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# THE IMPACTING OF THE ACCOUNTING ENVIRONMENT AFFECTING THE QUALITY OF THE ACCOUNTING INFORMATION

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**ABSTRACT:** *Nowadays, enterprise accounting plays a very important role in providing accounting information for the management and operation of enterprises, which is the basis for making economic decisions and managing the business owners. Besides, accounting information also supplies for the stakeholders such as state management agencies, business partners, investors, etc. Understandably, the information and accounting data presented in the financial statements must be clear and easy to understand for the users. The user here is understood to be a person with an understanding of business, economics, finance, accounting at an average level. Information on complex issues in the financial statements must be explained in the explanatory note. The objective of the study is to find out the factors affecting the quality of accounting information. The study results showed that there were 200 persons who are the accountants in Vietnam who interviewed and answered about 13 questions. Data collected from March 2017 to December 2017 for accountants in Vietnam. The paper had been analyzed KMO test, Cronbach's Alpha and the result of KMO analysis which used for multiple regression analysis. Accountants' responses measured through an adapted questionnaire on a 5-point Likert scale (Conventions: 1: Completely disagree, 2: Disagree, 3: Normal; 4: Agree; 5: completely agree). Hard copy and online questionnaire distributed among 1.000 accountants in Vietnam. The research result showed that three components affecting the quality of the accounting information in Vietnam with significance level 5 percent. The research results processed from SPSS 20.0 software.*

**KEYWORDS**: Accounting, Accounting Environment, Accounting Information, Quality, HCE

## INTRODUCTION

At present, the world is rapidly developing the revolution with the 4.0 technology platform. This is a great opportunity for Vietnam to accelerate industrialization and modernization. The problem is that Vietnam is addressing low-level labor-productivity challenges in order to be ready for a new phase on the basis of industrial science 4.0. After three major Industrial Revolutions in history, the 4th Industrial Revolution (Industrial 4.0) has enabled the development of computer, hardware, software as well as global networks, creating a premise. This shows that we know the emergence of a comprehensive the establishment of accounting information is very important. In order to create the accounting information quality, it is necessary to go through the entire accounting process from initial information gathering to processing and analyzing and providing accounting information.

Besides, acquisition of accounting information is the initial recognition of economic and financial operations arising through the method of accounting documents (manifestations are accounting records and the accounting voucher rotation). At this stage, all derivative transactions are initially recognized in the documents in a fair, reasonable and adequate manner as a basis for the subsequent stages of the accounting process. The processing of



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accounting information, which is through initial information, will continue to be classified, sorted, processed and systematized through accounting methods such as accounting account methods and other methods. Method of consolidation is aiming to obtain appropriate information for recognition in accounting books and related reports. At this stage, financial and economic operations have been properly handled and recorded, but information has not been provided comprehensively yet, which must be continued in the next stage.

In addition, analyzing and providing information from the recorded accounting information will continue to be analyzed through vertical analysis methods, horizontal analysis, absolute numbers, relative numbers, etc. To obtain the data, the information meets the requirements of the subjects involved. For example, from the Balance Sheet on the Balance Sheet through analytical methods, it is only for the reader of the financial statement to know the absolute amount between the pre-existing balance and the preceding balance, the increase/ decrease of the cash balance will know the cause change the balance of money...

Finally, evaluate the quality of accounting information: to assess the quality of accounting information provided according to the specific needs and objectives, as well as based on the different accounting reports to assess the quality of accounting information. As through the financial statement, the asset situation, source of asset formation; business results and the firm level of cash flow. Specifically: the Financial Statements will provide additional illustrative and detailed information on the balance sheet, business results and cash flow statements as well as explanations of policy compliance, accounting and other information related to businesses. The management reports will help the owner to know the future plans, to control costs in the production process or for the selection of short-term business plans, pricing products, estimates of financial reports... The management reports have no certain stereotypes, but mainly due to the accounting of enterprises based on requests to provide information, management objectives to produce these reports. Facing this situation, the researcher had chosen topic "***The impacting of the accounting environment affecting the quality of the accounting information***" as a paper. This paper helps policy makers who apply them for improving policy on the management of the accounting information in Vietnam.

