CONCEPT OF ACCOUNTING INFORMATION SYSTEM AND MANAGEMENT CONTROL SYSTEM TO IMPROVE COMPANY PERFORMANCE

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Abstract

Accounting information systems (AIS) are collections of activities from organizations that are responsible for providing financial information obtained from data transactions for computer-based reporting purposes. So an accounting information system (AIS) is part of a Management Information System (MIS) that is responsible for financial statements and data transactions. Whereas the Management Control System (MCS) is a system used by management including methods, procedures, and strategies to collect, analyze information, evaluate and use it, as well as other actions to exercise control. The explanation above shows that information (accounting information and additional information) is needed by management to control in the company. This study provides a concept regarding Accounting Information Systems, Management Control Systems, and Company Performance. When the management control process is right, then the company's performance in increasing management control systems can provide information in an adequate communication structure so that it can be used as a basis for decision making. Decision making supported by accurate information makes the performance of unit managers able to take anticipatory steps and improve operational efficiency and effectiveness so that the performance of unit managers will be improved.

Keywords: Accounting Information Systems, Management Control Systems, Company Performance.

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INTRODUCTION

The organization is a collection of people who have different competencies, which are interdependent with one another, who strive to realize their shared interests, by utilizing various resources. The common goal that the organization wants to achieve is wealth creation; therefore,
organizations can be said to be wealth-creating institutions. With the wealth that was successfully created, the organization will be able to provide welfare for all parties who put an interest in the organization. Wealth can be both material and material. Profit-patterned organizations aim to produce material wealth as measured by profits generated from their business. There is a non-profit organization that aims to provide material wealth measured from the remaining results of operations, and there are those that seek to produce material wealth, the results of which cannot be measured in monetary units. Almost all organizations are built as economic entities, both because they are intended to fulfill the financial welfare of their members and because they consume economic resources to realize immaterial goals. Because almost all organizations consume economic resources to accomplish their goals, adequate planning and control are needed for various activities carried out to achieve organizational goals.

Control, in this case, is manifested in the application of management control systems and planning by implementing accounting information systems (Wilkinson, 1992). In recent years, accounting information systems have received much attention, with accounting information systems managers can take appropriate actions related to problems in the organization, if the AIS output is inaccurate management will make the wrong decision, moreover, if the accounting information system is considered an advantage competitive for the organization. Failure to implement a sound accounting information system will harm the success of the organization according to Salehi and Abdipour (2011) in (Ahmad Al-Hiyari et al., 2013).

Ahmad Al-Hiyari, et al. (2013) focused the study on student perceptions at the University of North Malaysia about the factors that influence the implementation of accounting information systems and the quality of information, the results of which indicate that there is a significant relationship between management commitment, data quality and implementation of accounting information systems. However, the link is not significantly related to human resources. Also, this study found that there is a significant relationship between human resources, accounting information systems, and the quality of accounting information (Rahadi, 2010). Besides, the relationship between management commitment, data quality is not significantly related to the quality of accounting information, consistent with Rahayu (2012).

The surprising result of the study is the insignificant relationship between data quality and the quality of accounting information, perhaps because they assume that even high-quality accounting data can be manipulated by management, which is consistent with previous research on earnings management (Astari and Sukartha, 2017). Xu (2014) focuses on the study of system investigations, stakeholders, and organizational factors that have an impact on the implementation of a qualified accounting information system data. Several essential points can be concluded from the application of the use of accounting information systems. (1) Trained personnel are as crucial as the appropriate system, (2) Input controls are the most critical controls, and in online transaction environments, must be combined with the quality of data supplier management, (3) It is difficult to have a Data Quality manager position in small and medium-sized organizations. However, organizations must incorporate the Quality manager function into the proper work function as stakeholders who must be responsible for the quality of the data in AIS (Xu et al., 2003).

