

Factors That Influence Accounting Information System Implementation And Accounting Information Quality

Ruhul Fitrius

Abstract: This article aims to determine the effect of top management commitment and user training on the implementation of accounting information systems. This study was conducted at hospitals type A, B and C in the region of Riau Province, Indonesia. The number of hospitals that fulfill the criteria to have the accounting information system for 42 hospitals. Totally 34 questionnaires are returned by respondents and can be processed. Data obtained are processed using SPSS version 21. The result showed that the top management commitment and user training affect the accounting information system implementation at hospitals type A, B, and C in the province of Riau. The results also showed that the implementation of accounting information system affect the accounting information quality.

Keywords: Top Management Commitment, User Training, Accounting Information System, Quality of Accounting Information

1. Introduction

Information is data that have been organized and processed, so that gives meaning and improve the decision-making process (Romney & Steinbart, 2015: 30). High-quality information is an information product that has the characteristics, attributes, or qualities that make the information be more valuable for users (O'Brien & Marakas, 2011; 390). These characteristics are accurate, relevancy, timely, and complete (Azhar Susanto, 2013: 72; Hall, 2011: 14; Gellinas (2008: 20). The users need The information quality to increases the value of the decision to be taken by companies and make effectiveness decisions (O'Brien & Marakas, 2011: 353; Wilkinson, 2000: 25). Quality and useful of information is produced by an effective accounting information system (Laudon & Laudon, 2014: 241; Wilkinson, 2000: 8). Accounting information system is a system to collect, record, store, and process the data to generate information for decision makers (Romney, 2015: 36). According to Bodnar (2010: 1) the accounting information system is a set of resources, such as human and equipment, which is designed to transform financial data and other data into a financial information. The main criteria of an information system successful is shown by the quality of information result (Jung, 2004). A quality of accounting information system generate the quality information (Sacer et al, 2006: 61). Accounting information system involves human components and equipment, such as hardware, software, brainware, procedures, databases, and network communication (Azhar Susanto, 2013: 72; Wilkinson, 2000).

System components, perform activities "interrelated", integrated and work in harmony each other to process data and produce quality accounting information (Azhar Susanto, 2013: 72; Hurt, 2008: 5). The key to the successful of accounting information systems implementation is the integration of the system components (Rodin-Brown, 2008). In fact the accounting information system is not implemented properly, as stated by Nur Abadi (2015) that the application of accounting information systems in hospitals is still not integrated, causing problems when audited. Chazali Situmorang (2014) as the Chairman of the National Security Council, stated that the information system on BPJS not yet integrated with the hospital, because the data input from primary care facilities are still done manually and have not reached information system. Laudon & Laudon (2012: 364) argues that the application system is owned by the company can not provide a value, if it is implemented through a flawed process. Successful implementation of accounting information systems are influenced top management commitment (Bagranof, 2010:419; Sheth, 2010:50) and user training (Stair & Reynolds, 2012:388; Pearlson, 2010:115). Commitment shows the power of individuals to identify and engage in an organization (Armstrong & Taylor, 2014: 185). Management commitment is defined as involvement and maintain behaviors that help others achieve a goal (Cooper, 2006). Management had a high commitment will bring the commitment as a key practice for individual independent, not controlled by sanctions and external pressure, and relationships within the organization based on a high level of confidence (Armstrong, 2006: 34). Bagranoff (2010: 419) stated that the commitment of top management has an important role in the successful implementation of accounting information systems. Sheth (2010: 50) states that top management support is an important factor that determines the point between success and failure of implementation of accounting information systems. The phenomenon shows that efforts to efforts to repair and produce financial statements an unqualified government requires a commitment of leaders of ministries / agencies and local government (Budiono, 2011). Similarly, many rural banks (BPR) is problematic and closed in Indonesia, because the owner has a bad behavior, so it takes a special rule to reinforce the commitment of its owner (Darmin