## LITERATURE REVIEW

**Human resource management** (HRM or HR) is the management of human resources. Commonly referred to as the HR Department, it is designed to maximize employee performance in service of an employer's strategic objectives. HR is primarily concerned with the management of people within organizations, focusing on policies and on systems. HR departments are responsible for overseeing employee-benefits design, employee recruitment, training and development, performance appraisal, and rewarding (e.g., managing pay and benefit systems). HR also concerns itself with organizational change and industrial relations, that is, the balancing of organizational practices with requirements arising from collective bargaining and from governmental laws. HR is a product of the human relations movement of the early 20th century, when researchers began documenting ways of creating business value through the strategic management of the workforce. It was initially dominated by transactional work, such as payroll and benefits administration, but due to globalization, company consolidation, technological advances, and further research, HR as of 2015 focuses on strategic initiatives like mergers and acquisitions, talent management, succession planning, industrial and labor relations, and diversity and inclusion. Human resource quality play an


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important part of developing and making a company or organization at the beginning or making a success at the end, due to the labor provided by employees. Human resources are intended to show how to have better employment relations in the workforce. Also, Human resources are to bring out the best work ethic of the employees and therefore making a move to a better working environment. **By Johnason, P. (2009).**

**Data quality** refers to the condition of a set of values of qualitative or quantitative variables. There are many definitions of data quality but data is generally considered high quality if it is "fit for [its] intended uses in operations, decision making and planning". Alternatively, data is deemed of high quality if it correctly represents the real-world construct to which it refers. Furthermore, apart from these definitions, as data volume increases, the question of internal data consistency becomes significant, regardless of fitness for use for any particular external purpose. People's views on data quality can often be in disagreement, even when discussing the same set of data used for the same purpose. Data cleansing may be required in order to ensure data quality**. By French, Carl (1996). Data processing** is, generally, "the collection and manipulation of items of data to produce meaningful information". In this sense it can be considered a subset of information processing, "the change (processing) of information in any manner detectable by an observer." The term Data Processing (DP) has also been used previously to refer to a department within an organization responsible for the operation of data processing applications. **By Redman, Thomas C. (30 December 2013).**

**Information technology infrastructure**: It is defined broadly as a set of information technology (IT) components that are the foundation of an IT service: typically, physical components (computer and networking hardware and facilities), but also various software and network components. The fields of IT management and IT service management rely on IT infrastructure, and the ITIL (**ITIL**, formally an acronym for **Information Technology Infrastructure Library**, is a set of detailed practices for IT service management (ITSM) that focuses on aligning IT services with the needs of business) framework was developed as a set of best practices with regard to IT infrastructure. Besides, enterprise IT infrastructure typically refers to components required for the existence, operation and management of an enterprise IT environment. It can be internal to an organization and deployed within owned facilities, or deployed within a cloud computing system, or a combination thereof. **By Laan, Sjaak (2011).**

**The quality of the accounting information:** It is the process of identifying, measuring and communicating economic information to permit informed judgments and decisions by users of the information. Data quality is a crucial issue for most organizations and local governments are not an exception. It is almost axiomatic that accrual accounting is able to produce better quality information for decision makers and accountability mechanisms under the financial management and accountability act 1997 (FMA Act) and the Common wealth Authorities and Companies Act 1997 agencies and other federal government bodies are required to prepare annual financial statements to be audited by the Auditor-General, who is required to report each year to the relevant Minister(s) on whether the entity's financial statements have been presented fairly in accordance with Accounting Standards and other mandatory professional reporting requirements. In order for accounting information to be useful, it must contain certain qualities and meet certain standards. The Financial Accounting Standards Advisory Board (FASB) establishes and maintains generally accepted accounting principles (GAAP) that set forth the qualities and standards of accounting information. Unless a company's accounting records meet GAAP standards, an auditor cannot certify the company's records. **By Kigoma B. (2003)**.



