# The Influence of Business Process and Management Support on Accounting Information System 

Meiryani<br>Department of Accounting, Faculty of Economics and Communication, Bina Nusantara University, Jakarta, Indonesia


#### Abstract

Business process and management support are factors which can improve the quality of information systems. Information systems used as a tool to help the company's daily operations and management in decision making. Integration of the system is indicated by the harmony in the system, so as to achieve user satisfaction. Thus, to improve the quality of information systems required business processes, management support that will improve the quality of information systems. This research was conducted at 61 for companies in the State-Owned Enterprises. This study uses an explanatory cross-sectional survey and testing the data used by Structural Equation Model (SEM) approach to analysis tools Partial Least Square (PLS). The results found in companies in the business processes and management support affecting the information system.


Key words: Quality of information systems, business process, management support, management, survey, decision making

## INTRODUCTION

Bagranof et al. (2010a) describes information system is a collection of data and processing procedures that produce the information required by the user. Based on the accounting information system of quality, user (user) will obtain quality information at the right time for decision-making, so, that decisions are taken and the allocation of resources more appropriately and response times are better (Laudon and Jane, 2012). Accounting information system is a tool of management control (Mitchell et al., 2000). The system of information is a tool (tools) that are used by management to conduct analysis in decision-making related to corporate transactions (McLeod and Schell, 2008). As according to Wilkinson (2007) states that, the information system of accounting is a unified structure (integrated) in an entity, the which consists of a collection of human resources and equipment, the which is used to transform the data into useful information for users to make decisions. Furthermore, according to Romney and Steinbart (2006) accounting information system is a system to collect, record, store and process the data is to produce information used in decision-making.

Accounting information systems at is basically an integration of the various subsystems of the processing of a trade or sub-system accounting information for each transaction processing system cycles transaction processing, so that, the accounting information system can also be regarded as an integration of the various cycles of processing transactions each transaction
processing is done by a processing system of a trade or sub accounting information system has various components such as hardware, software, brain ware, procedures, databases and communication networks (Azhar, 2008) is an important factor to determine the success in the implementation of information systems. Quality information system is not only Able to integrate every component (McLeod and Schell, 2008) but also information systems requires a harmony between the components with other human resources where the most important part of this integration (Azhar, 2008).

Low quality of accounting information also occurs in government institutions, reflected in the poor quality of financial statements presented. During the period 2004-2010, the central government financial statements (LKPP), most of the Ministry and the Institute of Financial Statements (LKKL) and the Local Government Finance Report (LKPD) still received the audito's opinion "reasonable with exceptions" (WDP). The target of $50 \%$ local obtain an unqualified auditor's opinion (WTP) in 2014 is difficult to achieve. Much earlier, Anwar and Tangled (2009) also admitted that: "Quality LKPD is worsening". Accounting information is the output of the accounting information system (Loudon and Jane, 2012). The accounting information system is defined as a collection of sub-systems which are interconnected with each other and work together in harmony to process financial data into the required financial information management in the decision making process in the financial sector (Azhar, 2008).

Weske (2012) provides an understanding of the business process is as follows: Business process business process consists of a structured set of activities, the which are performed by (potentially Several) actors (humans, computers and/or machines) in an organization in order to collaboratively Achieve a common business goal the provision of a service or the production of a product for an internal or external customer. The phenomenon of business processes conveyed by Dahlan (2012) that, the business processes in government are slow and inefficient, human resources incompetent and unprofessional, the disease of corruption, collusion and nepotism, until the issue of services to the public who is unresponsive and not accountable. Management of change and willingness to change (willingness to change and to act) key to the success of the implementation of information systems. Stone (1994), management support is an influential factor to the success of the implementation of the accounting information system. Cho et al. (2011) also disclose that management support affects the success of user information system.

Literature review: Harrington (1991) states that business processes are some of the activities of the input to the output that adds value for both internal and consumers external "business process is any activity or group of activities that take an input, add value to it and provide an output to an internal or external customer". Weske (2012) provide an understanding of the business process is as follows : business process business process consists of a structured set of activities, the which are performed by (potentially several) actors (humans, computers and/or machines) in an organization in order to collaboratively Achieve a common business goal the provision of a service or the production of a product for an internal or external customer.

