

The Influence of Business Process on Accounting Information System Quality

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ABSTRACT

Accounting information systems (AIS) is a tool to help a company's daily operations and assist management in decision-making. An integrated information system is usually used to achieve user satisfaction. Thus, AIS is used to improve the quality of improve the business processes of a company to improve its efficiency. The sample for this study was 61 state-owned enterprises and explanatory cross-sectional survey was conducted among the heads of accounting department, chief financial officer and the head (branch manager). Structural Equation Modelling (SEM) approach and Partial Least Square (PLS) were used to analyse data obtained. The results showed business processes affected the accounting information system.

Keywords: Accounting Information Systems, business process

INTRODUCTION

Globalisation has encouraged intense competition among companies (Whitten & Bentley, 2007). A strategy that utilises all the

strengths and opportunities of a company based on the right information is important which will in turn ensure the company makes appropriate decisions (Bodnar & Hopwood, 2010; Meiryani, 2018). Therefore, quality accounting information (Al-Hakim, 2007) is vital and offers a competitive advantage for the organisation. Quality information is generated by quality accounting information systems (AIS) (Laudon & Traver, 2011). Specifically, quality information system is an integrated information system that meets company expectations.

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According to Nicolaou (2000), integration is the key to successful AIS. The integration of the components of AIS offers the company substantial advantage (Meiryani, 2017; McLeod & Schell, 2006). However, there are challenges in terms of having a good AIS be it business (Karlis, 2011; Suharto, 2007) or non-business (Martowardodjo, 2011; Nasution & Yarns, 2009; Praja, 2014; Suprijadi, 2010) institutions. In non-business (government) such as the Directorate General of Mineral and Coal, low quality of accounting information systems may lead to a potential a loss of tax revenue from the mining sector. In 2012 whereby data coal production, according to the Directorate General of Mineral and Coal reached more than 20 trillion (Praja, 2014). The oil and gas production at special work unit does not have an integrated system, neither does it have an accurate data on oil production.

According to Nasution and Yarns (2009), AIS in government is not integrated and this was confirmed by the Director General of Taxes, Customs. Suprijadi (2010) found the information systems for National Single Window (NSW) at the Port of Batam which started had not been integrated. The same problem is faced by Ministry of Finance based on the information provided by Directorate General of Taxation (Martowardodjo, 2011). The banking industry according to Boediono (2010), Executive Vice President of Indonesia, must provide accurate and transparent information. Budi Rohaidi (2012), Deputy Governor of Bank Indonesia, said many

banks have manipulated their financial statements (window dressing) for small banks as well as for the big banks. A similar claim was made by Budi Mulya (2011), Deputy Governor of Bank Indonesia, who said there is an increasing demand for transparency of accounting information.

LITERATURE REVIEW

Laudon and Traver (2011) stated that a business process involved workflow of concrete material, information, and knowledge of a series of activities (business processes are concrete workflows of material, information, and knowledge-sets of activities). They added that business processes refer to the unique way in which work is organised, coordinated, and focused on producing a valuable product or service. Hurt (2007) explained that business processes are the policies and procedures used in the organisation to create value for stakeholders, such as customers, stockholders, suppliers, and others.

Jones and Rama (2003) stated that a business process is a sequence of activities performed by a business. Bagranoff, Simkin and Norman (2010) defined the term business process as a collection of activities and workflow within the organisation that creates value (a business process is a collection of activities and workflows in an organisation that creates value) (Fendiani & Tandiono, 2016). Whitten and Bentley (2007) said business processes are the work, procedures, and rules needed to complete business tasks, regardless of the information technology used to automate or support them

(business process are the work, procedures, and rules required to complete the business tasks, independent of any information technology used to automate or support them). They added the task of responding business process business events, such as a customer order. Bagranof et al. (2010) stated that two business process that are common to every business organization which are: (1) sales process: begin with customer order and end with the collection of cash from the customer; (2) purchasing process: the accounting information systems is concerned with timely payment for purchased goods and services”.

Therefore, it can be said that business process is a series of activities/procedures clear to complete business tasks in creating value (Azhar Susanto & Meiryani, 2018a, b; Bodnar & Hopwood, 2010; Hurt, 2007; Laudon & Traver, 2011; Whitten & Bentley, 2007). Hoque (2006) described two dimensional business process as follows: 1) primary activity: activity of reception, storage, and distribution of material to produce products/services and activities to inform the customer about the products/services produced by the company; (2) 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 & development, investment in information technology, website development, product design).