Research (Xu, 2014) shows that to have a successful accounting information system implementation, organizations must pay attention to both systems and organizational factors. Different stakeholders of the system and data quality control need to work together to ensure data quality in AIS. Siamak Nejadhosseini Soudani (2012) empirically analyzes the relationship between AIS and organizational performance in companies listed on the Dubai Financial Market (DFM). From the research found: (1) AIS variables significantly affect financial performance.
variable tells us that AIS is the most critical factor in companies registered with DFM. (2) Business performance and management performance influences organizational performance. This means financial performance and management performance are useful in building organizational performance, (3) AIS as an essential factor in building organizational performance through commercial collection, storage and processing and accounting data whose impact will be evaluated on improving decision making processes, quality of accounting information, evaluation performance, internal control and facilitating company transactions. (4) There is no relationship between AIS and management performance. This result means that several obstacles lead to the implementation of the AIS regarding management performance in companies listed on the DFM (Dubai Stock Exchange).

In research conducted by Majed (2013) and Muchlis (2009) found that Management Control Systems have a significantly positive effect on Company Performance. This finding means that the better the Management Control System, the more effective the company's performance will be. The theory stated by Porporato (2006) in Majed (2013) that one of the essential organizational tools to support optimal performance of a company is the need for a management control system. To determine success and sustainable development, the company must now have a sound system and a qualified workforce. One excellent system is an optimal management control system (Sari and Saragih, 2009). Some researchers in the accounting field also acknowledge that MCS plays a vital role in organizational performance (Goebel and Weißenberger, 2017). Besides, research is also in line with the results of the study conducted by Muchlis (2009) examining management control systems that have a positive effect on SSRs performance which is consistent with Mahama’s (2006) research. Based on the description of the literature - literature, a literature review that has been described, the conclusions that can be drawn from this article are the importance of the concept of the application of accounting information systems and management control systems to improve company performance.

RESEARCH METHOD

This study uses a qualitative approach by applying library research methods or a literature review. The literature review is essential in qualitative research which relates to the study of theories that can be used to explain phenomena and study previous studies to show the linkages between the research being conducted and what has been done. This literature review research method deals with library data collection methods, or research whose research objects are explored through a variety of library information (books, encyclopedias, scientific journals, newspapers, magazines, and documents. The focus of library research is to form a theoretical framework for research topics/fields, explain definitions, keywords, and terminology, and determine studies and models, which are used to analyze and solve research questions that have been formulated.

The nature of this research is descriptive analysis, namely the regular breakdown of data that has been obtained, then given an understanding and explanation to be well understood by the reader. The data used in this study are secondary data, namely books, magazines, and written documents. Besides, articles also taken from journals related to the research topics developed were also used. Whereas to answer the problem, the analysis technique used is the content analysis technique (Erlingsson and Brysiewicz, 2017). In this technique, data is needed to explain each stage of the research, and then the content analysis is performed on the data to answer or describe the research question at that stage. The results of the content analysis are then used as material to answer research questions at a later stage along with other data obtained.
RESULTS AND DISCUSSION

Accounting information system
The accounting information system is an accounting system in a formal form, which has the characteristics and elements as described above. As Bodnar and Hoopword (2003) stated once again that: "Accounting information systems are collections of sources, such as people and equipment designed to transform financial data into information. This information is communicated to decision makers. Accounting and information systems are very closely related. An authorized body best describes this relationship: "Basically, accounting is an information system. Precisely, accounting is the application of the general theory of information to the problems of efficient economic operations. Accounting is also a large part of public information expressed in quantitative form. In this context, accounting is part of the general information system of an operational unit and is also part of a large field under the name of the information concept ".

This close relationship is also recognized by the term accounting information system (AIS). Accounting information systems are formal information systems. This system contains all the characteristics described in advance, including goals (usability), stages, tasks, users, and resources. Furthermore, the accounting information system of a particular company has comprehensive coverage. This system extends to all company activities and provides information for all company users. On the other hand, an accounting information system of a company shows aspects that distinguish it from the entire company information system.

