Improving the Quality of Accounting Information System
Through the Availability of User's Competence

Sri Dewi Anggadini
Department of Accounting, Faculty of Economics and Business,
Indonesian Computer University, Bandung, Indonesia

Abstract: Accounting information system that is applied is inseparable from the ability of users in this case is the competence of users, consisting of knowledge and skills. The research method using descriptive and verification methods. With a sample of 30 respondents from PT Sawargi Farma. Sampling using purposive sampling. The collection of data through observation, literature and questionnaires. The results showed that the competence of the effect on the quality of accounting information system which means higher competencies possessed by the user, the quality of accounting information system for the better.

Key words: Quality of accounting information systems and user's competence, ability, verification, inseparable, skills, Indonesia

INTRODUCTION

The entire form of organization either business or nonprofit provide accounting information to help stakeholders either from the inside of the company such as a manager or from the outside of the company such as investors, government institutions, banks, etc. for decision making in the economy (Hansen and Mowen, 1995). An accounting information helps the parties outside of the company on making the decisions about investing, evaluating performance, monitoring activity and as the measurement for regulation purposes (regulatory measures) (Hansen and Mowen, 1995).

Hansen and Mowen (1995) said that accounting information system is a system consisting of interrelated manual and computer parts using process such as collecting, recording, summarizing, analyzing (using decision models) and managing data to provide output information to users. Operationally, an AIS uses processes to transform inputs into outputs that satisfy the overall objectives of the system.

James (2011) added specifically that the Accounting Information System (AIS) sub-systems process financial transactions and non-financial transactions that directly affect the processing of financial transactions. For example, changes to customer's names and addresses are processed by the AIS to keep the customer file current. Although, not technically financial transactions, these changes provide vital information for processing future sales to the customer. A financial transaction is an economic event that affects the assets and equities of the organization is reflected in its accounts and is measured in monetary terms: sales of products to customers, purchases of inventory from vendors and cash disbursements and receipts are examples of financial transactions. Every business organization is legally bound to correctly process these types of transactions. Non-financial transactions are events that do not meet the narrow definition of a financial transaction. For example, adding a new supplier of raw materials to the list of valid suppliers is an event that may be processed by the enterprise's information system as a transaction. Important as this information obviously is it is not a financial transaction and the firm has no legal obligation to process it correctly or at all. Financial transactions and non-financial transactions are closely related and are often processed by the same physical system. For example, consider a financial portfolio management system that collects and tracks stock prices (non-financial transactions). When the stocks reach a threshold price, the system places an automatic buy or sell order (financial transaction). Buying high and selling low is not against the law but it is bad for business. Nevertheless, no law requires company management to design optimal buy and sell rules into their system. Once the buy-or-sell order is placed, however, the processing of this financial transaction must comply with legal and professional guidelines.

This phenomenon which related with accounting information system in Indonesia varies greatly as stated by Poernomo (2011) as the chairman of BPK (Audit Board of the Republic of Indonesia) states that LKPP (National Public Procurement Agency) in 2010 got WDP opinion (reasonable opinion with exception) with 4 problems,

among which the fourth there are problems in the implementation of the Asset Inventory and Assessment (IP) of fixed assets, namely: the correction value of IP results is different from the correction of errors in SIMAK BMN (Management Information Systems and State Property Accounting) Rp. 12.95 T of fixed assets with acquisition cost of Rp. 5.34 T at seven KL has not been IPs yet, the IP results of the four KL which is worth Rp. 56.42 has not been accounted and DJKN (Directorate General of State Wealth) has not been able to quantify the benefits of fixed asset, so that, the government cannot perform depreciation on fixed assets until now. BPK also found problems related to the internal control system weaknesses, reported fixed assets in LKPP are not wholly IP, they are different from the results of the IP and not in line with the recording of the items. Similarly, occurred in SOE problems related to accounting information system, stated by Iskan (2012) as the minister of BUMN that the management of several BUMNs has so far been constrained primarily due to the decision-making process in the past, administrative error, incorrect posting accounting and possibly because there are fraud intentions.