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## METHODS OF RESEARCH

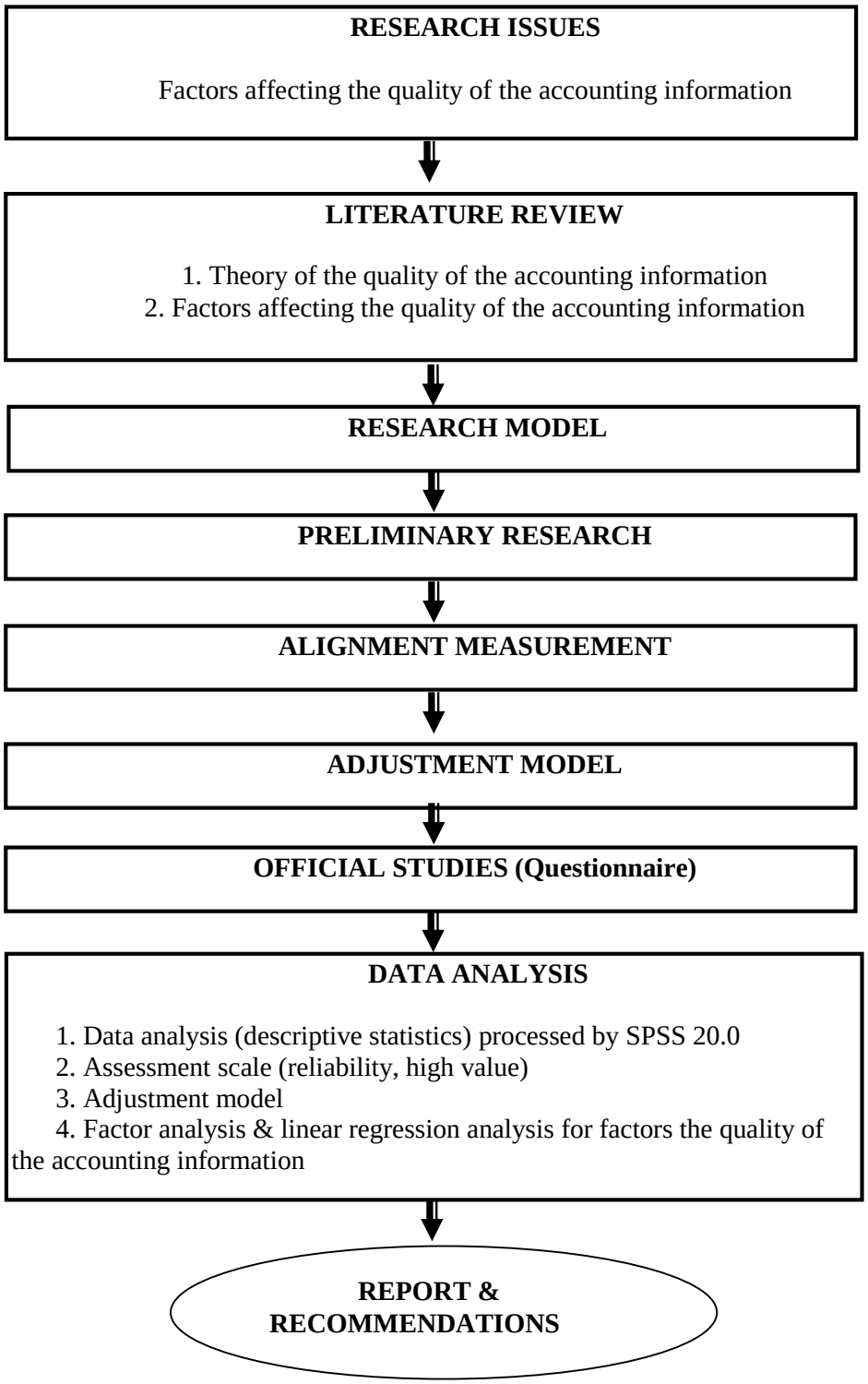


**Figure 1: Research processing for factors affecting the quality of the accounting information**



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In this research, the observations can be done while letting the observing person who the accountants in Vietnam. Observations can also be made in natural settings as well as in artificially created environment. After preliminary investigations, formal research is done by using quantitative methods questionnaire survey of 200 accountants in Vietnam who related and answered nearly 13 questions. The reason tested measurement models, model and test research hypotheses. Data collected were tested by the reliability index (excluding variables with correlation coefficients lower < 0.30 and variable coefficient Cronbach's alpha < 0.60), factor analysis explored (remove the variable low load factor < 0.50). The hypothesis was tested through multiple regression analysis with linear Enter method. Conventions: 1: Completely disagree, 2: Disagree, 3: Normal; 