Laudon and Jane (2012) is a business process work flow of concrete material, information and knowledge of a series of activities (business processes are concrete work flows of material, information and knowledge-sets of activities). A business process is any activity (such as order processing, inventory control or product design) that is vital to delivering goods and services to customers quickly intervening or that promotes high quality or low costs (Rama and Frederick, 2006). Laudon and Jane (2012), adding that the business process refers to the unique way in which research is organized, coordinated and focused to produce a valuable product or service. Hurt (2008) describes the business process is a set of procedures and policies designed to create value for some of the organization's stakeholders (a business process a set of procedures and policies designed to create value for some
organizational stakeholders). Further, Hurt (2008) explains that business processes are the policies and procedures used in the organization to create value for stakeholders such as customers, stockholders, suppliers and others.

Romney and Steinbart (2006) states that, the business process is a series of related activities, coordinated and structured and the tasks performed by a person or by a computer or a machine and that help achieve the goals of the organization (a business process is a set of related, coordinated and structured activities and tasks that are performed by a person or by a computer or a machine and that help Accomplish a specific organizational goal). According to Rama and Frederick (2006), business process is a sequence of activities performed by a business to acquiring, producing and selling goods and services (a business process is a sequence of activities performed by a business for acquiring, producing and selling goods and services).

Haag describes the terms of the business process is a set of activities that accomplish specific task such as processing customer orders (a business process is a standardized set of activities that Accomplish a specific task such as processing a customer's order).

George and William (2010) to give understanding of business processes as a series of tasks involving the data, organizational units and logical time sequence. The business process is always triggered by some economic events and has clearly defined the starting point and end point. "Business process is an interrelated set of tasks that involve; the data, organizational units and a logical time sequence. Business processes are always triggered by some economic event and all have clearly defined starting and ending points. Weske (2012) describes the business process is a series of activities conducted in coordination in organizational and technical environment. This activity is jointly realize business goals. Every business process that has been set by a single organization but can interact with business processes performed by other organizations.

Bagranof et al. (2010b) describes the terms of the business process is a collection of activities and work flows within the organization that creates value (a business process is a collection of activities and work flows in an organization that creates value) while according to Laudon and Jane (2012) is a business process work flow of concrete material, information and knowledge of a series of activities (business process work flows are concrete of material, information and knowledge-sets of activities). Laudon and Jane (2012) adding that the business process refers to the unique way in which work is organized, coordinated and focused to
produce a valuable product or service. According to Azhar (2013) defines the procedures/processes of business are a series of activities or the activities carried out repeatedly in the same way. The characteristics of the procedure as follows:

- The procedures support the achievement of organizational goals
- The procedure is able to create good supervision and using the minimum cost
- The procedure shows sequences logical and simple
- The procedure showed their decision-making and responsibility
- The procedure showed no delays or obstacles

From the above opinion can be said that the business process is a series of activities/procedures clear to complete business tasks in creating value (Goerge and William, 2010; Hurt, 2008; Laudonand Jane, 2012). Hoque (2002) describes the last two dimensional business process as follows primary activity: activity of reception, storage and distribution of material inputs used by the organization to produce products/services produced and activities to inform the customer about the products/services produced by the company; Supporting activities: activities of daily operations (accounting, finance, law and public administration, activities associated with employees (recruitment, hiring, training and compensation payments) and the activities of improvement of products/services (research and development, investment in information technology, website development, product design).

Goerge and William (2010) all business processes have a starting point and end point that is clear for example, the process of managing customer orders triggered by the acceptance of purchase orders from consumers. Further explained, Goerge and William (2010) dimensions of business process consists of a primary activity and supporting activity. Furthermore, according to Romney and Steinbart (2006) describes there are two dimensional business process: primary activity: and support activity (Activities can be conceptualized as forming a value chain consisting of the primary activities that directly provide value to customers and support activities allow the primary activities to be performed efficiently and effectively. Primary activities: activities of receiving and distribution the materials an organization uses to create the services and products it sells; activities help customers buy the organization's products or services; support activity: firm infrastructure is the accounting, finance, legal and general administration activities that allow an organization to function; human
resources, activities include recruiting, hiring, training and compensating employees, technology activities improve a product or service).

Bagranof et al. (2010a) states that, there are two common business processes in any business organization, namely: the sales process: starting with the customer's order and ending with cash collection from customers; the purchase process; accounting information system with regard to timely payment for goods and services purchased. McLeod and Schell (2008) dimensional business process consists of a primary activity and support activity. Primary activity includes: logistics inputs obtain raw materials and supplies from suppliers; operating companies that transform raw materials into finished goods; the output logistics of moving goods to customers; marketing and sales that identify customer needs; get orders and activity-activity services that maintain good customer relations after sales. While support activity includes: infrastructure of organization that generally affect the entire main activity; management of human resources; the development of technology; procurement/purchasing.

