.126.

VI. Recommendations

From the research results above, the author make the following suggestions to improve the quality of accounting information system for garment firms ofThai Nguyen Province, Vietnam as follows:

*Firstly, training and improving knowledge for business managers.*Managers are the people who best understand the business operations of the garment enterprise, they need to use accounting knowledge to identify information requirements. Managers of garment firms also need to regularly update documents related to accounting and auditing standards, and have knowledge of accounting information system. Managers need to actively participate and support the process of choosing information technology and accounting information systems that suit the needs of the business. Managers need to increase their responsibility in making investment reviews in information technology and accounting information systems.

Secondly, focus on investing in information technology infrastructure. Managers need support in terms of resources (funds, equipment, etc.) to develop the business's information technology; provide all-round assistance to the information technology department and users of the accounting information system.

Thirdly, training and improving knowledge for accountants. Accountants need to regularly update knowledge and regulations on current financial and accounting regimes related to businesses, especially in specific businesses such as garment businesses in Thai Nguyen Province. In addition, accountants at garment enterprises in Thai Nguyen Province need to clearly understand the functions of the accounting information system, how to operate the accounting information system (such as how to enter data, process data, data extraction, data storage, system control, cycle control, etc.) to provide complete, reliable and timely financial information; assist managers in considering and making relevant economic decisions. Users of accounting information systems need to be skilled in using computers and be proficient in the use of work-related computer applications. They need to maintain a positive attitude in learning and improving their IT skills to effectively use information technology applications in accounting information systems. They also need to show a positive attitude and be willing to accept changes in the applications of information technology and accounting information systems to suit the business activities of the enterprises.

Fourth, garment firms need to increase management support. Managers need to actively participate and support the process of choosing information technology and accounting information systems that suit the needs of the business. Managers need to increase their responsibility in making approvals and investment decisions in information technology and accounting information systems. Managers need to provide appropriate financial resources for the training process, improving the level of information technology and application of accounting information system; contact businesses providing information technology and accounting information system software solutions (especially information technology and accounting software providers for businesses) to open training classes, updating and guiding information technology knowledge for users of accounting information system in businesses.

References

[1.] Azizi, N. M., Salleh, H. & Mustafa, N. K. F. (2012) , 'People Critical Success Factors (CSFs) in Information Technology/Information System (IT/IS) Implementation', *Journal Design and Built*, 5, 1-17.

[2.] Daoud, H & Triki, M. (2013), 'Accounting Information Systems in an ERP Enviorment and Tunisian Firm Performance', *The International Journal of Digital Accounting Research*, 13, 1-35.

[3.] De Guinea, A. O., Kelley, H. & Hunter, M. G. (2005), 'Information Systems Effectiveness in Small Business: Extending a Singapore Model in Canada', Journal of Global Information Management, 13(3), 55-70.

[4.] 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.

[5.] Gelinas, U. J., Richard, B. D., & Wheeler, P. R. (2012), *Accounting Information System*, South-Western Cengage Learning, Mason, USA.

[6.] Ismail, N. A. (2009), 'Factors Influencing AIS effectiveness among Manufacturing SMEs: Evidence from Malaysia', *The Electronic Journal on Information Systems in Developing Countries*, 38, 1-19.

[7.] Laudon, K. C. & Jane, P. L. (2015), *Management Information Systems: Managing the Digital Firm Plus MyMISLab with Pearson eText-Acess Card Package*, Prentice Hall Press.

[8.] Luong Duc Thua (2019), 'Assessing some factors affecting the quality of accounting information systems - Evidence from Vietnam', Proceedings of the Conference on Accounting Information Systems - 2019, University of EconomicsHo Chi Minh City , Ho Chi Minh City, 154-174.

[9.] Medina, J. M., Jiménez, K. M. A. & Asbrego, D. (2014), 'Training in Accounting Information Systems for Users' Satisfaction and Decision Making', *International Journal of Business and Social Science*, 5(7), 134-144.

[10.] Nguyen Huu Hoang Tho (2012), 'Factors affecting the successful implementation of a resource planning (ERP) system in Vietnam: An improved application of the elements of a successful information system model', Journal of Science , Hue University, 72B(3), 343-353.

[11.] Nusa, I. B. S (2015), 'Influence of organizational culture and structure on quality of accounting information systems', *International Journal of Scientific & technology research*, 4(5), tr. 257-267.

[12.] Petter, S., DeLone, W. & McLean, E. (2013), 'Information Systems Success: The Quest for the Independent Variables', *Journal of Management Information Systems*, 29(4), 7-62.

[13.] Rommey, M. B. & Steinbart, P. J. (2017), *Accounting Information Systems 14E*, Pearson Education, USA.

[14.] Sajady, H., Dasgir, M. & Nejad, H. H. (2008), 'Evaluating of the Effectiveness of Accounting Information Systems', *International Journal of Information Science and Technology*, 6(2), 49-59.

[15.] Syaifullah, M. (2014), 'Influence organizational commitment on the quaily of accounting information systems', *International Journal of scientific & technology research*, 3(9), tr. 299-305.

[16.] Tóth, Z.(2012), 'The Current Role of Accounting Information Systems', *Journal of Economic Literature*, 8 (1), 91-95.

[17.] Vu Thi Thanh Binh (2020), "Research on factors affecting the quality of accounting information systems at small and medium-sized enterprises in Hanoi city", Doctoral thesis, Thuongmai University.