These aspects arise because the accounting function relates to the economic impact of certain events on the activities and welfare of the company. So, accounting information systems only accept economic data from external events (transactions) or internal operations. Most of this data is expressed in financial terms (for example, the number of sales to customers), although it can also be non-financial (for example, the number of employee hours) if this data is finally converted into a commercial unit (for example, gross salary). In terms of output, accounting information systems produce documents, reports, summaries, and other information outputs that are stated entirely, or at least in large part, in monetary units. These financial-oriented outputs provide scorekeeping information, for example, how much profit is generated, how much debt to certain parties; attention-directing information, for example, how much expenditure has exceeded the budget; and information on decision making, for example, what are the benefits of launching a new product compared to its costs (King and Wahyuningrum, 2017).

Management Control System
Macariello and Kirby (1994) define management control systems as devices of interconnected communication structures that facilitate the processing of information to help managers coordinate existing parts and achieve organizational goals continuously. Hongren, Foster, and Datar (2000) define a management control system as the acquisition and use of information to help coordinate the planning and decision-making process through organizations and to guide employee behavior. The purpose of this system is to improve collective decisions within an organization. Thus, the notion of controlling management varies, depending on the understanding of management control.
However, the objectives of the system are all identical for collective decisions so that they ultimately lead to the same thing, namely achieving organizational goals. Management control is a process. In the process, it is influenced by environmental factors. The management control process still puts humans as the main actors.

Management control systems are a system used by management to build the organization's future (Anthony et al., 2005). The company needs to be predetermined in what business the organization will try in the future. The answer to that question is the mission of the organization. Thus the purpose of the organization is the chosen track to bring the organization to realize its future. After the organization's mission is determined, the next step taken by management is to describe the condition of the organization that will be recognized in the future. This description of the terms that will be realized in the future is the vision of the organization. Thus, to achieve the image of the organization, through the mission that has been chosen, a system of planning and control of company activities is needed.

The management control system is a system for planning activities to realize the vision of the organization, through the chosen mission and implementation and control of the implementation of the planned activities. To achieve the concept of the organization through a task that has been selected, the organization requires a system of design activities that is a series of sequential steps to plan actions taken by the company in realizing the vision of the organization. The activity planning system to understand the organization's vision consists of four main steps: (1) strategy formulation, (2) strategic planning (strategic planning), (3) programming (programming), (4) budgeting (budgeting). The four planning stages are often referred to as total business planning. To carry out the planned activities that have been prepared, steps for implementing and controlling the implementation of the plan are needed. The management control system is a system for implementing and managing the implementation of activity plans.

Several factors can influence the design of management control systems, and factors that need to be considered in designing management control systems include: there is no right or lousy control system design, what exists is whether a model fits in with the business environment faced by the organization. Fitness (fitness) of a system with the context in which the order is used will make the policy useful for conducting business in that environment. Therefore, in designing management control systems, the characteristics of the business environment entered by the organization are the basis for developing the system (Figure 1). This formulation approach is called the contingency approach. Secondly, a business environment is like a national system which needs a map. Maps that illustrate the business environment faced by management are called the way we see the world paradigm. With specific standards, we view the world as a way of dealing with it, and with this paradigm, we behave and act.
Figure 1. Conceptual framework for designing management control systems

Based on this paradigm, we design systems - a tool that we use to organize various resources to realize system goals. Third, each system consists of two parts: structure and process. The system structure is the components related to one another, which together form a network. The system process is the steps that must be passed to realize the system goals. Fourth, every system we design requires specific competencies to run the system. Compensation for running a management control system is called managerial skill.

Linkages to Accounting Information Systems with Management Control Systems
Three terms come to the surface, related to the management or operations of a company, namely Management Information Systems (SIM), Accounting Information Systems (AIS) and Management Control Systems (MCS). Management Information System (SIM) is an integrated system that uses hardware and software procedures guidelines, management models and decisions and a database, which aims to present information to support operations, management, and decision making in an organization. Accounting information systems (AIS) are collections of activities from organizations that are responsible for providing financial information obtained from data transactions for computer-based reporting. So an accounting information system (AIS) is part of a Management Information System (SIM) that is responsible for financial statements and data transactions. Whereas the Management Control System (MCS) is a system used by management that includes methods, procedures, and strategies for collecting, analyzing information, evaluating and utilizing it, and other actions to exercise control.