Hurt (2008) says that, critical business processes within the organization include the sales process, purchasing process, conversion processes, financial processes and human resources processes. The same thing was said by Romney and Steinbart (2006) that, the activities of the business process consists of the revenue cycle, discharge cycles, the cycle of human resources. From the above statement can be said that the dimensions of the business process is the primary activity with activity indicator for reception, storage and distribution of material inputs used by the organization to produce products/services produced and activities to inform customers about the products/services produced by the company and support activity with indicators of daily operational activities, activities associated with employees and activities improve products/services (Hoque, 2002; Romney and Steinbart, 2006; Laudon and Jane, 2012).

Gelinas et al. (2014) used the term "effectiveness" of accounting information systems as a measure of the success of information systems in achieving the goals set. DeLone and McLean (2003) uses the term "success" of information systems for measuring out-put is generated by the actual system. Likewise, Pornpandejwittaya (2012) uses the term "success" to describe the successful application of accounting information systems in the areas that became the principal concern to the organization, used extensively by one or more user satisfaction and improve the quality of performance. As for the term "quality" accounting information system
proposed by Sacer et al. (2006) is used to indicate the integration of the various components of the accounting information system are: hardware, software, brain ware, telecommunication network and data base quality and the quality of research and satisfaction of users.

Characteristics of quality information system DeLone and McLean (1992) is ease to use, system flexibility and ease of learning. Wixom and Todd (2005) describes the characteristics of the information system is realibilty quality, flexibility, integration, accessibility and timeliness. Furthermore, the quality characteristics of the information system according to Horan and Abhichandani is a utility, reliability, efficiency, customization and flexibility. Kothari (2004) measures the quality system with easy of use, easy learning accuracy, user requirements, system features, system accuracy, flexibility, sophistication, integration and customization. Based on the above it can be said that, the quality system of accounting information referred to in this research is the functioning of accounting information systems integration of all system components, reliably, efficiently and effectively, easy to use, easy to learn as a provider of accounting information quality used in decisions which could impact on user satisfaction.

Goerge and William (2010) states also that: "an Accounting Information Systems (AISs) is a collection of resources such as people and equipment, designed to transform the data into financial and other information. This information is communicated to a wide variety of decision makers. AISs perform this tranformation Whether, they are esentially thoroughly computerized or manual systems. Azhar (2013), accounting information system can be defined as a collection (integration) of the sub-systems/components both physical and non physical are interconnected and cooperate with each other in harmony to process transaction data related to financial problems into financial information. Then, more specifically James (2010) incorporating the terms of financial transactions and non-financial in terms of accounting information systems, so that, the full Bagranoff (2007) states that: the Accounting Information System AIS subsystems process financial transactions and nonfinancial transactions that directly affect the processing of financial transactions. Galinas et al. (2014) go on to explain that a financial transaction is an event that affects the economics of the assets and equity of the organization as reflected in the estimates (account) and is measured in monetary terms. For example, sales transactions of products to customers, the purchase of inventory from suppliers and transaction receipts and disbursements. While non-financial transactions are events that do not meet the definition of financial
transactions in the narrow sense such as adding the data for the new supplier of raw materials to the list of authorized suppliers is an event/events that will be processed by the enterprise information system as a transaction. However, non-financial information is not a financial information and the company has no legal obligation to process the information correctly.

Quality accounting information obtained from the application of quality accounting information system (Sacer et al., 2006). The fundamental role of accounting information systems in organizations is to produce quality accounting information (Azhar, 2008). The term "quality" can mean success/success (DeLone and McLean, 2003) or effectiveness or user satisfaction (Stair and Reynolds, 2009). While, Gelinas et al. (2012) used the term "effectiveness" of accounting information systems as a measure of success in achieving the goals of information systems that have been set. Delon and McLean (2003) uses theterm "success" information system for measuring out-put is generated by the actual system. Pornpandejwittaya (2012) uses the term "success" to describe the successful application of accounting information systems in the areas that became the principal concern to the organization, used extensively by one or more user satisfaction and improve the quality of their performance. The term "quality" accounting information system proposed by Sacer et al. (2006) are used to demonstrate the integration of the various components of accounting information systems, namely: hardware, software, brain ware, telecomunication network and data base quality and quality of work and satisfaction of users. Bagranoff (2010) that an accounting information system is a collection of the data and processing procedures that created needed information for its users. George (2001) accounting information system is a system of information pertaining to financial transactions, i.e., transactions that are measured in terms of money by using a highly structured framework that includes several subsystems. Goerge and William (2010) explain the meaning of accounting information system is a collection of resources such as human and equipment designed to alter financial data and other data into information.