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Nasution, 2011). Training is a process where people acquire the ability to help achieve organizational goals (Mathis, 2011: 317). Mahapatro (2011: 285) states that the training was organized activities to enhance the knowledge and skills of the people for a particular purpose. Furthermore Dessler (2013: 246) argues that training means giving employees new skills or ongoing required for the performance of their work. Companies need to institute a training program extensively to ensure their workers have the skills to use information technology effectively (Pearlson, 2010: 115). Laudon & Laudon (2012: 364) states that employees need training to prepare implementing the system at the correct information. Stair (2012: 388) states that when the operating system or application system is implemented, then the user training becomes very important. O'Brien & Marakas (2010: 437) considers that training is a key activity in the implementation of accounting information systems. Training related phenomena stated by Imam Bastari (2013) that low realization of local budget absorption as a result of implementing information systems and lack of personal ability. Based on the description above, the purpose of this study was to measure (1) the effect of management commitment and user training individually against implementation of accounting information systems, and (2) the effect of accounting information systems implementation to accounting information quality.

2. Review of Literature

2.1 Accounting Information System

The accounting information system is a collection of resources, such as people and equipment, which are designed to alter financial data and other data into information to be communicated to various decision makers (Bodnar, 2010: 1). The accounting information system is a set of interrelated activities, documents, and technologies designed to collect data, process, and report information to a diverse group of internal and external decision makers within the organization (Hurt, 2008: 5). Accounting information system is a system to collect, record, store, and process the data to generate information for decision makers (Romney & Steinbart 2012: 686). Implementation of a system represents a set of procedures that are prepared to complete a new information system or the revision and using the information system (Gelinas & Dull, 2008: 616). There are six components of Accounting Information Systems (Romney, 2012: 30), namely: (1) The people who use the system, (2) The procedures and instructions use to collect, process, and store data, (3) The data about the organization and its business activities, (4) The software used to process the data, (5) The information technology infrastructure, including the computers, peripheral devices, and network communication devices used in the AIS; and (6) The internal controls and security measures that safeguard AIS data. O'Brien & Marakas (2010: 30) states that the components are interrelated, all items working together (interrelated) to achieve a common goal by accepting inputs and produce outputs through a transformation process that organized. Dimension implementation of accounting information systems in this research are: transaction processing system (Azhar Susanto, 2013: 65; Hall, 2011: 10; Turban, & Volonino,

2011: 35) and the integration of the component system ((Romney, 2012: 30; O'Brien & Marakas, 2010: 30).

2.2 Quality of Accounting Information

Information is data that has been organized and processed to give meaning and improve the decision making process (Romney & Steinbart, 2015: 30). The quality of information is an intrinsic qualities held by the information itself, not including the situation and the context (Erik Mai, 2013). The information shows the high quality, if the information is relevant and useful for decision-making (Haag & Cummings, 2009: 9). High quality information is an information product that has the characteristics, attributes, or qualities that make the information more valuable to them (O'Brien & Marakas, 2010:350). Furthermore O'Brien & Marakas (2010: 350) states that characteristics of useful and valuable information that can be seen from the dimensions of the dimension of time, content and form. According to Hall (2011: 13-14), the useful information have the characteristics: relevant, timely, accurate, complete and concise. Stair & Reynolds (2010: 57) stated that quality information is accurate, reliable, current, complete, and presented in the right format. The dimensions of accounting information quality in this research dimension of time, content and form (O'Brien & Marakas, 2010:350).

2.3 Top Management Commitment

Commitment represents the strength of an individual's identification with, and involvement in, an organization (2014:185). Management commitment is a leadership style where managers and subordinates participate together in determining the purpose of employment, determine the level of responsibility, and clarify the performance commitments (Chalk, 2008: 3). Commitment management refers to the promises and actions of top management to allocate resources and provide support to the work done by these resources (Phillips, 1999: 79). Management commitment is the involvement and efforts to maintain behaviors to help others achieve their goals (Cooper, 2006). Management with a high commitment aims to raise commitments for individuals that have a major independent behavior, not governed by the sanctions and external pressure, and relationships in an organization based on a high level of confidence (Armstrong, 2006: 34). Dimension management commitment in this study, there are: (1) establish a policy (Sheard, 2002), (2) the provision of the required resources (Roach & McGaughey, 1997); Sheard, 2002; (3) involves the work of supervision (Roach & McGaughey, 1997; Cooper, 2006), and (4) improvement policy (Sheard, 2002; Cooper, 2006).

