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Evaluation of the quality of staff and management support on the effectiveness of accounting information systems

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ABSTRACT

The purpose of this study was to examine the effect of staff quality and management support on the effectiveness of accounting information systems, either partially or simultaneously. This type of research is a type of correlational research, which aims to find whether there is a relationship between two or more variables. Data collection techniques used are interviews, observation, documentation, questionnaires. The data analysis techniques used were: (1) To determine the partial effect of staff knowledge of technology, training, technical skills, and management support on the variable effectiveness of accounting information systems, namely through the t test. (2) To determine the simultaneous effect of staff knowledge on technology, training, technical ability, and management support for the variable effectiveness of the accounting information system, namely through the F test. Based on the results of the analysis that has been carried out, it can be concluded that the variables of staff knowledge of technology and staff training variables partially have no positive effect, while the variables of technical ability and management support partially have a positive effect. Through the F test it can be concluded that simultaneously there is a variable influence of staff knowledge of technology, staff training, technical skills, and management support on the effectiveness of the accounting information system. while the variables of technical ability and management support partially have a positive effect. Through the F test it can be concluded that simultaneously there is a variable influence of staff knowledge of technology, staff training, technical skills, and management support on the effectiveness of the accounting information system. while the variables of technical ability and management support partially have a positive effect. Through the F test it can be concluded that simultaneously there is a variable influence of staff knowledge of technology, staff training, technical skills, and management support on the effectiveness of the accounting information system.

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1. INTRODUCTION

In order to develop company operations and to maintain competition in the market, companies should always innovate information systems. Innovation in the development of information systems will make it easier for companies to achieve their goals, namely serving consumers and winning market competition. For this reason, organizations need an information system that is able to

capture and process internal and external information about the organizational environment, so that it can be used as a basis for making strategic organizational decisions.

According to Laudon and Laudaon (2003: 11), the information system itself is a set of several components that are interconnected and mutually support each other, working together to collect, process, store, and distribute information to facilitate planning, control, and decision making in other businesses and organizations. The information system is a media provider that is complete, precise, concise and reduces delays in decision making. The success of information systems is measured by increasing organizational profits and user satisfaction of information systems, as well as increasing the effectiveness of system performance which will affect management performance.

Information quality shows the effect of information system output. If the information system is able to produce precise and accurate information, then the value of the information system for the company will increase. Information quality measurement variables include accurate, timely, and relevant (N. Ahituv, 1980). Now consumers are increasingly intelligent in evaluating the services provided by service companies. Companies that are able to produce services that meet quality expectations will be able to lead the competition in the market.

Resources are one of the most important parts of an information system. One of the resources that affect the information system is human resources. The existing staff in the information department will be responsible for the effectiveness and efficiency of the information obtained. Training is needed so that the accounting information system can be used productively and can support the objectives of the accounting information system. Management of accounting information systems, requires an investment of time and the willingness of employees to develop their soft skills. Investing time means taking the time to learn.

In this case, many companies have recently undergone a transformation from a manual accounting system to a computerized accounting system. This situation creates a new work environment, demanding that employees learn new modules and understand new job descriptions. This raises the need for training for employees. For this reason, the authors try to evaluate the implementation of the accounting information system. Does the investment in computerized technology support the processing of financial reports and facilitate customer service or not. The elements studied are the quality of organizational staff and variables related to staff quality, including technological knowledge, training for staff, technical capabilities and management support.

Based on the background of the problems above, the authors are interested in conducting research that aims to evaluate the relationship between work quality and management support on the effectiveness of accounting information systems.

2. RESEARCH METHOD

This research is a type of correlational research, which aims to find whether there is a relationship between two or more variables. Correlational research is used with the aim of knowing the strength, significance, and direction of the relationship between two variables. In this study, the subjects were students of the Accounting Department, Faculty of Economics, Sanata Dharma University. In this study, questionnaires were distributed to students as the object. The population is the entire collection of objects or people to be studied (Wonnacot and Wonnacot, 1985:22). The population is the entire sample set that is the center of attention or the research target. The population in this study were students who had or were studying accounting information systems courses. Students who have studied information systems have knowledge of information systems, both information system goals and information system implementation. The sampling technique in this study was to use purposive sampling method. Sampling is intended to simplify the scope of research. Purposive sampling is done by taking samples from the population based on certain criteria (Hartono, 2004:79). The sample chosen in this study was based on judgment sampling. The primary data collected is in the form of answers from the respondents. Data was collected through a questionnaire given to 100 respondents. To make it easier to obtain and collect primary data in the form of respondents' perceptions, a questionnaire with a closed question was used. making it easier and faster for respondents to answer questions. Collecting data by direct observation of users of the information system being researched, face-to-face and direct debriefing with students

and related parts of the organizational structure. Questionnaires submitted to students are useful questionnaires to obtain primary data. This questionnaire uses closed questions, making it easier and faster for respondents to answer questions

3. RESULTS AND DISCUSSIONS

Research results and discussion

1. Description of Data and Questionnaire Returns

In this study, the data collection technique used was by distributing questionnaires and interviewing respondents. From table IV.1 it can be seen that the respondent has taken at least one course out of the three required courses in the questionnaire. The three courses are accounting systems, management information systems, and accounting information systems.

