

# The Effect of Accounting Information System Quality on Accounting Information Quality

Faiz Said Bachmid

Lecturer, accountancy department, STIE EKUITAS, Bandung, Indonesia  
Doctoral students, accountancy department, Faculty of Economics and Business (FEB)  
University of Padjajaran (UNPAD), Bandung, Indonesia

## Abstract

The purpose of this study was to determine the influence of accounting information system quality on accounting information quality. Good or bad company's decision-making comes from accounting information quality, to generate highly qualified accounting information, it takes a good quality from accounting information system. The quality of accounting information system will affect the quality of accounting information systems. Quality information significantly improve decision-making better, and directly increase profit for the organization, but the quality information is not automatically guarantee any decision made is better, because the decision makers are human beings, where no man is perfect (Paige Baltzan, 2012). This study wants on answer the following questions : the influence of accounting information system quality on accounting information quality. From the results of this literature review, showed that the accounting information systems quality will effect on accounting information quality.

**Keywords:** Accounting information system quality; accounting information quality.

## 1. Introduction

The hardest part of managing an organization today is making the appropriate decision. (Mark : 1977). The top management usually plays a central role in making these decisions through its involvement in corporate long-range planning (Hofer and Schendel, 1978; Lorange and Vancil, 1977; King and Cleland, 1978). The success of decision making, which is the heart of administrative process, is highly dependent partly on available information, and partly on the functions that are the components of the process. (Predrag Ranisavljević : 2012).

Information is a set of classified and interpreted data used in decision making and it has also been defined as some tangible or intangible entity, which serves to reduce uncertainty about future state or events. (Lucas:1978). The power of technology has transformed the role of information in a business firm. Now information has become recognized as the lifeblood of an organization and without information, the modern company is dead. (Papows, J:1998).

An Accounting information system should provide relevant information in real time and should frequently report on the most important events and provide rapid feedback on the previous technology. (Hazar Daoud & Mohamed Triki:2013). Accounting information system is a collection of data and processing procedures that produce the information required by the user (Bagranof, 2009; Azhar Susanto, 2013). A management information system has also been defined as an integrated user - machine system for providing information to support operations, management and decision making functions in an organization. The system utilizes computers, manual procedures, models for analysis, planning, control and decision making, and a database. (Davis, G.B., & Olson, M.H:1984)According Gelinat et. al. (2012) and Azhar Susanto (2013) an information system is a man made system that Generally consists of an integrated set of computer-based components and manual components established to collect, store and manage the data and to provide output information to users. Furthermore Cornnor (2004) says that the integration between computer systems is very important, Integration remove the necessary for the system to be rehandled again and again to enter it into multiple systems. Integration is the key to success in the Accounting information system (Nicolaou, 2011). Integrated Accounting information system enables the process of formulating strategies and improving the complementary relationship will be setting specific directions between organizations and supervisory activities (Nicolaou, 2011). According to McLeod & Schell (2006) the integration of Accounting information system not only integrates the components of hardware, software, brainware, communication networks, databases and procedures, also includes the quality of work and satisfaction of users of Accounting information systems (Sacer, 2006). Due to the integration of the Accounting information system generated Accounting information that is accurate, timely, and consistent for management (Rodin and Brown, 2008).

In theory, the system should be integrated. However, in reality, many sectors in the last few years does not fit the theory.

Phenomenon In Sector Public, Head of BPK, Jakarta Branch, Efdinal said that in the aspect of information technology, the city government has had some financial management applications. However, the financial management system has not been able to produce accrual-based financial statements, have not been integrated, the lack of security in accessing data, no disaster recovery plan, and has not provided the manager of

information technology at SKPD (work unit area). Another phenomenon in sector public, Deputy Chairman of KPK, Johan Budi said that one of their findings in the use of government funds to be used as a "village funds" amounting Rp20,7 trillion is in the field of supervision, because every village does not have an integrated system. Phenomenon at Indonesia Port, Chairman of the KPK, Rizal Djalil said the results showed that operations at the Port of Tanjung Priok is still not effective, in Guaranteeing service vessels and the flow of goods, due to "port information system", not fully integrated, in supporting the smooth flow of ships and goods.

