

The Influence of Accounting Information Systems and Service Systems on Organizational Performance at Hospital in Makassar City

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Abstract

This study aims to analyze the accounting information system in hospitals. This study uses primary data sources by distributing questionnaires to 63 respondents with research samples, namely the head of service, head of support, and head of financial administration at type A and type B hospitals in Makassar City. The returned questionnaire was 57 respondents, processed using multiple linear analysis with the help of the SmartPLS computer program. The results showed that the accounting information system and service system have a role in improving organizational performance at hospitals in Makassar City.

Keywords: accounting information system, service system, organizational performance

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1. INTRODUCTION

The performance of an achievement or level of success achieved by an individual or an organization in carrying out work in a certain period. Performance can also be interpreted as an achievement achieved in carrying out services to the community in a period. Performance improvement cannot be achieved in carrying out services to the community for a period. Every management effort aims to encourage performance to reach the highest level in every organization (Aditma, 2017). Organizational performance has become an important topic in economics and business literature. It has gained significant interest from academics and practitioners because it can create competitive advantages for companies and improve their sustainability and future prospects (Hanafi et al., 2022). The emergence of globalization has resulted in increasingly fierce competition. Therefore, in order to be at the forefront of competition, companies must have good management to achieve the company's main goals, namely getting maximum profits effectively, efficiently, and economically for maintaining the concepts of going concern organizations, it is

necessary to realize that the business environment will continue to change, including information technology. One type of information system needed by the organization is accounting information about the company's business processes that are needed by management and parties related to decision-making. Implementing an accounting information system aims to streamline an existing company's performance, which was originally good to be better.

Accounting information systems assist management in planning and carrying out the company's operational activities to achieve company goals (Diana, 2012). Accounting information system is an accounting data processing system coordinated from humans, tools, and methods in a structured organizational container to produce financial accounting information and management information (Dalimunthe et al. 2019). Accounting information system is a supporting activity in carrying out the company's main activities to be more effective and efficient.

Effective is when something can be used and is useful in accordance with predetermined provisions, while efficient is when doing something can minimize or reduce the use of existing costs. An effective and efficient accounting information system is needed by all organizations, one of which is the hospital. Hospitals need an information data processing system that supports it, with an adequate accounting information system, which is expected to increase work effectiveness and efficiency, improving performance at the hospital.

Hospital is a service business unit that provides social services in the clinical field. Although the number of hospitals will increase, the number of hospitals will lead to tougher competition. Therefore, the key to increasing competitiveness is improving the hospitals in Makassar. However, the results of a short interview conducted with one of the workers who worked at the hospital turned out that there were still problems that arose in the use of the accounting information system. The problems are related to errors in the system when sending drugs to the active for one hour. Besides, there are problems during service, such as patients often complaining when queuing, waiting for doctors, and waiting for drugs.

The health service system still has many vulnerabilities. It reflected in the lack of performance, which can be seen from the lack of control over the special allocations funds provided by the ministry, the lack of health service facilities that can be accessed by the community, inadequate medical equipment in several regional hospitals, lack of financial incentives for physicians, and weak risk culture. Especially for health services at public hospitals in South Sulawesi, there are problems related to health services that are less than optimal which causes some patients to be displaced due to the lack of specialist doctors (Hanafi et al. 2022).

Research conducted by Mulianti (2020) shows that there is a significant and positive influence between the accounting information system on employee performance, and the place of research is PT Iron Bird Logistics. Rizaldi (2015), the results of the research conducted, namely the application of an accounting information system, have a significant and positive influence on employee performance, and the place of research is at CV Teguh Karya Utama. Parjanti (2014), found that the accounting information system has a significant and significant effect on the performance of employees and the place of research, namely in 45 computer companies that are members of APKOMINDO Surabaya City. Research conducted by Churiyah (2007) shows that service quality, which consists of five dimensions,

significantly influences hospital performance. Ardiansyah et al. (2017) found that simultaneously service quality has a significant effect on patient satisfaction. Research conducted by Hanafi et al. (2022) showed the influence of job satisfaction and spiritual have an influence on organizational performance (hospital).