2.4 User Training

Training is the process whereby people acquire the capability to assist in the achievement of organizational goals (Mathis, 2011: 317). Training is organized activities to enhance the knowledge and skills of the people to achieve certain goals (Mahapatro, 2011:285). Training means giving employees new skills or ongoing required for the performance of their work (Dessler, 2013:246). Stair & Reynolds (2012: 44) states that the user training is key to getting the most out of the accounting information system. Training is not only related to activities such as data entry, but also involves all aspects of the use of new information

systems, so that the users (managers and end users) should be educated how new technologies affect the company's operations and business management (Obrien, 2011: 514). Users of accounting information systems are mostly people who are simply going to use information systems that have been developed, such as operators and managers (end user) (Azhar Susanto, 2013: 254). There are five (5) step training process ADDIE (analysis-design-develop-Implement-evaluate) that used, are: (1) Analyze the training need; (2) Design the overall training program; (3) Develop the course (actually assembling/creating the training materials); (4) Implement training, by actually training the targeted employee group using methods such as on-the-job or online training; and (5) Evaluate the courses effectiveness (Dessler, 2013:247). The relevant components of the three main phases in the training system, are: (1) the assessment phase, planners determine training needs and determine the training objectives; (2) the implementation phase, the implementation can be started based on assessment results; and (3) the evaluation phase, measures how well the training achieve what is expected (Mathis, 2011: 330).