Phenomenon at Indonesian Stock Exchange (IDX), Indonesia Mutual Fund Managers Association (APRDI) faces severe challenges to achieve the target of 5 million mutual fund investors in 2017, because the number of mutual fund investors currently only 250 thousand customers with a total transaction value of Rp 460 trillion or 46 percent of its new target of Rp 1.000 trillion. To get 5 million investors (mutual funds) are still many things that we must solve. Supporting technology also needs to be improved. Unlike the stock market, he said, over the years, mutual fund transactions are not yet fully integrated on-line, so it is not efficient. The sales data and product purchases are still entered manually, and not presented in real time. Another phenomenon at Indonesian Stock Exchange (IDX), According to Ito Warsito, President Director of IDX, foreign and local investors need an integrated data. Currently, it is still in the stage of socialization in the submission of financial statements. In 2016, listed companies are required to use XBRL.

Phenomenon at Tax Sectoral, President Joko Widodo (Jokowi) told officials to work harder in this case reveals, by performing certain steps to integrate the system of reporting and analysis of financial transactions with tax returns. Much easier, if profiling of customer data and the taxpayer can be integrated and so that law enforcement can work together to combat the crime of tax evasion and money laundering. During this time, Tindak Pidana Pencucian Uang (TPPU) aka money laundering, closely associated with tax evasion, so handling should also be integrated. Another phenomenon at Tax, According to Justin Prastowo, taxation observer, said improvement in the tax must be thoroughly integrated. The government should commit to increase state revenue, through taxes, to fix the system of information technology (IT). Programs initiated by the government on taxation, lack running well, because it is not integrated with other ministries. IT system of taxation should be completely integrated with many parties. With sophisticated IT, and integrated, Nasution said tax amnesty program is also expected to be absorbed well.

Phenomenon at Bank of Indonesia, According to Perry Warjiyo, Director of Economic Research and Monetary Policy at the Bank Indonesia (BI), Ministry of Finance, and the Deposit Insurance Agency (LPS) has had an integrated protocol economic crisis. However, the protocol on the three institutions have not integrated, there is no protocol crisis at the national level. The same thing is also said Arief Hidayat, the Constitutional Court (MK), suggests three banking supervisory agencies to create integrated information systems. There is already a legitimate transfer of power, between the Bank and the FSA, such as the FSA Act Section 7.

Phenomenon at Corporate, According to Muhammad Cholid, Director of Human Resources (HR) at PTPN XI, said that his company rejuvenate HR and financial systems through consolidation, after having come up short in 2014. If we make an integrated, it will save operating costs, so the cost of sugar will be more ideal, as supported diversification. For further support, we will prepare an adequate infrastructure. It is impossible to have ERP, if you do not have a Virtual Private Network [VPN]. VPN must exist, so that the entire sugar factory must be integrated and connected, so that the data can be monitored in real time.

Based on above phenomenon, there are several problems of integration in the various sectors in Indonesia.

## **2. Literature review**

### **2.1. Accounting information system quality.**

The system is an integrated entity or a network that tries to achieve a series of goals (A system is an integrated entity (ie, a framework) that attempts to Achieve a set of objective) (Wilkinson : 2000). Similar disclosed, McLeod & Schell, (2006) that the system is a group of integrated elements with the same purpose to achieve a goal. A system is a group of interrelated components that function together to achieve a desired result. (Whitten:2007). From some of the above opinion can be interpreted that the system is integrated components or elements with the same purpose that function together to achieve goal.

An Information is data that have been shaped into a form that is meaningful and useful to human beings. (Laudon : 2014). While it is broadly recognized that information plays a critical role in the success of companies (C. W. Choo, 1996; Davenport, 2006). Information systems are an integral part of organizations. (Laudon : 2014). An information system can be defined technically as a set of interrelated components that collect (or retrieve), process, store, and distribute information to support decision making and control in an organization. (Laudon : 2014). Three activities in an information system produce the information that organizations need to make decisions, control operations, analyze problems, and create new products or services. (Laudon : 2014). Information systems are used in all functional areas and operating divisions of business. In finance and accounting, information system forecast revenues and business activity, determine the best sources and uses of funds, manage cash and other financial resources, analyze investments, and perform audits to make sure that the

organization is financially sound and that all financial reports and documents are accurate. (Stair : 2010). From some of the above opinion can be interpreted that the information system is a data that is meaningful and useful to human and plays a critical role in the success of companies because an integral part of organization.