4: Agree; 5: completely agree. Data collected were tested by the reliability index (excluding variables with correlation coefficients lower < 0.30 and variable coefficient Cronbach's alpha < 0.60), factor analysis explored (remove the variable low load factor < 0.50). The hypothesis was tested through multiple regression analysis with linear Enter method.

$$Y = \beta_0 + \beta_1 X1 + \beta_2 X2 + \beta_3 X3$$

Y: the quality of the accounting information.

$\beta_0$ - $\beta_3$: Regression coefficients.

X1 – X3: Factors affecting the quality of the accounting information. Independent variables are following: Human resource management (X1), Data quality and process (X2), Information technology infrastructure (X3).

Three factors have positive relation to the quality of the accounting information in Vietnam.

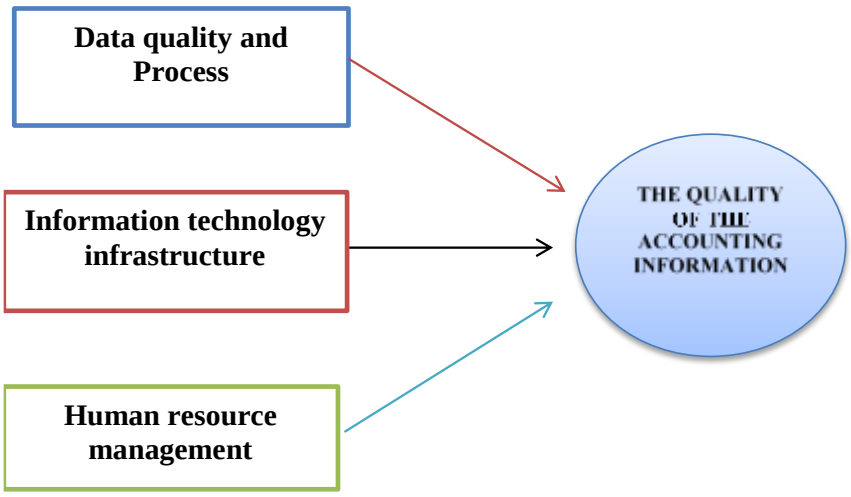


**Figure 2: Research model for the various factors affecting the quality of the accounting information**


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Hypothesis: three factors have positive relation to the quality of the accounting information in Vietnam.