The continuity of the information system inseparable from the user running the function of the organization in terms of information systems (George and William, 2014). As the user, an accountant should be involved in designing the accounting information system (Gelinas *et al.*, 2012), so, it requires competence of users in the implementation of information systems (Kassboll *et al.*, 2010) because the user's competence is a factor of success in the information system. Competency, according to Lyle and Spencer (1993) is a basic characteristic of individuals who have a causal relationship with the criteria referenced to effectively measure the performance of the superior position or situation that is supported by motives, talents, self-image and the orientation to always improve the quality of performance. Mcshane and Glinow (2010) revealed that competencies are the skills, knowledge, attitudes and other characteristics which supports excellent performance. Similar case delivered by Robert and Angelo (2010) the concept of competence is understood as a combination of abilities and skills as both received significant attention in management circles today. McLeod and Schell (2007) distinguishes users into two criteria, namely knowledge and skill while Jeffreys (2016) divides competence into three dimensions, namely cognitive, practical and affective. The phenomenon that occurs related to users competence is the weakness of SOE that are triggered by internal factors, one of which is the lack of capacity of human resources, lack of

competencies (knowledge, skills, attitudes) among the employees (Daryono, 2015) as a Commissioner of PT Pupuk Indonesia Holding Company. Another similar statement was delivered by Kuncoro (2014) as the Commissioner of PT Pupuk Indonesia Holding Company that is based on experience proves implementation of information systems at PT KAI often failed both in terms of long implementation time, cost overruns up not incompatible with business requirements and limited quality of human resources. Taufik (2013) as Kapusdiklat Spimnas Engineering Management and Development Policy (TMKP) LAN added, the compilers legislation competence (legal drafter) at the level of legislative and executive, BUMN/BUMD currently still weak, so, often there is disharmony in various policy. Based on the explanation, this study has differences with previous studies that the research model is offered where the variables and dimensions of the proposed refers to the phenomenon and the conditions that occur in SOE. Furthermore, from the phenomenon and previous research, this study will be focused on the research object, namely "Improving The Quality Of Accounting Information System Through The Availability Of User's Competence."

Literature review
Users competencies: Competencies which proposed by Gary (2011) "competencies are demonstrable characteristics of the person that make performance possible. Competency based job analysis means describing the job in terms of measurable, observable, behavioral competencies (knowledge, skills and/or behaviors) that an employee doing that job must exhibit to do job well". Not much different from the opinion of Mcshane and Glinow (2010) that competencies are skills, knowledge, aptitudes and other personal characteristics that lead to superior performance. Similar opinion submitted by Wayne (2010), said that competencies include a broad range of knowledge, skills, traits and behaviors that may be technical in nature, relate to interpersonal skills or are business oriented. Another definition of the competencies according to Jeffrey (1997) is competence is a concept that can be applied to all categories of employee. It defines competence as a combination of skills, knowledge and behaviors that is important for the success of the organization, personal performance and enhanced contribution. User's competence in this research is the ability of a person which includes aspects of knowledge, skills and attitudes appropriate working standards required in carrying out activities of accounting information systems. User's

competence is the competence of the end users of information systems which can not be ignored as an important personnel (McLeod and Schell, 2007).

The quality of accounting information systems: The fundamental role of accounting information systems in an organization is to produce quality accounting information (Susanto, 2013). In addition, the quality of information systems is the key for an organization to achieve success effectively (Bruce, 2006). According to Weber (1999), the quality of system is a set of characteristics that can be seen by users as they interact with the system at a given time (one set of characteristics will be fairly apparent to users after they have berinteraksi with the system for only a short period time). DeLone and McLean (1992, 2003) use the term "success" to show the quality of the information system while Stair and Reynolds (2010) show the quality in terms of user satisfaction. The quality of accounting information system is defined as a form of statements about the conditions in which the accounting information systems can generate accounting information according to the user needs. Quality accounting information obtained from the application of quality accounting information system (Sacer *et al.*, 2006). Next, the quality of the information system developed by DeLone and McLean (1992, 2003) have been used extensively in research in the field of accounting information systems. In the D and MIS (Success Model, 1992), there are 6 variables component of the success of information systems: system quality, information quality, use, user satisfaction, individual impact and organizational impact. These components are not independent variables (independent), variable but rather as mutually dependent (interdependent) of each other. Furthermore, Stair and Reynolds (2010) state that the qualified information system is commonly meets the criteria as a flexible, efficient, accessible and timely.