## MATERIALS AND METHODS

This research is an explanatory research to test the hypothesis that has been formulated previously. Although, the description also contains a description but as a quantitative study the focus lies in explaining the relationship between variables. The purpose of this study is to examine the effect of business process and management support on the quality of accounting
information systems. Explanatory is related to the nature of the analysis which seeks to study the causality relationship through hypothesis testing between several variables being studied (Singarimbung and Effendi, 1995). The studies included in the hypothesis testing usually explain the nature of a particular relationship or determine the difference between some independent variables in a given situation (Sekaran, 2000).

## RESULTS AND DISCUSSION

The results of this research can verify the theory and can provide proof that business processes and management support affect the quality of accounting information systems such as the theory presented by O'Brien and George (2008) argue that the business process is the basic framework of the development of information systems. Bagranoff (2007) states that, the effectiveness of the business processes supporting the quality of accounting information systems. The same thing was stated by Brien states that the business process is the basic framework of the development of information systems (Laudon and Jane, 2012). The results of this study could confirm the results of previous studies, Wallace (2004) identified that the business process is a positive aspect in improving system performance information. Meiryani (2016) found that an integrated understanding of business processes will improve the effectiveness of communication for the development of information systems. The same thing addressed by the research results by Chen et al. (2009) found that business process and system design is an important factor to determine the success of information systems. Luthan shows that, management support can give satisfaction to employee who do not work routine/repetitive (non-repetitive) and work involving ego. Related to the management support that is oriented in this performance, the majority of the SAI in the Ministry and the State Agency of Indonesia feel that, so, far the management support has always asked for them to achieve the targets and overall accounting information system users always feel challenged to achieve targets leader. Meiryani (2016) stated that, business process affect accounting information system quality. McShane and Mary (2010) mentions factors of personal characteristics followers comprised of expertise and experience while factors related to the environment include the structure of the task and group dynamics.

## CONCLUSION

Based on the phenomenon, the formulation of the problem, hypothesis and research, the conclusion of this study is the business process and management support
affect the quality of accounting information systems. Not yet fully qualified accounting information systems have not implemented the primary business process activity and supporting optimal activity and management didn't do maximum planning, direction, actuating and control to employee in the implementation of accounting information system.

## SUGGESTIONS

Suggestions for development of science: In order to meet the characteristics of scientific research that is replicability and generalizability (McLeod and George, 2007) it is advisable for other researchers to conduct research back based on the results of this research with the research methods are the same, the unit of analysis and different samples in the hope of showing results the same that will increase confidence in the research that has been done and the usefulness of the research to be widely accepted as the scope of applicability of the research results accepted by various organizations.

Research has not yet revealed all the variables that can affect the quality of accounting information systems which have implications for the quality of accounting information, then other researchers are expected to examine other variables such as information technology, the support of top management, change management, competency users and others.

## REFERENCES

Anwar, N. and Y. Tangled, 2009. Regional financial statements. Institute of Indonesia Chartered Accountants, Batam, Indonesia.
Azhar, S., 2008. [Accounting Information System: Development Risk Control Structure]. Lingga Jaya, Bandung, Indonesia, (In Indonesia).
Azhar, S., 2013. [Accounting Information System: Development Risk Control Structure]. Lingga Jaya, Bandung, Indonesia, (In Indonesia).
Bagranof, N.A.M., G. Simkin and S.N. Carolyn, 2010a. Accounting Information Systems. 7th Edn., Southwestern University, Georgetown, Texas.
Bagranoff, N.A., G.M. Simkin and C.S. Norman, 2010 b. Core Concepts of Accounting Information Systems. 9th Edn., John Wiley and Sons, Hoboken, New Jersey, USA.
Bagranoff, N.A., G.S. Mark and S.N. Carolyn, 2007. Accounting Information Systems. 9th Edn., John Wiley and Sons, Hoboken, New Jersey, Pages: 513.