Bodnar and Hopwood (2010) stated that all business processes have a starting

point and end point namely, managing customer orders. They explained dimensions of business process consist of a primary activity and supporting activity. According to Romney and Steinbart (2011), there are two dimensional business processes: (1) primary activity: and (2) support activity. Activities can be conceptualised as forming a value chain consisting of primary activities that directly provide value to customers and support activities allow the primary activities to be performed efficiently and effectively. Primary activities refer to activities of receiving, storing and distributing materials that an organisation uses to create the services, and products it sells; and activities that help customers access the organisation’s products or services.

Laudon and Traver (2011) reported business process consists of two (2) dimensions, namely:

Primary Activity: includes the activities of reception, storage, and distribution of material used by the organisation to produce products/services produced; and activities to inform customers about the products/services produced by the company.

Support Activity: activities of daily operations (accounting, finance, law and public administration), activities associated with employees (recruitment, hiring, training and compensation payments) and activity improve products/services (research and development, investment in information technology, website development, product design).

Bagranoff et al. (2010) stated that there are two common business processes in any business organization, namely: (1) the sales process which starts with the customer's order and ends with cash collection from customers; (2) the purchase process which involves accounting information system with regard to timely payment for goods and services purchased. Mcleod and Schell (2006) reported dimensional business process consists of a primary activity and support activity. Primary Activity includes: (1) logistics inputs obtain raw materials and supplies from suppliers; (2) operating companies that transform raw materials into finished goods; (3) the output logistics of moving goods to customers; (4) marketing and sales that identify customer needs; (5) get orders and activity-activity services that maintain good customer relations after sales. Support activity includes (1) infrastructure of the organisation that generally affects the entire main activity; (2) management of human resources; (3) the development of technology; (4) procurement/purchasing.

Hurt (2007) said critical business processes within the organisation include sales process, purchasing process, conversion processes, financial processes, and human resources processes. This was supported by Romney and Steinbart (2011) that the activities of the business process consist of revenue cycle, discharge cycles and the cycle of human resources. Therefore, it can be said that dimensions of business process is the primary activity with activity indicator for reception, storage and

distribution of material inputs used by the organisation to produce products/services produced and activities to inform customers of these and support activity referring to improving products/services (Hoque, 2006; Laudon and Traver, 2011; Romney & Steinbart, 2011).

MATERIALS AND METHODS

Suriasumantri (2009) stated that research method is a method used in the study. The research methods used in this study are based on survey. Sekaran and Bougie (2013) described the survey methods as collection of information from those who act as a source of information. Furthermore, Nazir (2011) stated that in the survey method, the researchers not only describe phenomena, but also explain the relationship, test hypotheses, make predictions, and acquire the meaning and implications of a problem to be solved. This research can provide an overview of phenomena related to the variables examined in this study, namely business strategy, leadership style, business processes, the quality of accounting information systems and the quality of accounting information. In terms of the type of study (the type of investigation), this kind of research is both verification and are explanatory (explanatory research) or causality (causal study), because this research aims to find out if and how far the factors that predicted affect a variable (Kuncoro, 2007). This research may explain how much influence variable business strategy, leadership style,

business processes, the quality of accounting information systems and influence the quality of the SIA.

RESULTS AND DISCUSSIONS

The results of descriptive statistics on business processes can be explained as follows:

Business processes in state-owned companies are at the level of clarity/stability of where the business processes are often both the primary activity and supporting activity. Companies sampled for these studies often have clear procedures/business processes to achieve company goals.

Based on the calculation of the relative frequency of variable business process analysis at 0% units responded very low/good/never. It can be interpreted that the state-owned company's clarity of a business process is still low in achieving the company's goals.

The results of descriptive statistics on the quality of accounting information system can be described as follows:

The score 3.1 means information system is used often to accommodate the needs of the user. It is interpreted that the accounting information system has the capability of integration, ease of use, accessibility, and adaptability.

Based on the calculation of the relative frequency of variable business, process analysis at 0% units responded very low/

good/never. It can be interpreted that the state-owned company has a low clarity of a business process in achieving the company's goals.