Framework and hypothesis: User competence is one of the factors which influence the success of information systems (David, 2004). The statement was supported by Laudon and Laudon (2014) that information system can improve overall performance of the business unit's activity depends on the competence of the user. Similar view was expressed by Nancy *et al.* (2010) that the independence, competence and best practices for audit and consulting impact on information systems. Users themselves are the end user to work in processing the information system (George and William, 2014). As a user, accountants can also be called on to participate in the design process of accounting information systems. In fact, users should insist on involved to ensure the design of the new system. To be effective in the design process, the user must know the developed system, the used technique in the system and the techniques used to be developed, a technique that is used to develop systems and technologies that will be used in the new system (Dull *et al.*, 2012). Similar things delivered by TaherBelhaj *et al.* (2014), in his research that this result that the success of any information system hugely depens on the competency levels of its users. In simple terms, user competency entails the set of appropriate features and technical attributes that provide individual's ability to perform a particular task effectively.

Based on the description above that the quality of accounting information system is shown by the implementation of information system and information system success is supported by user-owned competence, so, we can say the user competence affects the quality of accounting the information system. From the description above related to users competence on the quality of accounting information system that has been described previously, the framework in this study can be explained in Fig. 1 as on the following page: based on the framework above, the hypothesis proposed in this study are:
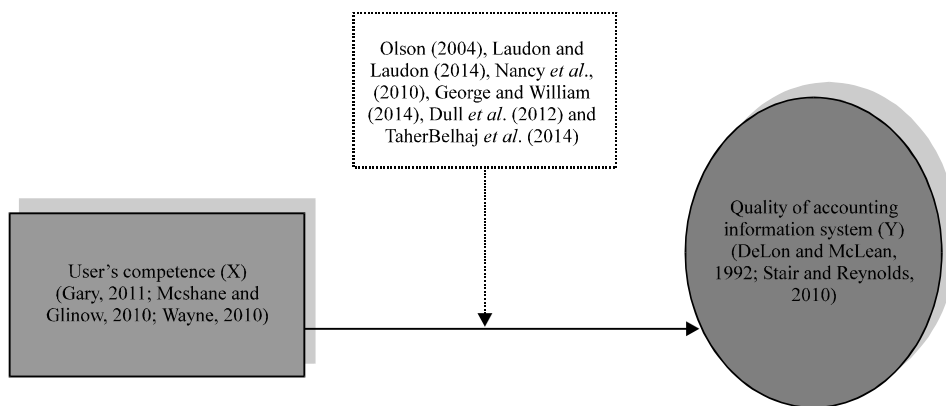

Fig. 1: Quality of accounting information system

- H: user competence influence the quality of accounting information system

MATERIALS AND METHODS

The used method in this research is the verification method (verificative research) and explanatory (explanatory research) or causality (causal study), because this research aims to find out if and how far the factors that are thought to affect a variable in order to test the hypothesis. This research may explain how big the influence on the quality of users competence variable on AIS (causal).

The unit of analysis in this research is PT Sawargi Farma that have implemented computer-based accounting information system in Indonesia, both headquarters and branch offices. Respondents in this study is the branch manager, head of accounting/finance and staff accounting/finance related to accounting information system implemented by the state, the reason for having a role and authority in the implementation of activities related to see the quality of of information system at each unit research. Population target in this study, the collected samples were 30 respondent. In order to simplify the interpretation and hypothesis testing, the collected data will be analyzed using a specific method. The research data was obtained by submitting a list of statements to the respondents through the questionnaire, the answers of the respondents on the statement is a measure that will be tested. To test the hypotheses used SEM PLS analysis was used because the collected samples are below 80 samples.