So historically, an IS incorporated a separate Accounting information system. Which is specialized sub system of the Accounting information system. The purpose of this separate Accounting information system was to collect, process, and report information related to the financial aspects of business events. (Gelinas & Dull : 2012). Accounting information system that is integrated with an organization's daily business activities or business processes will generate information O'Brien and Marakas (2010). Similar said, Accounting information system as a collection of resources, such is people and equipment, designed to transform financial and other data into information (Bodnar and Hopwood, 2013). Further more, Robinson, Davis and Alderman (1986) sees Accounting information system to encompass the processes and procedures by which an organization's financial information is received, registered, recoded, handled, processed, stored, reported, and ultimately disposed of. Also, Accounting information system is a Information systems that record and report business transactions and the flow of funds through an organization, and then produce financial statements. These statements provide information for the planning and control of business operations, as well as for legal and historical recordkeeping. O'Brien and Marakas (2010). From some of the above opinion can be interpreted that the accounting information system is a daily activities to generate information by collecting, processing, storing, reporting, and transform to accounting information using systems.

Whittington and Pany (2004) see an efficient Accounting information system as one that should: (i) Identify and record all valid transactions; (ii) Describe on a timely basis the transactions in sufficient detail to permit proper classification of transactions for financial reporting; (iii) Measure the value of transactions for financial reporting their proper monetary value in the financial statements; (iv) Determine the time period in which transactions occurred to permit recording of transactions in the proper accounting period; and (v) Present properly the transactions and related disclosures in the financial statement.

Quality in an organization is defined by Reeves and Bednar (1994) in terms of quality as excellence, quality as value, quality as conformity to specifications, and quality as meeting customer expectations. Information systems (IS) quality can be understood using Reeves and Bednar's framework of quality (Swanson, 1997).

## **2.2. Accounting information quality**

The essential characteristics of accounting are: (1) the identification, measurement, and communication of financial information about (2) economic entities to (3) interested parties. (Laudon : 2014). Financial accounting is the process that culminates in the preparation of financial reports on the enterprise for use by both internal and external parties. Users of these financial reports include investors, creditors, managers, unions, and government agencies. (Kieso : 2014). Accounting information can be aligned with labor, raw materials, machines, money and described as blood flow through the human body (Laudon : 2014). Azhar Susanto (2013) states that the Accounting information is the output of the accounting process. In general, the Accounting information presented in the financial statements (Kieso : 2014).

Accounting information submitted in the proper form will have relevance, accuracy, timeliness and complete (McLeod & Schell, 2006). Accounting information required as a valuable resource in avoiding risks that contribute to determine whether an organization can continue to operate (Azhar Susanto, 2013). Conversely, if the Accounting information is not qualified, then the Accounting information becomes useless (Kieso : 2014).

According to O'Brien and Marakas (2010), the quality of Accounting information can be described in three dimensions, namely, time, content and the format. Criteria of quality of Accounting information by Gelinas and Dull (2012) and McLeod & Schell (2006) is the information must be relevant, accurate, timely and complete. Stair and Reynolds (2010) to enter the dimensions of accounting information quality are accessible, accurate, complete, economical, flexible, relevant, reliable, secure, simple, timely and verifiable.

## **3. Theoretical Framework**

### **3.1. Theory of Accounting information system quality on Accounting information quality**

In the information systems (IS) field information quality and use have played an important role in defining success of various IS (DeLone & McLean, 1992). The opinion goes on to say that there is no accounting information quality without quality accounting information system (Sacer, 2006; Azhar Susanto, 2013). The company uses the accounting information system to generate reports specifically to meet the Information needs of investors, creditors, government agencies (Jones and Rama, 2003). Furthermore, the accounting information system should also generate accounting information to meet the needs of managers and workers (Hall : 2011). Not easy to build a system of accounting information quality, many factors associated with the success of the construction or development of Information systems such as Information systems must be constructed using methods, techniques and principles of the right (Whitten, 2007; Azhar Susanto, 2013). If the Information is not

qualified, then the accounting information becomes useless, Failure perceived by the user is accounting information system is unable to produce Information in accordance with the expected users, as said (Kieso : 2014).