Based on the results of hypothesis testing, the $p\text{-value} = 0.00$. As the P value less than 0.05, H_0 is rejected. The conclusion is that business processes affect the quality of accounting information systems at a significance level of 0.05. Thus, the clearer the business process procedures, the quality of accounting information systems is increasing.

A testing of the effect of business processes on the quality of accounting information system showed $p\text{-value}$ less than 0.05 at the 5% significance level to reject H_0 . Better business processes can lead to ensure high quality of accounting information system. It can be concluded that the data provide evidence on the influence of business processes on the quality of AIS. The activity of reception, storage, and distribution of material inputs by the organisation to produce the product/service has an average score of 3.65 (category of often applied). This meant the sample of the study on average tended to implement business process activity, such as receiving, storing and distributing of material by the organisation producing products/services and carrying out operational activities of the company.

As for the second indicator that the application of primary activity in the form of activities inform customers about the products/services produced had an average score of 3.33 (in the often category). This

means that the operation of accounting information systems by the sample often implement business processes of primary activity in the form of activities to inform customers about the products/services produced. Business processes affect the quality of accounting information systems. This was emphasised by SOE Ministerial Regulation No. PER-02/MBU/2013 that internal information systems should be executed according to the company's business processes accurately, efficiently and effectively. In other words, the computer application (SIA) in state-owned enterprises are based on the needs of information and tasks that must be executed in supporting primary and supporting companies' activity in the form of a series of activities for reception, storage and distribution of products and services produced; socialisation/market products and services produced; a series of daily operational activities; a series of activities related to employees and a series of activities that improve products/services.

According to Whitten and Bentley (2007) business processes has an influence on the accounting information system. This was in line with Laudon and Traver (2011); O'Brien and Maracas (2007) who said that the business process is a factor that is considered when planning the organisation and that the success of an accounting information system must not be measured only by the efficiency in terms of minimising the cost, time and resource usage information; rather, it should be measured by

the effectiveness of information technology in support of the organisation's business processes, and enhance customer value and the company's business. The business processes in the SOE environment occurs where the work is organised, coordinated, and focused on producing a product or service that adds value to the consumer. PT. PLN business process for example starts from power plants managed by a subsidiary processed on Hydroelectric Power Plant (HEPP), Steam Power (power plant), Power Gas and Steam (Power Plant), Power Plant (NPP), and Diesel Power Plant (diesel). The electric current supplied to the distribution company is sold to customer. Business processes in the PT. PLN is organised, coordinated, and focused on producing a product or service that adds value to the consumer, thus affecting the quality of accounting information systems that use state-owned enterprises.

The results of this research supported the theory and proved that business processes affect the quality of accounting information systems. O'Brien (2004) for example, argued business process is the basic framework to the development of information systems. Furthermore, Bagranoff et al. (2010) stated that the effectiveness of the business processes supporting the quality of accounting information systems. O'Brien (2004) agreed the business process is the basic framework of the development of information systems (Laudon & Traver, 2011). The results of this study confirmed those of Nowicki

Lewis and Lippitt (2005) who investigated the implications of business processes on quality information systems. Jones and Rama (2003) revealed business process is a positive aspect in improving system performance information. Sekaran and Bougie (2013) found that an integrated understanding of business processes will improve the effectiveness of communication for the development of information systems. Therefore, business process and system design are important factors in determining the success of information systems.

CONCLUSION

It can be concluded from the foregoing that business processes affect the quality of accounting information systems. Not yet fully qualified accounting information systems have not implemented because of the primary business process activity and supporting optimal activity. Stable business process / can improve / maintain the quality of accounting information system, conducted by: (1) Duties and authority of employees must be clear and formalized in the form of decree issued and signed by the leadership. Sufficient and clearly documented rules strongly support the smooth operation of the organization; (2) Provide continuous training to all users of accounting information systems so that users of accounting information systems have adequate knowledge and skills in accordance with their work in operating accounting information systems.

Suggestions

Operational Suggestions

Based on the results of, it is recommended that in order improve the quality of accounting information systems, businesses must ensure: 1) Duties and authorities of employees are clear and stated formally in the form of a decree issued and signed by the leadership. The rules are adequate and documented to support the smooth operation with the organisation; 2) ongoing training for all users in in SIA so users have adequate knowledge and skills.

Suggestions for Development of Science

In order to meet the characteristics of scientific research that is replicable (Sekaran & Bougie, 2013), future research should look at different samples so that findings can be generalised.

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

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