## RESEARCH RESULTS

**Table 1: Cronbach's Alpha test for factors affecting the quality of the accounting information**

| Code | Human resource management (HRM) | Cronbach's Alpha |
|---|---|---|
| HRM 1 | Human resource control policy, include a clear job description of the staff; description and system manual; and skills and knowledge of the participants is the factor affecting the quality of accounting information | 0.875 |
| HRM 2 | The quality of human resource training and development planning are the task of business priorities affecting the quality of accounting information | |
| HRM 3 | Vision, commitment and support of senior management of enterprises (referred to as Management Board) affecting the quality of accounting information | |
| HRM 4 | Use policy, reward, discipline and training staff. It is very important as it is the foundation for ensuring and maintaining the quality of our employees affecting the quality of accounting information. | |
| **Code** | **Data quality and process (DQP)** | **Cronbach's Alpha** |
| DQP1 | Business process and information processing, business control and information processing are appropriate and meet the characteristics of operations and management needs, provide information | 0.936 |
| DQP2 | Quality data collected and stored: timely, accurate, complete and consistent user information needs | |
| DQP3 | Strategy and policy on the use and quality control of information systems, control of data and technical safety | |
| **Code** | **Information technology infrastructure (ITI)** | **Cronbach's Alpha** |
| ITI1 | Process and software needs to meet the needs of users, control the process of using the system and data, convenient for users. | 0.864 |
| ITI2 | Software has a convenient interface to use; allows easy addition of accounts and accounting methods required by the user; easy to upgrade when new versions are available; and the stability of the software | |
| ITI3 | Quality of equipment, infrastructure - referred to as Infrastructure (used phase analysis): the suitability and stability of the machine system, enterprise network | |
| **Code** | **Quality of accounting information (QAI)** | **Cronbach's Alpha** |
| QAI1 | Relevance in accounting information is necessary for predictive and feedback value | 0.685 |
| QAI2 | The quality of timeliness requires both recording the financial transaction in the appropriate accounting period and generating | |


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| | | |
|---|---|---|
| | accounting reports as soon as all data are posted | |
| QAI3 | Accounting information is reliable and useful in decision making, it must be recorded consistently, meaning the same accounting treatment must be applied at all times to a given type of accounting data | |

(Source: The researcher's collecting data and SPSS)

Table 1 showed that all of variables in Human resource management (HRM), Data quality and process (DQP), Information technology infrastructure (ITI) surveyed Corrected Item-Total Correlation greater than 0.3 and Cronbach's Alpha if Item deleted greater than 0.6 and Cronbach's Alpha is very reliability. Besides, table 1 showed that all of variables in Quality of accounting information **(QAI)** surveyed Corrected Item-Total Correlation greater than 0.3 and Cronbach's Alpha if Item deleted greater than 0.6 and Cronbach's Alpha is very reliability. Such observations make it eligible for the survey variables after testing scale. This showed that data was suitable and reliability for researching.

**Table 2: KMO and Bartlett's Test for factors of the quality of the accounting information**

**KMO and Bartlett's Test**

| | | |
|---|---|---|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .732 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 1255.001 |
| | df | 45 |
| | Sig. | .000 |

**Total Variance Explained**

| Com. | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings[a] |
|---|---|---|---|---|---|---|---|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total |
| 1 | 3.417 | 34.171 | 34.171 | 3.417 | 34.171 | 34.171 | 2.933 |
| 2 | 2.887 | 28.868 | 63.039 | 2.887 | 28.868 | 63.039 | 2.967 |
| 3 | 1.716 | 17.164 | 80.203 | 1.716 | 17.164 | 80.203 | 2.649 |
| 4 | .462 | 4.624 | 84.827 | | | | |
| 5 | .390 | 3.899 | 88.725 | | | | |
| 6 | .347 | 3.469 | 92.194 | | | | |
| 7 | .282 | 2.816 | 95.010 | | | | |
| 8 | .259 | 2.591 | 97.601 | | | | |
| 9 | .163 | 1.630 | 99.231 | | | | |
| 10 | .077 | .769 | 100.000 | | | | |

(Source: The researcher's collecting data and SPSS)

Table 2 showed that the results showed that KMO coefficient had: $0.5 \leq KMO \leq 1$ (KMO: Kaiser-Meyer-Olkin). KMO is an index used to examine the appropriateness of factor analysis. KMO value significantly larger factor analysis is appropriate. KMO coefficient is 0.732 and the



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level of significance (Sig) is 0.000. Exploratory Factor Analysis (EFA) is consistent with survey data of 200 accountants in Vietnam but 186 accountants processed by SPSS 20.0.

