



The Influence of User Participation, Information Technology Sophistication and User Technical Capabilities on the Performance of the Accounting Information System at Hosana Lippo Cikarang Hospital

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ABSTRACT

This study aims to determine the effect of user participation, information technology sophistication, and user technical capabilities on the performance of accounting information systems. The location of this research was conducted at Hosana Hospital Lippo Cikarang. The sample in this study consisted of 84 employees using accounting information systems who were selected using a saturated sampling technique from the entire population of employees at Hosana Lippo Cikarang Hospital. The data was obtained through a survey using a questionnaire and analyzed by the method of multiple linear analysis. The results show that partially, user participation has a positive and significant effect on the performance of accounting information systems and the technical ability of users has a positive and significant effect on the performance of accounting information systems. Simultaneously user participation, sophistication of information technology, and user technical ability affect the performance of accounting information systems.

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INTRODUCTION

Surviving under the pressure of global competition requires a comprehensive perspective on all activities in the business, especially related to aspects of the company's value chain (Rothlauf, 2014). Organizations with good information system management make it easier for companies to improve their value chain creation performance (Bailey & Francis, 2008).

Information systems play an important role in the organization of a company because they relate to how a company plans, coordinates, and monitors various activities carried out by the company (King & Teo, 1997; Premkumar & King, 1992). To obtain high-quality output, the effectiveness of the accounting information system used must also be considered and evaluated (Ladan Shagari et al., 2017). Effectiveness shows success in terms of whether the goals that have been set have been achieved. If the campaign results are closer to the goal, it means the effectiveness is higher, and vice versa (Pavlou & Stewart, 2000). The effectiveness of accounting information systems is generally assessed based on the satisfaction of users of accounting information systems, namely the satisfaction of employees themselves and users of accounting information systems with internal and external parties (Agustina & Sari, 2020; M. Al-Okaily, 2024).

An accounting information system is needed to collect and process data, so it is necessary for company leaders to supervise work and make decisions (Saparinda et al., 2023). To obtain valid and accurate information, good cooperation is needed between the parties involved. The resulting information will become a benchmark used by management to determine the company's condition, making it easier to prepare future company plans. The success or failure of the program is related to the accuracy of the information received (Muslim et al., 2022).

The main advantages of optimal use of accounting information systems in an organization are better adaptation to changing circumstances, better transaction management, and a high level of competitiveness (Thong, 1999). An information system can be said to be effective if a system is able to produce acceptable information and is able to meet information expectations in a timely, accurate, and reliable manner (Pratiwi, 2019). Accounting Information Systems are usually used by all sectors, one of which is the health sector, namely hospitals (Kihuba et al., 2016).

Hospitals are public sector institutions involved in health services. In running a business, hospitals not only need to care for patients, but also must prioritize the satisfaction of the users they serve, in this case patients (Ladhari & Rigaux-Bricmont, 2013). Hospitals need information to help them achieve optimal

performance to support their operations. Because of the importance of information, management needs to focus on the performance of its performance systems, including accounting information systems (AIS). Performance is work that is assessed in terms of the quality and quantity of activities carried out. Information system performance helps improve hospital operations (Ani & Muliati, 2022).

As an organization providing health services, hospitals have an important social function, namely providing health services to the community. Based on this function, hospitals must be able to manage and provide health services to the community as their clients well (Maulana, 2021). Hospitals are multidisciplinary institutions that are complex, dynamic, competitive, capital intensive and labor intensive, and can change at any time. Judging from hospital output, it is clear that hospitals not only produce services, but also produce goods, and many hospitals can produce brainware (Putra & Suryanata, 2021).

Hosana Medica Lippo Cikarang Hospital is located at Jalan Utama BIIIE No. 1 Lippo, Cibatu, Cikarang Selatan, Bekasi Regency, West Java 17550. Hosana Medica Hospital is a privately owned public hospital and is one of the type C hospitals located in the Bekasi area, West Java. This hospital provides services in the health sector which are supported by specialist doctor services and supported by other medical facilities. The facilities and services provided are ambulances, emergency installations, operating rooms, nutritional installations, medical rehabilitation, delivery services, midwives, nurses and general practitioners. The medical support available is Laboratory, Radiology, X-ray, Ultrasonography (USG), Electrocardiogram (EKG), Physiotherapy and Hemodialysis. The list of existing poly services is Internal Medicine Specialist, Obstetrics and Gynecology Specialist, Pediatric Specialist, Surgical Specialist, General Surgery, Orthopedic Surgery, Eye Specialist, ENT Specialist, Lung Specialist, Orthopedic Specialist, Neurologist Specialist, Skin and Venereal Disease Specialist, and Clinic Tooth (Hosana medica, 2023).