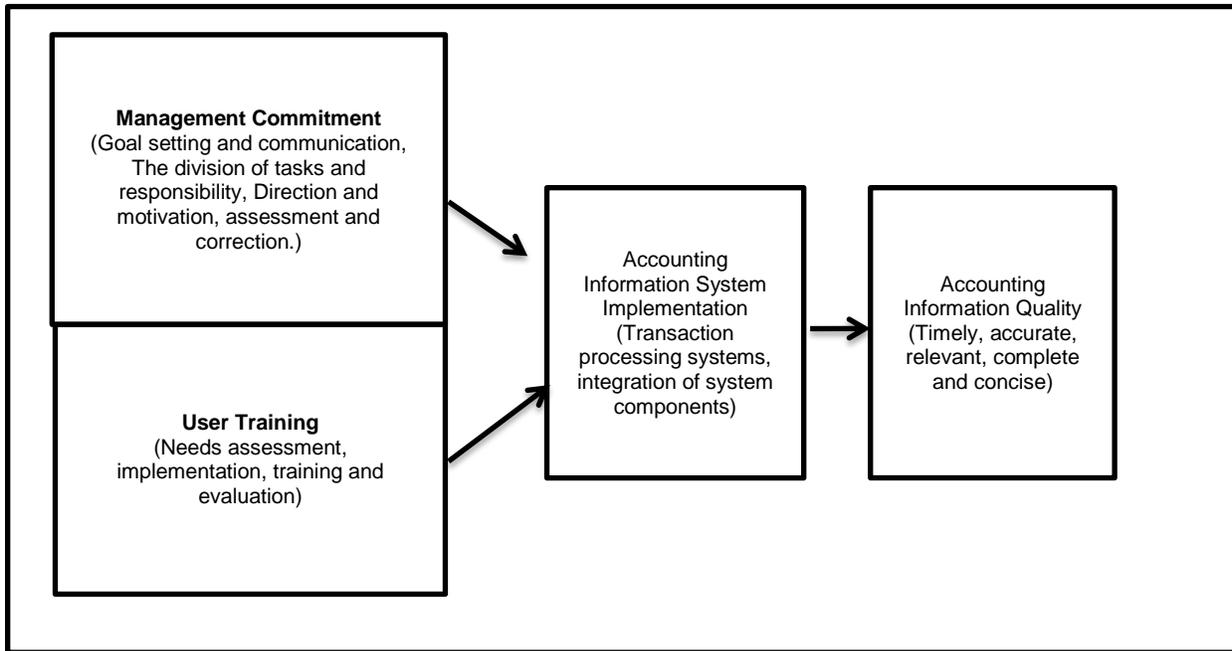
2.5 Theoretical Framework

The top management commitment is an important factor to help the success of operational managers to implement accounting information system, otherwise the implementation of information systems will fail (Schalbe, 2014: 54). Top management contribute to the implementation of information systems through their participation in the formulation of objectives and explain the application of information systems is a form of active participation (Englund, 2006). All changes in work habits, procedures and realignment of accounting information systems in organizations depend on the support of management (Laudon & Laudon, 2014: 573). Furthermore Laudon and Laudon (2013: 393) stated that top management commitment affect the implementation accounting information systems through the users and the technical information services staff. Similarly stated by Bui (2014) that the effective implementation of information systems require top management commitment. Furthermore Corsi et al. (2013) suggested that the successful implementation of ERP system is influenced by several factors, especially suitable education and training and commitment of top management. Robert et al., (1993) states that the installation program that effective depends on the level of top management commitment, the stronger the commitment, the greater the potential for success of the application program. The statement was reinforced by Dong et al. (2009) that the top management support affect the project systems implementation. Siti Kurnia (2012) which examines the quality of information systems at the Tax Office in Jakarta and Bandung stated that the commitment of top management, affect the implementation of accounting information systems. Al-Hiyari (2013) found the effect of top management commitment to the implementation of accounting information systems. Then Daoud (2013) found a significant effect of top management commitment to the implementation of accounting information systems. Furthermore Dezdard & Ainin (2011) stated that the company's top management should provide full support and commitment to the successful

implementation of accounting information systems. Training needs arising due to gap between the knowledge, skills and experience of the individual with the necessary to carry out their work (Stredwick, 2005: 377). The application system is owned by the company will not provide a value, if it is implemented through a process that is defective or if the company does not know how to use the system (Laudon & Laudon, 2012: 364). Application systems can be used, if managers and end-users should be given training on how to operate (Obrien, 2011: 514). Dezdard & Ainun (2011) states that adequate training and education regarding the accounting information system should be provided to users to ensure that they are able to use the system effectively and efficiently. Beydokhti (2011) states that user training quality has a direct effect on the successful implementation of accounting information systems. Zaied (2012) states that the training has a significant influence on the successful implementation of information systems. Rouibah (2009) revealed that the availability of training, management support and involvement of users contribute to improving the use of information system, if the system is considered useful and easy to use. The primary objective of financial accounting information system is to provide relevant financial information to the individual or group outside of an organization such as investors, government, state agencies and creditors (Bagranoff, 2010: 15). In order to generate the information, accounting information system collecting data and transform it into quality information (Gelinias and Dull, 2008: 17). People need high quality information, that is information product whose characteristics, attribute, or quality makes information more valuable to them (Obrien, 2011: 390). Previous research showed that the accounting information system has a significant impact on the quality of accounting information, accounting information system which is able to improve the quality and accuracy of financial statements reporting in Iran (Salehi, 2010). Similarly, the results of research Siti Kurnia Rahayu (2012) showed a significant effect of accounting information system to the quality of accounting information. Abdallah (2013) also showed the impact of the existence of the use of accounting information system of the quality of financial statements submitted to the government in Jordan.

2.6 Study Model and Hypotesis

Based on the above theoretical framework the research model can be described as follows:



From the description above theoretical framework found the hypothesis that shows the relationship between the variables to be tested, as follows:

Hypotesis 1: Implementation of accounting information systems is influenced significantly by management commitment and user training.

Hypotesis 2: accounting information quality is influenced significantly by implementation of accounting information systems.

3. Methodology

The research methodology used was survey method. Then the questionnaire is used as a tool for collecting data. The unit of analysis of this study is a hospital in the province of Riau, Indomesia, where there were 42 hospitals type A, B and C. Likert scale is used to measure the questionnaire answers from respondents. The questionnaire was prepared in the form of a closed question. To assess the ability of the measuring variables instrument, used validity test. While to know the level of precision, accuracy or consistency of the data collection tool, used test reliability. This study used data ordinal scale. To change to the regression analysis, ordinal scale data is transformed into an interval scale using Method of Successive Interval.