Based on this description, this article discusses the effect of the accounting information system on organizational performance and the effect of the service system on organizational performance in hospitals in Makassar City, especially type A and type B hospitals.

2. LITERATURE REVIEW

2.1. Effect of Accounting Information Systems on Organizational Performance

Islam and Hu (2012) explained that in applying contingency theory, accounting information systems are closely related to technology, environmental, and organizational structure effects. Contingency theory supports the realization of the effectiveness of the accounting information system (Nicolau, 2000). Contingency theory explains the use of accounting information, which will ultimately help in evaluating management performance and decision-making.

Kurniawan and Nensih (2014) say that several cogency approaches affect companies, such as the external environment, organizational size, verified technology, and formal structure. One of the technologies a company uses is an accounting information system that supports daily company activities. Accounting information systems are very useful for companies in decision-making activities.

Romney and Steinbart (2016) explain that an accounting information system is a system that collects, records, stores, and processes data to produce information for decision-making. Knowledge of using the accounting information system is needed so that users can communicate with the company's top managers. Managers need the information to predict the future and make decisions by considering the company's external factors. The accounting information system is useful in capturing, delivering, creating, storing, and communicating that information which can help managers they can improve organizational performance. According to the American Institute of Chartered Public Accountants (AICPA), the accounting information system indicators are availability, security, maintainability, and integrity.

Suhud (2015) stated that the accounting information system positively affects individual performance. Research conducted by Muliyanti (2020) states that the accounting information system significantly and positively affects employee performance. Research conducted by Febriansyah (2018) states that the accounting information system significantly and positively affects employee performance. Research conducted by Mauliansyah (2019) states that the accounting information system significantly and positively affects company performance. Based on the description and previous research, the first hypothesis is formulated as follows:

H1: Accounting information system affects organizational performance.

2.2. Effect of service system on organizational performance

Contingency theory states system on organizational performance contingency theory states that all components of an organization are compatible. In service systems, contingency theory is based on the general premise that no universal service system is always appropriate to be applied to all organizations in every situation. This means that the design of various components of the service system depends on special contingencies, or it can also be said that other situational factors can influence certain conditions.

A service system is an activity or sequence of activities in a business carried out by a person or group of people or certain agencies to provide assistance and convenience to people who have an interest in the organization in order to achieve goals in accordance with the main rules and procedures that have been determined (Moenir, 2000). The service system indicators put forward by Iman and Suryani (2017) are input, process, output, outcome, and impact. Ardianto et al. (2015) stated that the service system has a positive direction and significantly affects service quality. Churiyah (2007) states that service quality, which consists of five dimensions, significantly influences hospital performance. Ardiansyah et al. (2017), in their research, that simultaneously service quality has a significant effect on patient satisfaction. Based on the description and previous research, the second hypothesis is formulated as follows.

H2: Service system affects organizational performance.

Based on the description that has been explained previously, the conceptual framework for this research is described as follows.

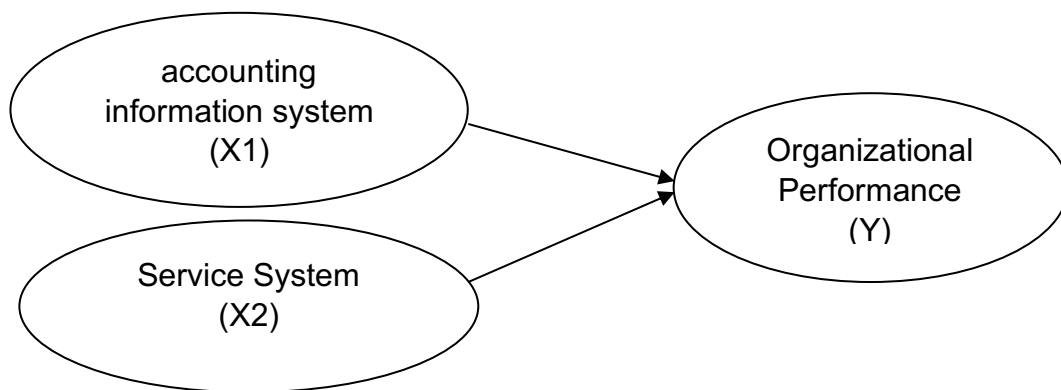


Figure 1. Research Model

3. METHODOLOGY

This study uses a quantitative approach by collecting primary data through questionnaires to respondents as the population and sample in this study. This research consists of theoretical foundations and ideas of experts to previous research. This study examines the effect of variable X (accounting information system and service system) on variable Y (organizational performance). To test the