Chen, R.S., C.M. Sun, M.M. Helms and W.J.K. Jih, 2009. Factors influencing information system flexibility: An interpretive flexibility perspective. Intl. J. Enterp. Inf. Syst., 5: 32-43.
Cho, J., I. Park and J.W. Michel, 2011. How does leadership affect information systems success? The role of transformational leadership. Inf. Manage., 48: 270-277.
Dahlan, I., 2012. Dahlan confirms no forms for corruptors Antaranews. Antara, Central Jakarta, Indonesia.
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 systems success: The quest for the dependent variable. Inform. Syst. Res., 3: 60-95.
Gelinas, U.J., B.D. Richard and W. Patrick, 2014. Accounting Information Systems. 9th Edn., South Western Cengage Learning, USA., Pages: 715.
George, H.B. and S.H. William, 2010. Accounting Information Systems. 10th Edn., Prentice Hall, New York, USA.
George, S.M., 2001. Principles of Management Information Systems. Mc-Graw-Hill, New York, USA., ISBN:9780070561076, Pages: 270.
Harrington, H.J., 1991. Business Process Improvement: The Breakthrough Strategy for Total Quality, Productivity and Competitiveness. 1st Edn., McGraw-Hill, USA.,ISBN-13: 978-0070267688, Pages: 274.

Hoque, Z., 2002. Strategic Management Accounting. Spiro Press, USA., Pages: 168.
Hurt, R.L., 2008. Accounting Information Systems: Basic Concepts and Current Issues. McGraw-Hill, New York, USA., ISBN: 9780071220521, Pages: 379.
James, H.A., 2010. Accounting Information System. 7th Edn., Cengage Learning, Boston, Massachusetts, USA., ISBN:9781111788865, Pages: 840.
Kothari, C.R., 2004. Research Methodology: Methods and Techniques. 2nd Edn., New Age International Publisher, New Delhi, India.
Laudon, K.C. and P.L. Jane, 2012. Management Information Systems: Managing the Digital Firm. 12th Edn., Prentice Hall, Upper Saddle River, New Jersey, USA., ISBN:9780132142854, Pages: 557.
McLeod, R. and G.P. Schell, 2008. Management Information Systems. 10th Edn., Pearson Education, Upper Saddle River, New Jersey, USA., ISBN:978-81-317-1949-7, Pages: 465.
McLeod, R. and P.S. George, 2007. Management Information Systems. 10th Edn., Prentice Hall, Upper Saddle River, New Jersey, USA., ISBN: 9780131889187, Pages: 447.

McShane, S.L. and A.Y.V.G. Mary, 2010. Organizational Behavior. 5th Edn., McGraw-Hill, New York, USA., ISBN:9780071281034, Pages: 633.
Meiryani, 2016. Influence of uncertainty and risks on the information system. Intl. Bus. Manage., 10: 1575-1580.
Mitchell, F., G.C. Reid and J. Smith, 2000. Information System Development in the Small Firm: The use of Management Accounting. Chartered Institute of Management Accountants, Kathmandu, Nepal,
O'Brien, J.A. and M.M. George, 2008. Management Information Systems. 9th Edn., McGraw-Hill, New York, USA., ISBN:9780071280433, Pages: 659.
Pornpandejwittaya, P., 2012. Effectiveness of accounting information system: Effect on performance of Thai-Listed firms in Thailand. Intl. J. Bus. Res., 12: 84-94.
Rama, D.V. and L.J. Frederick, 2006. Accounting Information Systems: A Business Process Approach. 2nd Edn., Thomson/South-Western, Mason, Iowa, ISBN:9780324314410, Pages: 684.
Romney, M.B. and P.J. Steinbart, 2006. Accounting Information System. 11th Edn., Prentice Hall, Upper Saddle River, New Jersey, USA., ISBN:9780131968554, Pages: 805.
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.
Sekaran, U., 2000. Research Methods for Business: A Skill-Building Approach. John Wiley \& Sons, New York, USA., Pages: 463.
Singarimbun, M. and S. Effendi, 1995. Survey Research Methods. Pustaka LP3ES Indonesia PT., West Jakarta, Indonesia,
Stair, R. and G. Reynolds, 2009. Principles of Information Systems. 9th Edn., Cengage Learning, Boston, Massachusetts, USA., ISBN:9780324665284, Pages: 654.

Stone, R.A., 1994. Leadership and information system management: A literature review. Comput. Hum. Behav., 10: 559-568.
Wallace, J., 2004. Business process re-engineering. J. Global Inf. Manage., 20: 1-17.
Weske, M., 2012. Business Process Management: Concepts, Languages, Architectures. 2nd Edn., Springer, Berlin, Germany, ISBN:978-3-642-28615-5, Pages: 399.
Wilkinson, J.W., 2007. Accounting Information System Essential Concept and Application. 4th Edn., John Willey and Sons Inc, Hoboken, New Jersey, USA.
Wixom, B.H. and P.A. Todd, 2005. A theoretical integration of user satisfaction and technology acceptance. Inform. Syst. Res., 16: 85-102.