The explanation shows that information (accounting information and other information) is needed by management to do control in the company. In connection with this explanation, we will discuss more the role of accounting information systems in the management control system that is carried out within the company. Accounting information systems are part of the management information system. AIS is needed in controlling the management of an organization. The role that can be provided by accounting information systems in management control systems is as follows.

Planning
Accounting information systems produce information in the form of financial information and accounting data. In preparation, even though accounting information data has occurred in the past
(actual cost), but it is essential as a starting point for planning future activities. Information that is usually most needed by management for planning is information in the future. This information can be obtained from various sources. One technique that can be used in the system to collect information in the future is the Expert System, for example, data from a marketing expert by predicting future marketing.

**Coordination**

It is a function in a company organization that requires cooperation in the form of information between parts to carry out company operations, for example, coordination between production, finance, and marketing. The company using a database can serve information between elements of the company. As explained by Jogianto, a database system is an information system that integrates data sets that are interrelated with each other and make available to several different applications within an organization. Furthermore, Ron Weber's explanation contained in the book Zaki Baridwan (1993) states that there are four goals that must be achieved using a database, namely: (1) can be used together (shareability); (2) Availability; (3) can be developed (Evolvability); (4) Database integrity. The use of a database accelerates the acquisition of data or information from several parts of the organization. This part will further help management coordination in the operations of the company's organization.

**Assessment and Control**

Accounting information systems produce accounting information that comes from various parts or functions within the organization. This information is used as a basis for assessing performance (performance evaluation). Size of work performance is a precise type of information for control. Data on achievement results are collected during the operation. Periodically, information about these measurements is reported to managers who oversee a particular operational activity to evaluate their work performance. The assessment process begins by comparing the results achieved with the plan. Based on this analysis, managers try to find answers to why the results obtained are not as planned.

Performance measurement varies according to the level of the organization. At a lower level, achievement measurements tend to be more detailed, specific, qualitative, and attention is directed towards particular deviations. Whereas at a higher level, the standards tend to be more general, and more attention is paid to achievement for one unit as a whole, the main results, and the deviations that are exceptions. Data about achievement results can be provided by the accounting system both the manual accounting system and the computer-based accounting system located in the data processing technique. The manual system uses hands, while the computer system uses computers that have been programmed, so that the benefits of the order using the computer are better, for example, the speed of recording/entering data, the results report faster and at any time reports can be obtained if needed. The presuppositions derived by various parts of the organization can be used as a basis for control. The information system with a monitor screen allows continuous and fast control of the results obtained in the monitor screen display. The necessary planning has been added with the concept of control limits to measure achievement. If the performance is beyond the control limit, it is immediately submitted to the controlling unit.

**Decision-Making**

Some opinions say that computers can make human-made decisions. A decision maker must always be a part of a choice. A decision algorithm, a decision rule, or a computer program only
serves to help by presenting the basis of a decision. The choice of the decision remains only made by humans. In terms of decision making, the accounting system uses a computer that can provide concepts in the form of tracing, designing, and selection stages. In the search phase, the system is tasked with finding and filtering the environment internally and externally to see conditions that indicate an opportunity or problem, while the design stage involves finding, developing and analyzing the best course of action, and the selection stage is a procedure for evaluating and implementing software.

Impact of Accounting Information Systems and Management Control Systems in Company Performance

Accounting Information Systems (AIS) are tools that, when incorporated into the field of Information Systems and Technology (IT), are designed to assist in management and control related to the economic-financial sector of the company (Halim, 1994). However, incredible technological advances have opened up the possibility of producing and using accounting information from a strategic perspective. This system is essential to be applied to all companies; even this system is necessary to be applied to Small and Medium Business Units to face higher levels of uncertainty in competitive markets (El Louadi, 1998 in Grande et al., 2011). In a study conducted by Grande et al. (2011), it was concluded that there was a significant relationship between the use of AIS on financial performance and other performance, but there was no meaningful relationship between the use of AIS and productivity.