hypothesis, this study will use the smartPLS method. This research focuses on data processing in variable testing so that it will produce a relationship between variables. The type of data in the form of answers to the statements in the questionnaire in the form of a Likert scale with a score of one (strongly disagree) to five (strongly agree). Sources of data in this study came from primary data.

The population in this study is the head of support, head of service, and head of financial administration who work in type A and B hospitals in Makassar City. The research sample is the head of the support field, the head of the service sector, and the head of financial administration, with a total of 21 hospitals, so the total sample is 63.

The technique or method of collection used is a questionnaire, which is a way of collecting data by providing data or distributing a list of statements to respondents in the hope that they will respond to the list of statements. This questionnaire consists of four sections containing a number of statements related to research variables, namely accounting information systems (8 statements), service systems (12 statements), and organizational performance (11 statements).

This research uses a data analysis method with the smartPLS computer program. To determine the accuracy of the measurement model (outer model), which consist of validity and reliability tests to evaluate the structural model (inner model) to test the hypothesis. The PLS structural model is evaluated using r-square for the dependent constructs of path coefficients or t-values of each path to test the significance between constructs in the structural model. The path coefficient score or the inner model indicated by the t-statistic value must be above 1,64 for the one-tailed hypothesis at 5 percent alpha. The variables in this study consisted of two kinds of variables, namely the independent variable and the dependent variable. The independent variables in this study are the accounting information system and the service system. The dependent variable in this study is organizational performance.

Romney and Steinbart (2016) suggest that an accounting information system is a system that collects, records, stores, and processes data to produce information for decision-making. These systems include people, procedures and instructions, data, software, information technology infrastructure, internal controls and security measures. An information system is needed by a company engaged in any field because it contains a process to report the company's financial condition accurately and correctly for all parties who need it. According to the American Institute of Chartered Public Accountants (AICPA, 2004), indicators of an accounting information system are availability, security, maintainability, and integrity.

A service system is an effort made by a person or group of people or agencies to provide assistance or convenience to people with interest (Moenir, 2000). The service system indicators proposed by Iman and Suryani (2017) are structure/input, process, output, outcome, and impact. Organizational performance is the organization's ability to carry out any tasks assigned to the organization to achieve its goals, objectives, mission, and vision. The organizational performance focuses on achieving results and goals and emphasizes the implementation process and resources to achieve its goals (Aditma, 2017). Using the Balance Scorecard approach by Kaplan (1992), organizational performance indicators are finance, customers, internal business, and growth and learning (Budiarti, 2005).

4. RESULT AND DISCUSSION

4.1. Data Description

This study aims to determine the effect of the accounting information system and service system on organizational performance. The objects in this study were the head of the service division, the head of the support division, and the head of the financial administration of type A and type B hospitals in Makassar City. The data collection method in this study used a questionnaire measured by a Likert scale, namely a score of one to five. The questionnaire distribution in this study was carried out on March 15 to April 15, 2022, through a questionnaire distributed directly by visiting each hospital. The number of questionnaires that should have been distributed was 63, and the number of respondents who returned the questionnaire was 57. Therefore, questionnaires can be processed are 57 questionnaires, and those cannot be processed 6 because the questionnaires are not returned.

4.2. Convergent Validity Test

The number of questionnaires filled out by respondents was 57 questionnaires. The validity and reliability criteria can also be seen from the reliability value of a variable and the Average Variance Extracted (AVE) value of each variable. The variable is highly reliable if the composite reliability value is above 0,7 and the AVE is above 0,5.