4.1 Results of tests of validity and reliability

Validity and reliability tests performed to assess the validity and reliability of the answers to the questionnaire items were received. Standard reliability testing a variable value determined by Cronbach Alpha value of more than 0.70. Whereas the value standard of the validity of the test results using the product moment correlation (validity index) with a correlation coefficient of more than 0.3. Results of tests of validity and reliability on the table 1.

Table 1: Results of reliability tests

Variabel	Reliabilitas	Hasil
Top management commitment	0,790	handal
User training	0,825	handal
Accounting information system Implementation	0,773	handal
Accounting information quality	0,794	handal

4.2 Descriptive analysis

Respondents use the measurement-point scale with a scale of 1 to 5. Point scale are grouped based on the average score of the response to interpretation, as follows: 1 <2: bad, 2 <3: less, 3 <4: pretty and 4 s.d. 5: Good. The results showed that the top management commitment shows the actual value of a score for 69.45%, user training for 65.37%, implementation of accounting information systems for 69.55% and accounting information quality for 75.98%. These results indicate that the average score of the answers all of the variables are enough categories. While the percentage of each variable gap indicates that there are opportunities to enhance or improve the commitment of top management, user training, implementation of accounting information systems and quality of accounting information.

4.3 The Results of Hypothesis Testing

To test of hypothesis, the research data in the form ordinal converted into interval data using the MSI (Method of Successive Interval). Test of hypothesis uses the statistical program SPSS (Statistical Product and Service Solutions). The regression equation that are used in this study was described in the second structure equation, as follows:

One: $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + e$

Second: $Z = \alpha + \beta_1 Y$

Explanation:

X_1 = top management commitment

X_2 = user training

Y = accounting information system implementation

Z = accounting information quality

4.5 The influence of top management commitment and user training on the accounting information system implementation.

The structure of the regression equation 1 is:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + e$$

The results of data processing using SPSS 21 resulted in the regression equation, as follows:

$$Y = 0.954 + 0,047X_1 + 0,597X_2 + e$$

The regression equation illustrates that every increase of first degree of commitment of the top management and first degree user training will enhance accounting information system implementation respectively 0.047 and 0.597. Adjusted R2 Square showed a yield of 0.577. These results indicate that variable top management commitment and user training are able to explain or predict the variable accounting information system implementation for 57.70%. While the remaining 42.30% is explained by other variables. The test results, as described in Table 4 shows that the commitment of top management and user training simultaneously affect accounting information system implementation significantly with a significance value of less than 0.05. The test results, as described in table 5 shows that top management commitment influence the accounting information system implementation is not significant, with 0,266 t value at less than > t table of 2.0423 with a significance value greater than 0.05. Values influence of top management commitment is based on the value of standardized beta coefficients for 0.052. User training influence on the accounting information system implementation significantly, where t valued at 3.776 greater than > t table of 2.0423 with a significance value of less than 0.05. The amount of user training influences can be seen from the Standardized Coefficients Beta is equal to 0.735.

4.6 The influence of accounting information system implementation to the accounting information quality.

The structure of the regression equation 2 is:

$$Z = \alpha + \beta_1 Y_1 + e$$

Processing data using SPSS ver 21 and generate the regression equation, as follows:

$$Z = 0,577 + 0,880Y_1 + e$$

The results of this research indicate that each of increase of 1 degree of accounting information system implementation can improve accounting information quality of 0.880. Adjusted R2 Square indicate a yield of 0.662. This figure indicate that the variable accounting information system implementation able to explain or provide information to predict the variable the information accounting quality for

66.20%. While the gap for 33.80% is explained by other variables. Table 6 above shows that the accounting information system implementation significantly influence the accounting information quality, where t valued at 7.852 less than t table at 2.0423 with a significance value of less than 0.05.

5. Conclusion

Top management commitment influence on accounting information system implementation are not significantly. User training influence on accounting information system implementation significantly. Top management commitment and user training influence on the accounting information system implementation simultaneously and significantly. Then the accounting information system implementation affect the quality of accounting information significantly. The results of this research have proved the concept theory of relationship top management commitment and user training with the accounting information system implementation and their impact on the accounting information quality. The results of this study can be used to solve the problem of the accounting information system implementation and accounting information quality through improved top management commitment and user training.

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