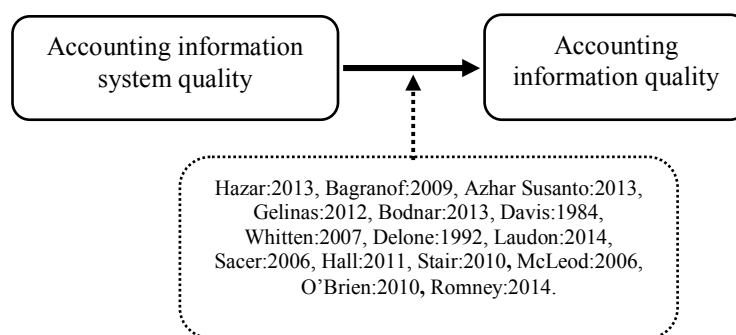
According to Stair & Reynolds (2010) that “An Information system (IS) is a set of interrelated components that collect, manipulate, store, and disseminate the data and Information and provide a feedback mechanism to meet an objective”. Similar disclosed Hall (2011) that “the Information system is the set of formal procedures by the which the data are collected, processed into Information, and distributed to users”. Furthermore McLeod & Schell (2006) defines an Information system as a computer-based systems that make Information available to users who have similar needs. According Gelinas et. al. (2012); Azhar Susanto, (2013) an Information system is a man made system that Generally consists of an integrated set of computer-based components and manual components established to collect, store and manage the data and to provide output Information to users. The same thing dictated Bodnar and Hopwood (2013) that defines the Information system implies the use of computer technology in an organization to produce Information for the user. Similar opinion was also expressed by O'Brien and Marakas (2010) that the Information system is an organized combination of brain ware, hardware, software, network communications, database, policies and procedures that store, retrieve, modify and produce the Information within an organization. Arens, (2013) says that organizations should develop an Information system to ensure that the economic events of the entities noted in a timely and reasonable for the preparation of quality Information. Then Hall (2011) says that the required Information the user is a product of the Information system.

Romney and Steinbart (2012) says that an accounting information system is a system that collects, records, stores, and processes the data to produce Information. Furthermore Gelinas (2012) states that the accounting information system can be an important element for the success of the organization by facilitating the process of daily operations and provide useful Information for the management of the organization. Accounting information system aims to present financial statements that are designed for external users and internal users (Scott, 1986). Laudon (2014) states that the implementation of the quality of accounting information system will produce the quality of accounting information is also used by the user in making a decision. Furthermore, the accounting information system should also generate accounting information to meet the needs of managers and workers (Hall, 2011).

The opinion goes on to say that there is no accounting information quality without quality accounting information system (Sacer, 2006: 62; Azhar Susanto, 2013).

#### 4. Literature Reviews Model.

Based on theoretical framework have just described, then the theoretical framework is as below :



#### 5. Conclusion

According to the literature reviews, found that accounting information system quality have relationship on accounting information qualit, support by theory from Davis (1984), Whitten (2007), Delone (1992), McLeod (2006), Sacer (2006), Bagranof (2009), Stair (2010), O'Brien (2010), Hall (2011), Gelinas (2012), Hazar (2013), Azhar Susanto (2013), Bodnar (2013), Laudon (2014), Romney (2014),

#### References

- Arens. (2013). *Auditing and Assurance Services: An Integrated Approach* (Vol. 15th edition). New Jersey: Pearson Education.
- Baltzan, P. (2012). *Business Driven Information system*. New York: McGraw-Hill.
- Susanto, A. (2013). *Management Information systems: Structured Approach, Risk and Development*. Bandung: Lingga Jaya.
- Bagranof, Nancy A. Mark, G. Simkin, and Carolyn S.Norman. (2009). *Core concept of Accounting information*