RESULTS AND DISCUSSION

Based on the analysis of descriptive statistics, explained that the average answers score value of the SOE research samples on the user compentence on the quality of accounting information system was 3.8 at the high category. It means that the accounting information system used has adopted the competency of users that reflect the knowledge and skills possessed the user. Then, 5.2% of SOEs that become the research sample answered in the range of 2-3 which means that there is still accounting information systems at the state-owned enterprises which has not adopted the competency of users. The influence of the user competence on the quality of accounting information system in PT Sawargi Farma is described as follows:

Knowledge is measured by formal education and work experience that affects the quality of accounting information systems. Based on observations during the research, there was information that many have a manager, chief or staff in the accounting department with less suitable formal education and even do not match with the work fields for the moment in other words there are still occupied position that does not match with the formal education followed through school. Based on respondent's answers that the average score of 4.1 is in the "very high" category. It means that the used accounting information system is complied with the formal educational background and experience in the field of accounting information system which the user has.

Skills are measured based on training which followed and have the ability to understand the learning process that affects the quality of accounting information system. Based on the observation that the conditions in PT Sawargi Farma, compiled structure is not always based on competence and PT Sawargi Farma business process, especially in PT Sawargi Farma that are in the area due to accommodate the interests of a region. When seen from the respondent's answers to the quality of accounting information systems in SOEs, an average score of 3.9 is in the high category. This means that the use of accounting information system by the user are in compliance with the training followed by the user, so that, no difficulty in using accounting information systems and have the ability to understand the learning process in the field of accounting information systems.

Results of hypothesis testing the effect of competence on the quality of accounting information system shows that the competence of users affect the quality of accounting information systems. The study provides empirical evidence that the corresponding user competence will improve the quality of accounting information systems. In other words, it can be interpreted that the quality of accounting information systems can be improved if the PT Sawargi Farma increase the user competence that is by providing human resources such as a manager, superintendent or staff who have knowledge and skills.

Amount of the estimated value of 0.46 indicates that the competence of the user influence on the quality of accounting information systems and in the same direction, meaning that the competence of a good user will have the quality of accounting information systems are good also. Can be explained that the change of one standard deviation of the user competence can change the quality of accounting information system of 0.46 standard deviations.

The conclusion that the competence of the user affect the quality of accounting information system confirms a previous study conducted by Ahmad *et al.* (2013) that the competence of the user presence is very important in

implementing a system. Furthermore, Hazar and Triki (2013) revealed in his research that the competence of the user of accounting is an important factor in the success of accounting information systems. Similar things delivered by TaherBelhaj *et al.* (2014) in his research that the success of the system depends on the competence of the user information because basically competence is the ability possessed by the user so, it can do its job effectively. Competency-based analysis of employment means that employment can be measurable, observable, behavioral competencies (knowledge, skills and/or behavioral) that an employee doing the work to produce the best (Gray, 2011).

CONCLUSION

The user competence influence the quality of accounting information systems. An accounting information system that has not been qualified are caused by knowledge and skills which owned by the user has not been fully accommodated in the use of accounting information system.

REFERENCES

Ahmad, M., A. Ayasra and F. Zaideh, 2013. Issues and problems related to data quality in AIS implementation. Intl. J. Latest Res. Sci. Technol., 2: 17-20.

Bruce, R., 2006. Public Management Information System. IGI Global, Hershey, Pennsylvania, ISBN-13:9781591408079,.

Daryono, M., 2015. [The competitiveness of BUMN plantation is still weak]. BeritaSatu, Indonesia. (In Indonesian)

David, O.L., 2004. Introduction to Information System Project Management. 2nd Edn., Irwin, Huntersville, North Carolina, ISBN:9780072872705, Pages: 314.

DeLone, W.D. and E.R. McLean, 2003. The DeLone and McLean model of information systems success: A ten-year update. J. Manage. Inform. Syst., 19: 9-30.

DeLone, W.H. and E.R. McLean, 1992. Information system success : The quest of the dependent variable. Inf. Syst. Res., 3: 60-95.