This research aims to examine the influence of user participation, information technology sophistication, and user technical abilities on the performance of the accounting information system at Hosana Cikarang Hospital. It is hoped that the results of this research can provide material for study regarding the development of accounting information systems, especially the role of user participation, sophistication of information technology and user technical abilities on the performance of accounting information systems.

Participation or user participation is involvement in the system development process by members of the organization or members of the target user group (Mckeen & Guimaraes, 1997). The accounting information system will provide benefits if the existing accounting information system has good performance, including being able to meet the needs of information system users (A. Al-Okaily et al., 2020). In an analysis and design of an information system that will produce an information system with good performance, apart from the quality of the information system design itself, it is also influenced by several factors, including the participation of information system users during the development and implementation of the accounting information system. The results obtained from this research indicate that the participation of information system users has a significant effect on the performance of the accounting information system (Choe, 1998).

The sophistication of information technology is the use of technology to make information more available and faster to obtain, including external information, internal information and pre-existing information, so as to increase the accessibility or affordability of information (Duncan, 1995). The sophistication of information technology influences the performance of accounting information systems (Muslim et al., 2022; Pratiwi, 2019).

Personal information system technical capabilities are the main influence on employee recruitment and accounting information system design. Users who are skilled and understand the system will influence the performance resulting from the system (Hendrickson, 2003; Peppard & Ward, 2004). Personal technical abilities have a positive and significant effect on the effectiveness of accounting information systems (Ani & Muliati, 2022; Muslim et al., 2022).

METHOD

This research is quantitative in associative form, quantitative research is that emphasizes theory testing by measuring research variables with numbers and analyzing data using statistical procedures (Sugiyono, 2016). In this research, the variables tested are the influence of User Participation, Sophistication of Information Technology, and User Technical Capabilities on Accounting Information System Performance

The population used in this research were employees using AIS at Hosana Cikarang Hospital. 84 employees are using SIA out of a total of 272 employees at Hosana Cikarang Hospital. So the sample used is saturated, or sampling is the same as the population (Sugiyono, 2016).

The performance of an accounting information system is the work result of a series of accounting data that can be achieved by a person or group of people in an organization and company, in accordance with their respective authority and responsibilities, legally, without breaking the law, and in accordance with the moral ethics that result. Ultimately it becomes accounting information that includes transaction and information processes (Li & Fang, 2022). User participation is the involvement of organizational members in the system development process (Mckeen & Guimaraes, 1997). The sophistication of information technology is the use of technology to make information more available and faster to obtain, including external information, internal information and pre-existing information, so as to increase the accessibility or affordability of information (Duncan, 1995). Personal information system technical capabilities are the main influence on employee recruitment and accounting information system design. Users who are skilled and understand the system will have an influence on the performance resulting from the system (Hendrickson, 2003; Peppard & Ward, 2004).

Table 1. Operational Variables

| Research Variables | indicator | Measurement |
|---|---------------------------------|--------------|
| Accounting Information System Performance | a. Information as needed | Likert Scale |
| | b. In accordance with standards | |
| | c. Accurate | |
| | d. Effective | |
| | e. On time | |
| User Participation | a. Insight Relationships | Likert Scale |
| | b. Responsibility | |
| | c. Engagement time | |
| | d. Desire | |
| | e. Use | |
| Sophistication of Information Technology | a. Application Completeness | Likert Scale |
| | b. Strong and Wide Network | |
| | c. Convenience | |
| User Technical Ability | a. Knowledge | Likert Scale |
| | b. Ability | |
| | c. Skill | |

RESULTS AND DISCUSSION

Results

Descriptive statistical analysis

The characteristics of respondents in this study were divided into three categories, namely based on age, gender, and highest level of education. We present the characteristics of the respondents in diagram form as follows:

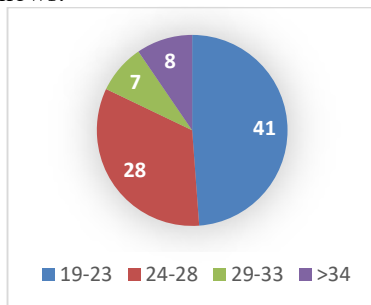


Figure 1. by Age

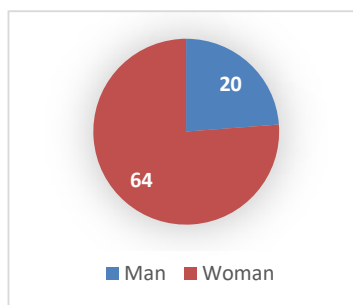


Figure 2. by Gender

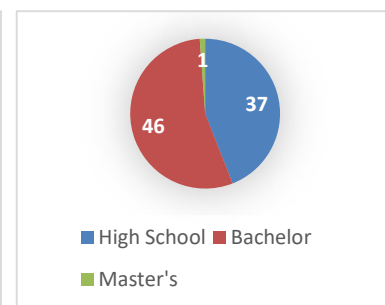


Figure 3. by Education Level

Instrument Test (Validity and Reliability Test)

The results of the validity test for each question item for all variables in this research showed that the r-Pearson Correlation value was above the r-table value (0.212) with a confidence level of 95% and an error tolerance of 5%. So that the question items representing each research variable indicator are declared valid. Meanwhile, the results of the reliability test for each variable are as follows:

Table 2. Reliability Test Results

| Variable | Cronbach's Alpha | N of Item |
|---|------------------|-----------|
| Accounting Information System Performance | .872 | 7 |
| User Participation | .881 | 8 |
| Sophistication of Information Technology | .858 | 7 |
| User Technical Ability | .875 | 7 |

Goodness of Fit Test

The ANOVA test results show that the research model is suitable to be tested by looking at the significance value below .05 and the F-count value of 106.769 above the F-table value of 2.72. The contribution value of the independent variable in explaining the fixed variables in the research model is 79.3% (see Adj. R Square value in table 4).

Table 3. Analysis of Varians Test Results

| | | ANOVA ^a | | | | |
|-------|------------|--------------------|----|-------------|---------|-------------------|
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 900.363 | 3 | 300.121 | 106.769 | .000 ^b |
| | Residual | 224.875 | 80 | 2.811 | | |
| | Total | 1125.238 | 83 | | | |

Table 4. Coefficient of Determination Test Results

| Model Summary ^b | | | | | |
|----------------------------|-------------------|----------|-------------------|----------------------------|--|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | |
| 1 | .895 ^a | .800 | .793 | 1.677 | |

Hypothesis Testing Result

Table 4. Hypothesis Test Results Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|--|-----------------------------|------------|---------------------------|-------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | .460 | 1.724 | | .267 | .790 |
| | User Participation | .381 | .078 | .433 | 4.903 | .000 |
| | Sophistication of Information Technology | .012 | .082 | .012 | .146 | .884 |
| | User Technical Ability | .533 | .097 | .500 | 5.491 | .000 |

Based on Table 4, the T-count results for each independent variable are known. Following is the decision making based on the T-count results.

- a. The T-count value for the User Participation variable was obtained at 4.903 > 1.99006, where the T-count value was greater than the T-table value with a significant value of 0.000 < 0.05, which means that the User Participation variable had a significant influence on the Performance of the Accounting Information System.
- b. The T-count value of the Information Technology Sophistication variable was 0.146 < 1.99006, where the T-Count value was greater than the T-table value with a significant value of 0.884 > 0.05, which

means that the Information Technology Sophistication variable did not have a significant influence on Accounting Information System Performance.

- c. The T-count value for the User's Technical Ability variable is $5.491 > 1.99006$, where the T-count value is greater than the T-table value with a significant value of $0.000 < 0.05$, which means that the User's Technical Ability variable has a significant influence on the Performance of the Accounting Information System.

Discussion

The findings from this research show that user participation and the technical abilities of accounting information system users play a strong role in influencing the performance of an accounting information system (Agustina & Sari, 2020; Ani & Muliati, 2022; Hendrickson, 2003). Even if we assume based on the research results above, even if the technology used is not that great, these two factors can make a big contribution in determining the performance of an accounting information system. Therefore, in addition to user involvement in the development of accounting information systems, it is important for institutions and organizations to provide a training agenda for their employees.

CONCLUSION

Hospitals as institutions that are responsible for health services and education for the community, it is important to develop an accounting information system that is reliable and able to provide satisfactory information for its users. If viewed from the perspective of stakeholder theory, the development of an accounting system needs to involve all users, starting from capital owners, management, employees, suppliers, customers, society and other wider stakeholders.

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