Table 1. Average Variant Extracted (AVE)

Variable	AVE	Description
Accounting information system (X1)	0,715	Valid
Service system (X2)	0,644	Valid
Organizational performance (Y)	0,643	Valid

Source: Data processed (2022)

The data presented in table 1 shows that the accounting information system, service system, and organizational performance variables have an AVE value greater than 0,5. Thus, it can be stated that each variable has good convergent validity.

4.3. Discriminant Validity Test

Discriminant validity can be tested by comparing the square root of the AVE for each construct with the correlation value between constructs in the model. Good discriminant validity is shown from the square root of the AVE for each construct which is greater than the correlation between constructs in the model.

Table 2. Fornell Larker Criterion

	Accounting Information System	Service System	Organizational Performance
Accounting information system	0,842		
Service system	0,707	0,800	
Organizational performance	0,828	0,950	0,801

Source: Data processed (2022)

The data presented in Table 2 shows that the square root of the AVE for each construct is greater than the correlation between constructs in the model. Therefore, based on the results of the Fornell Larcker criterion test, it can be stated that the indicators used in this study have good discriminant validity in compiling their respective variables.

4.4. Composite Reliability and Cronbach Alpha

Composite reliability and Cronbach's alpha are parameters used to test the reliability of indicators on a variable. The rule of thumb for composite reliability and Cronbach's alpha used in this study should be $>0,7$. The composite reliability and Cronbach's alpha value of each variable used in this study are shown in Table 3.

Table 3. Composite Reliability dan Cronbach's Alpha Value

Variable	Composite Reliability	Cronbach's Alpha	Description
Accounting information system	0,952	0,942	Reliable
Service system	0,956	0,950	Reliable
Organizational performance	0,952	0,945	Reliable

Source: Data processed (2022)

The data presented in Table 3 shows that the composite reliability and Cronbach's alpha values of all research variables are above 0,7. These results indicate that each variable has met the rule of thumb for composite reliability and Cronbach's alpha, so it can be concluded that all the variables used in this study can be relied upon to test the hypothesis.

4.5. Coefficient of Determination Test Result

R-square is used to measure the predictive power of the structural model. R-square explains the effect of the dependent variable. R-square value of 0.67, 0.33, and 0.19 indicate a strong, moderate, and weak model. The R-square results in appendix 4, show that the R-square value is 0.575. this value indicates that the variable accounting information system service system affects organizational performance by 57.5%. Then the remaining 42.5% is influenced by other variables outside the variables in this study.

4.6. Predictive Relevance Test Result

The relevance of the prediction aims to see the relative influence of the structural model (inner model) on the research measurement for the dependent variable. Value > 0 indicates that this study has predictive relevance, and < 0 indicates no predictive relevance (Saputra, 2018). The results of the smartPLS data processing show that the value is 0.477, which means there is a relevant prediction in the model.

4.7. Hypothesis Test Results

The path coefficient value or the inner model shows the significance level in hypothesis testing. The path coefficient or inner model score indicated by the T-statistic value must be above 1.64 for the one-tailed hypothesis in hypothesis testing at 5 percent alpha. The path coefficient test results are shown in Table 4.

Table 4. Path Coefficients (Bootstrapping)

	Original Sample	T-Statistics	P-Values	Desc.
H1 = Accounting Information System -> Organizational Performance	1,136	6,889	0,000	Accepted
H2 = Service system -> Organizational Performance	0,924	6,024	0,000	Accepted

Source: Data processed (2022)

4.7.1 Effect of Accounting Information System on Organizational Performance

The results of the statistical test show that the accounting information system variable has an effect on organizational performance. Based on the regression results, it can be stated that this study is accepted if it associated with the theory that has been used, namely the contingency theory that supports the realization of the effectiveness of the accounting information system. The application of the accounting information system is closely related to technology, environmental, and organizational structure effects. Organizational structure, environment, and information technology are three important interconnected factors in improving organizational performance and effectiveness. According to Paranoan et al. (2019), the use of accounting information systems in a company is seen as a computer. Thus, the more effective the application of an accounting information system in a company will improve individual performance, and organizational performance will also increase. The results of this study support this theory because accounting information systems influence organizational performance.