- systems*, 7th Edition. South-Western. USA
- Bodnar G. H. and Hopwood W. S. (2013). *Accounting information system* (7th Edition). New Jersey: Prentice Hall.
- Choo, C. W. (1996). *The knowing organization: How organizations use information to construct meaning, create knowledge and make decisions*. International Journal of Information Management, 16(5), 329-340.
- Cornnor, Peter. (2004). *Using Computer in Hospitality*, 3 th Edition. High Holborn House 50-51 Bedford Row London WC1R4LR Cengage Learning EMEA.
- Davenport, T. H. (2006). *Competing on analytics*. Harvard Business Review, 84(1), 98-107.
- Davis, G.B., & Olson, M.H (1984), *Management Information systems: Conceptual Foundations, Structure and Development*, 2nd ed. New York, NY: McGraw-Hill.
- DeLone, W. H., & McLean, E. R. (1992). *Information systems success: The quest for the dependent variable*. Information systems Research, 3(1), 60-95.
- Gelinas, Ulrich & Dull, B. Richard. (2012). *Accounting information systems*. 9th Edition. USA: South Western Cengage Learning.
- Hall, James A. (2011). *Accounting information systems*. 7th Edition, Mason-USA: South-Western Cengage Learning
- Hazar Daoud., Mohamed Triki., (2013), *The International Journal of Digital Accounting Research*, Vol. 13, 2013, pp. 1 – 35 ISSN: 1577-8517
- Hofer, C. W. and D. Schendel (1978). *Strategy Formulation: Analytical Concepts*, West, St. Paul, Minn.
- Kieso, Donald E., Weygandt, Jerry J. & Warfield, Terry D. (2014). *Intermediate Accounting*. 15th Edition. John Wiley & Sons, Inc.
- King, W. R and D. I. Cleland (1978). *Strategic Planning and Policy*, Petrochelli/Charter, New York.
- Laudon, Kenneth. C & Jane P. Laudon. (2014). *Management Information systems: Managing the Digital Firm*. 13th Edition. USA: Prentice Hall.
- Lorange, P. and R. Vancil (1977). *Strategic Planning Systems*, Prentice Hall, Englewood Cliffs, N.J.
- Lucas, H.C., Jr. (1978)., *Information systems Concepts for Management*, New York, NY: McGraw - Hill.
- Mark S. (1997). *Delaying decisions stifles: industrial management decision-making progress*. Pacific Business News, Vol. 23, 37-39.
- McLeod, Raymon & Schell, George P. (2006). *Management Information systems*. 10th Edition. Prentice Hall. New Jersey.
- Nicolaou, Andreas I. (2011). *Integrated Information systems and interorganizational performance: the role of management accounting systems design*, Advances in Accounting Behavioral Research, Volume 14. pp. 117-141
- O'Brien, James A. & Marakas, George M. (2010). *Introduction to Information systems*. 15th Edition. NY: McGraw-Hill Irwin.
- Papows, J., (1998). *Enterprise.com: Market Leadership in Information Age*, London: Nicholas Brealey Publishing.
- Predrag Ranisavljević, Tanja Spasi, Ivana Mladenović Ranisavljević, (2012), *Management information system and decision making process in enterprise*, Economics Management Information Technology Journal.
- Reeves, C.A., Bednar, D.A., (1994). *Defining quality: alternatives and implications*. Academy of Management Review 9, 419-445.
- Robinson L. A., Davis, J. R. and Alderman C. W. (1986) *Accounting information system: A Cycle Approach (2nd edition)*. New York: Harper and Row, Publishers.
- Rodin-Brown, E. (2008). *Integrated Financial Management Information Systems*. New York: The Louis Berger Group, Inc.
- Romney, Marshall B., and Steinbart, Paul J. (2014). *Accounting information system*. Global Edition. 13th Edition. England: Pearson Education Limited.
- Sacer, Ivana Mamic, (2006). *Accounting Systems Informastion as The Ground for Quality Business Reporting*. IADIS International Conference E-Commerce. Pp.59-64.
- Scott, George M. (1986). *Principles of Management Information systems*. NY: McGraw-Hill.
- Stair, Ralph M. & Reynolds, George W. (2010). *Principles of Information systems*. 9th Edition. Boston-USA: Course Technology.
- Swanson, B., (1997). *Maintaining Information System quality*. Information and Software Technology 39, 845-850.
- Whitten, Jeffrey L. & Bentley, Lonnie D., (2007). *Systems Analysis and Design For The Global Enterprise*. 9th Edition. New York: McGraw-Hill. International Edition.
- Whittington O. R. and Pany, K. (2004). *Principles of Auditing and other Assurance Services* (14th edition). Boston: McGraw Hill Irwin.

Wilkinson, Cerullo, MJ, V. Raval, and Wong-On-Wing B. (2000). *Accounting information system: essential concepts and applications*, fourth edition. USA: John Wiley & Sons Inc.

Wilkinson, Joseph W. (1989). *Accounting information system: essential concepts and applications*. John Wiley & Sons Inc.