In the book of Mulyadi and Setyawan (1999) management control is a process. In the process, it is influenced by environmental factors. The management control process still puts humans as the main actors. Management control systems are a system used by management to build the organization's future. The company needs to be determined first in what business the organization will try in the future. The answer to that question is the mission of the organization. Thus the purpose of the organization is the chosen track to bring the organization to realize its future. After the organization's mission is determined, the next step taken by management is to describe the condition of the organization that will be recognized in the future. This description of the terms that will be realized in the future is the vision of the organization. Thus, to achieve the image of the organization, through the mission that has been chosen, a system of planning and control of company activities is needed.

The management control system is a system for planning activities to realize the organization's vision, through the chosen mission and implementation and control of the implementation of the activity plan (Halim et al., 2000). To realize the idea of the organization through a mission that has been chosen, the organization requires a system of design activities that is a series of sequential steps to plan actions taken by the company in realizing the vision of the organization. The activity planning system to understand the organization's vision consists of four main steps: (1) strategy formulation, (2) strategic planning, (3) programming, (4) budgeting. Wijethilake et al. (2016) examined the extent to which it allows and controls the use of management control systems (MCS) to moderate the relationship between environmental innovation strategies and the performance of manufacturing organizations and service sectors representing multinational companies and local organizations operating in Sri Lanka. In this study found that the use of MCS positively moderated the relationship between environmental innovation strategies and organizational performance; on the contrary, MCS control decreased the link negatively. Researchers compared results for the manufacturing and service sectors.
CONCLUSION

From the description in the discussion of accounting information systems and management control systems, that accounting information systems have a role in the management control system in terms of planning, coordination, assessment and control, and decision making. Accounting information systems produce information in the form of financial information and accounting data. In preparation, even though accounting information data has occurred in the past (actual cost), but it is essential as a starting point for planning the company's future activities. The company using a database can serve information between parts of the company. As explained by Jogianto, a database system is an information system that integrates data sets that are interrelated with each other and make available to several different applications within an organization. Accounting information systems produce accounting information that comes from various parts or functions within the organization. This information is used as a basis for assessing performance (performance evaluation). Size of work performance is a precise type of information for control.

Some opinions say that computers can make human-made decisions. A decision maker must always be a part of a choice. A decision algorithm, a decision rule, or a computer program only serves to help by presenting the basis of a decision. The choice of the decision remains only made by humans. In terms of decision making, the accounting system uses a computer that can provide concepts in the form of tracing, designing, and selection stages. In the search phase, the system is tasked with finding and filtering the environment internally and externally to see conditions that indicate an opportunity or problem, while the design stage involves finding, developing and analyzing the best course of action, and the selection stage is a procedure for evaluating and implementing software. There is a positive effect of the management control process on company performance because the management control process is a stage that must be passed to realize the system objectives.

The process of management control is related to behavior between managers and between managers and subordinates. The management control process explains and applies how the management control structure works. The method of management control relates to actions taken by management to ensure that people in the organization have implemented the strategy effectively and efficiently. Thus if the management control process is right, then the company's performance in increasing management control systems can provide information in an adequate communication structure so that it can be used as a basis for decision making. Decision making supported by accurate information makes the performance of unit managers able to take anticipatory steps and improve operational efficiency and effectiveness so that the performance of unit managers will be superior.

The application of accounting information systems in performance or performance measurement systems can be used to motivate an individual to work harder. In particular, performance information is believed to encourage managers by providing feedback on work behavior. All data generated by a performance measurement system will make it easier for managers to monitor the running of their business and know which aspects of the business need help. Thus a continuous improvement effort can be made to achieve the company's goals in the future, both short-term and long-term goals.

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