Dull, R.B., U.J. Gelinas and P.R. Wheeler, 2012. Accounting Information Systems: Foundations in Enterprise Risk Management. 9th Edn., South Western Cengage Learning, Mason, Ohio, USA., ISBN:9780538469326, Pages: 674.

Gary, D., 2011. Human Resources Management. 12th Edn., Prentice Hall, Upper Saddle River, New Jersey, USA.

George, H.B. and S.H. William, 2014. Accounting Information System. Prentice Hall, New Jersey, USA.,.

Hansen, D.R. and M.M. Mowen, 1995. Cost Management Accounting and Control. Cengage South-Western, Mason, Ohio, ISBN:9780538832328,.

Hazar, D. and M. Triki, 2013. Accounting information systems in an ERP environment and Tunisian firm performance. Intl. J. Digital Accounting Res., 13: 1-35.

Iskan, D., 2012. [Dahlan Assert no Mercy for Coruptor]. Antaranews, Jakarta, Indonesia, (In Indonesian).

James, A.H., 2011. Accounting Information System. 7th Edn., South-Western Publishing Co., Nashville, Tennessee?, USA.,.

Jeffrey, A.B., 1997. Competence Based Employment Interviewing. Quorum Books Publisher, Weslport, Connecticut, USA., ISBN:1-56720-050-8, Pages: 171.

Jeffreys, M.R., 2016. Teaching Cultural Competence in Nursing and Health Care. Springer, Berlin, Germany,.

Kaasboll, J., M.S. Chawani, G.A. Hamre and J. Sandvand, 2010. Competencies and learning for management information systems. J. Inf. Technol. Organiz., 5: 85-98.

Kuncoro, W.M., 2014. The Application of John P Kotter's Theory to the Success of IT Implementation. PT Kereta Api Indonesia Publisher, Bandung, Indonesia,.

Laudon, K.C. and J.P. Laudon, 2014. Management Information Systems Managing the Digital Firm. 13th Edn., Pearson Prentice Hall, Upper Saddle River, New Jersey, USA.

Lyle, M.S. and S.M. Spencer, 1993. Competence Work: Models for Superior Performance. Jhon Willey & Sons, Canada, North America, Pages: 372.

McLeod, R. and G.P. Schell, 2007. Management Information Systems. 10th Edn., Prentice Hall, New Jersey, USA.

Mcshane, S. and M.A.V. Glinow, 2010. Organizational Behaviour. 5th Edn., McGraw-Hill, Singapore.

Nancy, A.B., G.S. Mark and S.N. Carolyn, 2010. Accounting Information System. John Wiley & Sons, Hoboken, New Jersey, USA.

Robert, K. and K. Angelo, 2010. Organizational Behavior. 9th Edn., McGraw-Hill, New York, USA.

Sacer, I.M., K. Zager and B. Tusek, 2006. Accounting information system's quality as the ground for quality business reporting. Proceedings of the IADIS International Conference on E-Commerce, December 9-11, 2006, IADIS, Porto, Portugal, ISBN:972-8924-23-2, pp: 59-64.

Stair, R. and G. Reynolds, 2010. Principles of Information Systems, A Managerial Approach. 9th Edn., Cengage Learning, Boston, Massachusetts, United States, ISBN: 9780324665284, Pages: 652.

Susanto, A., 2013. [Accounting Information System: Development Risk Control Structure]. PT. Lingga Jaya Indonesia, Bogor, Indonesia, (In Indonesian).

TaherBelhaj, F.M., E. GanisSukoharsono and I. Suyadi, 2014. The need for user competency on the success of management information system implementation in oil companies in Libya. IOSR. J. Bus. Manage., 16: 71-78.

Taufik, A., 2013. [Legal drafter competence still weak]. Malang Regency Government, Kepanjen, Indonesia. (In Indonesian).

Wayne, M.R., 2010. Human Resources Management. 11th Edn., Prentice Hall, New Jersey, USA.

Weber, R., 1999. Information System Control and Audit. 1st Edn., Prentice-Hall International, USA., ISBN:0139478701.