**Table 3: Structure Matrix for factors affecting the quality of the accounting information**

| Code | Component | | |
|---|---|---|---|
| | 1 | 2 | 3 |
| HRM 3 | .899 | | |
| HRM 2 | .864 | | |
| HRM 4 | .839 | | |
| HRM 1 | .811 | | |
| DQP1 | | .970 | |
| DQP2 | | .931 | |
| DQP3 | | .921 | |
| ITI2 | | | .914 |
| ITI3 | | | .875 |
| ITI1 | | | .871 |

(Source: The researcher's collecting data and SPSS)

Table 3 showed that there are three factors of the quality of the accounting information. In addition, table 3 showed that there are three factors: Human resource management (X1), Data quality and process (X2), Information technology infrastructure (X3).

**Table 4: KMO and Bartlett's Test for the quality of the accounting information (Y)**

**KMO and Bartlett's Test**

| | | |
|---|---|---|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .649 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 94.594 |
| | df | 3 |
| | Sig. | .000 |

**Total Variance Explained**

| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | |
|---|---|---|---|---|---|---|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 1.850 | 61.674 | 61.674 | 1.850 | 61.674 | 61.674 |
| 2 | .664 | 22.149 | 83.823 | | | |
| 3 | .485 | 16.177 | 100.000 | | | |

Extraction Method: Principal Component Analysis.

Component Matrix

| Code | Component |
|---|---|
| | 1 |
| QAI3 | .829 |
| QAI2 | .793 |
| QAI1 | .731 |

(Source: The researcher's collecting data and SPSS)



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Table 4 showed that the results showed that KMO coefficient had: KMO = 0.649 (KMO: Kaiser-Meyer-Olkin). KMO coefficient of the quality of the accounting information is 0.649 and the level of significance (Sig) is 0.000. Extraction Sums of Squared Loadings is 61.674 percent (> 60 percent).

**Table 5: Factors affecting the quality of the accounting information**

**Model Summary[b]**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|---|---|---|---|---|---|
| 1 | .654[a] | .427 | .418 | .40962 | 1.355 |

**ANOVA[a]**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 22.796 | 3 | 7.599 | 45.287 | .000[b] |
| | Residual | 30.537 | 182 | .168 | | |
| | Total | 53.333 | 185 | | | |

**Coefficients[a]**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
|---|---|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | | Tolerance | VIF |
| 1 | (Constant) | 1.753 | .142 | | 12.373 | .000 | | |
| | X1 | .286 | .034 | .470 | 8.355 | .000 | .993 | 1.007 |
| | X2 | .154 | .024 | .386 | 6.493 | .000 | .890 | 1.124 |
| | X3 | .087 | .027 | .193 | 3.261 | .001 | .896 | 1.117 |

a. Dependent Variable: Y

(Source: The researcher's collecting data and SPSS)

Table 5 showed that column t > 2 (smaller significance level 0.05) and statistically significant data to explain the variation of the quality of the accounting information in Vietnam, Adjusted R Square is 0.418 (Adj $R^2$ = 41.8 %). Besides, the regression coefficient is positive. This means that the impact of the independent variables in the same direction with the quality of the accounting information with the level of significance (Sig < 0.05) is 0.00.

## CONCLUSIONS AND RECOMMENDATIONS

### Conclusions

Quality accounting information is too significantly to improve decision-making better and directly increase profits for the organization, but the quality accounting information is not automatically guarantee any decision made is better, because the decision makers are human beings, where no man is perfect. There are criteria for quality accounting information is the information that should be accurate, timely, relevant and complete and the quality of accounting information that is accurate, complete, and concise. Information is the output



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generated by the information systems used. Moreover, the quality of accounting information obtained from the application of accounting information system quality. The purpose of this study was to determine the factors influence the quality of accounting information. The unit analysis in this study is human resource management (X1), data quality and process (X2), information technology infrastructure (X3). The study results showed that there were 200 accountants in Vietnam who interviewed and answered about 13 questions but 186 persons processed, lack of 14 samples. Data collected from March 2017 to December 2017. The paper had been analyzed KMO test, Cronbach's Alpha and the result of KMO analysis which used for multiple regression analysis. Besides, there are three factors: Human resource management (X1), data quality and process (X2), information technology infrastructure (X3) that affecting the quality of accounting information with the level of significance (Sig < 0.05) is 0.00.