To improve company performance, an accounting information system is needed to assist employees in completing each job and generate finance for important corporate decisions. In addition, Mauliansyah (2019) also said that the accounting information system has a positive and significant effect on company performance. For the stability of the company to be maintained, one way to achieve this goal is to require an accounting information system that can support management in decision-making because the information is available and used by management is very helpful in completing various activities so that it is expected that the company's performance will increase. Then, Mulyanti (2020) said that the accounting information system positively and significantly affects employee performance. Research conducted by Febriansyah (2018) also says that the accounting information system has a significant and positive effect on employee performance. When the accounting information system affects employee performance, employee performance increases so that an increase in organizational performance is expected. This is in accordance with this study, namely, the accounting information system significantly influences organizational performance.

The accounting information system is a set of devices that record transaction data, process data, and present accounting information to internal and external parties. Accounting information systems can add value to the organization by providing accurate and timely information. Accounting information systems in organizations can assist organizations in collecting data and integrating financial data and non-financial data. The existence of an accounting information system in organizations, including hospitals, can improve decision-making, optimize service, improve the time efficiency of service to patients, and make long-term decisions more precisely and well-planned. This shows that the accounting information system is said to be successful if the system can be run properly, is easy to use, and is in accordance with existing technology.

4.7.2 Effect of service system on organizational performance

The results of statistical tests show that the service system variable affects organizational performance. Based on the regression results, it can be stated that this study is accepted. If it is associated with the theory that has been used, namely contingency theory which has three important approaches in contingency research, namely selection, interaction, and system, an organization identifies a service system that is most suitable to be applied in certain situations in achieving there is no single universal service system that can be applied in situations and conditions. Good service will create a feeling of satisfaction for service recipients, in this case, exiting patients in the hospital. The service in question is an activity carried out or carried out by an organization that concerns the interests of the service recipient, which will create a distinct impression. To improve the service system, an organization must improve organizational performance through improving employee performance both individually and in groups because with good performance, every task in the organization can be completed by using time, energy, and efficiency to improve organizational performance.

This is in line with research conducted by Churiyah (2017), which has research results that service quality consisting of five dimensions has a significant influence on hospital performance. Because of the importance of the role of hospitals in their service system, various efforts to improve the quality of hospital services are a priority so that the community as service recipients can enjoy affordable and equally served services. The research conducted by Ardianto (2015) has research results that the service system has a positive direction and a significant effect on service quality. A good service system will produce good service quality as well. Good service quality directly impacts customer satisfaction in accordance with their needs and desires. Research conducted by Ardiansyah (2017) says that service quality significantly affects patient satisfaction. So, it can be said from the three studies conducted on services that significantly improving the service system will result in good service quality, which will also have an impact on patient satisfaction so. That this will improve organizational performance in accordance with the results of this study which states that the service system affects patient satisfaction and organizational performance.

The service system has the most important goal, namely, to produce favorable outcomes for service recipients. The achievement of the desired outcomes is highly dependent on the service system performed. The service system is a step towards improving services to the organization, in this case services to hospitals, both

individuals and groups, in accordance with the expected output and accordance with professional knowledge. The service system in the hospital is one form of service that is most needed by the community. This shows that the better the service system carried out at the hospital, the better it can provide good satisfaction to patients, fellow employees, and also leaders.

5. CONCLUSION

Based on the results of the study, there are several conclusions that can be obtained. Accounting information system has a positive and significant effect on organizational performance at type A and type B hospitals in Makassar City. An accounting information system is said to be successful if the system can be run properly, is easy to use, and is in accordance with existing technology. The service system has a positive and significant effect on Organizational performance at Type A and Type B Hospitals in Makassar City. The better the service system carried out at the hospital, the better it can provide good satisfaction to patients, fellow employees, and leaders.

This study has limitations that can be used as a consideration for future researchers to get better results. As for the limitations, namely, the number of respondents in each hospital is only three people (head of service, head of support, and head of financial administration), of course it's still not enough to describe the actual situation in that one hospital.

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