**Recommendations**

**First of all for improving the human resource management**: The modernization and industrialization and modernization of the country requires a high level of human resources of accounting to operate and access modern technology, skills, means and modern methods and high labor productivity. Many new fields, new professions with new technology, require trained and qualified workers in accounting field. International economic integration gives Vietnam more opportunities to access capital and technology, management science, market expansion, participation in the international division of labor and, consequently, the creation of high quality jobs for accounting.

Besides, the Government has supportive policies to have high qualified labor force to meet the requirements of the economy, it is necessary to strengthen and renovate the education system, combine training with direct use, quickly develop accounting human resources, high, especially the financial experts, accounting and auditing industry. Transforming the education model into an open education model - learning social model with lifelong learning system, continuous training, transferring between disciplines and educational levels. The Government continues to strongly develop the professional education system, to rapidly increase the scale and make fundamental changes in the quality of teaching and learning and to promote the socialization and diversification of vocational training forms for the accounting quality.

**Secondly for improving the Data quality and process**: The enterprises continues to strengthen the state management of accounting and auditing on the basis of renewing the mechanism of operation and strengthening the state management and accounting agencies of the Ministry of Finance. Besides, the enterprises continues to improve the quality of occupational management in accordance with international practice, with close coordination between state management agencies and professional organizations; to set up the State inspection and supervision mechanism and system for the quality of accounting work and information audit on financial reports of units, enterprises and organizations, thereby enhancing the supervision of financial reports' quality following: (1) Honesty: The accounting information and data must be recorded and reported on the basis of sufficient, objective and truthful evidence on the current status, nature and content of business transactions. (2) Objective: Accounting information and data must be recorded and reported accurately to the reality, not distorted, not distorted. (3) Full: Any economic and financial transactions arising in the accounting period must be recorded and reported in full and not omitted. (4) Timely: Accounting information and data must be recorded and reported promptly, on time or before the prescribed time limit, without delay. (5) Easy to understand:


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The information and accounting data presented in the financial statements must be clear and easy to understand for the users. Information on complex issues in the financial statements must be explained in the explanatory note. (6) Compared: The accounting information and data should be calculated and presented consistently. In case of inconsistencies, it must be explained in the explanatory statement so that the users of the financial statements can compare and evaluate.

**Finally for improving** the **information technology infrastructure**: Enterprises should ensure the safety of the information system in general and the information technology quality in particular, businesses should focus on implementing the following solutions: (1) Enterprises continue to ensure the safety of the protection of information systems from unauthorized access: The penetration of computers by accountants and servers containing illegal accounting software and data can damage the material. Therefore, the protection of the enterprise's data system from illegal access is a positive measure to be implemented from the beginning. (2) Enterprises continue to monitoring of access to the system: In addition to preventing unauthorized access, enterprises must monitor all access to the system and use access logs, which are usually part of a secure operating system module for monitoring, logon time, visitor code, access type, and data type. (3) Enterprises continue to protect the physical intrusion of processing equipment: To reduce the risk of computer equipment loss, or to disclose or destroy information, the control of physical access to the computer system of the enterprise is necessary. (4) Enterprises continue to ensure the use of technology to prevent data destructive behavior: The fact that the risk of data loss is also related to theft or change of data to implement. The security of the data system should also use the corresponding technology to prevent the destruction of data. The security of accounting data storage: Security measures for the storage of accounting data include: storage devices such as hard disks, floppy disks, compact disks, CDs or magnetic tape; Data backup. Enterprises need to plan to prevent and recover data by performing data backup. For important data, it is important to keep it in a safe place, out of the reach of the business. At the same time, enterprises need to install software applications to recover the fastest lost data.

**Recommendations for the next study:** The above-mentioned things, the next study should survey more than 200 accountants and managers of accounting organizations in Vietnam (more than 5.000 managers). This helps the data that is more significant. The study topic is very big area. The next paper should survey more than 13 items in components affecting the quality of accounting information such as macroeconomic and microeconomic policies, organization culture, new laws, Industrial 4.0...

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