Table 1. The number of respondents and the characteristics of the respondents

No	Information	Number of Students	SA course	SIA course	SIM course
1.	SIA Class A	31 people	31 people	21 people	26 people
2.	SIA class B	40 people	23 people	26 people	19 people
3.	SIA Class C	27 people	22 people	18 people	16 people

According to the data above, it can be concluded that respondents have sufficient knowledge in understanding accounting systems, accounting information systems, and management information systems. In the process of collecting data through questionnaires, researchers entered the class of accounting information systems. A total of 100 questionnaires distributed to accounting students and 85 returned questionnaires. The eighty-five questionnaires came from 68 questionnaires that came from the SIA class and the other 17 questionnaires came from students who had free time outside of class.

Of the 100 respondents expected 15 questionnaires were not included. This was because the 30 students from the SIA class arrived late and did not enter class when the researcher distributed the questionnaires. The following table includes the number of respondents and questionnaires that were entered and the average value data for the first 10 questions in the questionnaire as an introductory case to the main questionnaire.

Table 2. The number of respondents and the average for the first 10 questions

No	Information	Amount	Percentage (%)	Total Score	Average
1.	SIA Class A	25	25%	185	7.4
2.	SIA class B	33	33%	196	7.121212
3.	SIA Class C	27	27%	196	7.259259

The questionnaire distributed to respondents consisted of 50 question items, with the following details; Part I consists of 10 questions regarding the general description of information systems and information technology and serves as an introduction to the main research questionnaire. The answers to these questions are true or false and the score if all of the ten questions are correct is 10. From the table above, it can be seen that respondents can understand information systems and information technology in general. The average value is obtained from the assessment of the ten questions whether they are appropriate or not with the answer key. The average value is obtained from the total score divided by the number of respondents in that class.

Part II is the main research questionnaire. Before entering into the list of questions, the researcher gave a case where the respondent was an information system auditor. As information system auditors, respondents were asked to evaluate the quality of staff and management support for the effectiveness of information systems. As an auditor, the respondent is expected to make decisions according to the information obtained.

The first part consists of 11 questions related to the effectiveness and efficiency of a job when using information systems and information technology. The second part consists of 6 questions that ask respondents regarding the staff's knowledge regarding the success and effectiveness of the information system. The third part consists of 7 questions that ask respondents regarding the technical capabilities of the staff whether it supports the effectiveness of the

information system. The fourth part consists of 8 questions related to training or training that can support the effectiveness and success of information systems.

2. Validity Test Results

Validity test is used to measure whether a questionnaire is valid or not. A questionnaire is said to be valid if the questions on the questionnaire are able to reveal something that will be measured by the questionnaire. From the Product Moment Correlation formula, with a significance level (α) of 5% and degrees of freedom (df) N-2 = 83, an r-table value of 0.213 can be obtained. While the calculated value of r is obtained from the results of testing with the help of SPSS 15. The first validity test is carried out on the variable technological knowledge on the staff. From the table testing the technological knowledge variables, table IV.3 shows that each of the questions on these variables is valid, because the value of r count is greater than 0.213.

Table 3. Results of Testing the Validity of Knowledg Technological Variables

Question	Pearson Correlation Value	Critical Value	Information
PT 1	0.546	0.213	Valid
PT 2	0.651	0.213	Valid
PT 3	0.748	0.213	Valid
PT 4	0.669	0.213	Valid
PT 5	0.635	0.213	Valid
PT 6	0.633	0.213	Valid

The second validity test was carried out on the technical ability variable. From the technical ability variable testing table, table IV.3 shows that each of the questions on these variables is valid, because the value of r count is greater than 0.213.

Table 4. Results of Testing the Validity of Technical Capability Variables

Question	Pearson Correlation Value	Critical Value	Information
KT 1	0.677	0.213	Valid
KT 2	0.681	0.213	Valid
KT 3	0.722	0.213	Valid
KT 4	0.696	0.213	Valid
KT 5	0.710	0.213	Valid
KT 6	0.689	0.213	Valid
KT 7	0.617	0.213	Valid

The third validity test was carried out on the staff training variable. From the staff training variable testing table, table IV.5 shows that each of the questions on these variables is valid, because the value of r count is greater than 0.213.

Table 5. Results of Testing the Validity of Management Support Variables

Question	Pearson Correlation Value	Critical Value	Information
MP 1	0.645	0.213	Valid
MP 2	0.736	0.213	Valid
MP 3	0.814	0.213	Valid
MP 4	0.788	0.213	Valid
MP 5	0.864	0.213	Valid
MP 6	0.719	0.213	Valid
MP 7	0.713	0.213	Valid
MP 8	0.690	0.213	Valid

The fifth validity test is carried out on the effectiveness variable. From the table of testing the effectiveness variables, table IV.7 shows that each of the questions on these variables is valid, because the value of r count is greater than 0.213.

Table 6. Results of Testing the Validity of Effectiveness Variables

Question	Pearson Correlation Value	Critical Value	Information
Effective 1	0.630	0.213	Valid
Effective 2	0.631	0.213	Valid
Effective 3	0.531	0.213	Valid
Effective 4	0.629	0.213	Valid
Effective 5	0.600	0.213	Valid
Effective 6	0.557	0.213	Valid
Effective 7	0.620	0.213	Valid
Effective 8	0.588	0.213	Valid
Effective 9	0.527	0.213	Valid
Effective 10	0.608	0.213	Valid
Effective 11	0.684	0.213	Valid

3. Reliability Test Results

Reliability test can be used for; Knowing how the questions in the questionnaire are related to each other, get a Cronbach Alpha value which is an internal consistency index of the overall measurement scale. Identify question items in the questionnaire that are problematic and must be revised or must be eliminated (Uyatno, 2006). The basis for decision making in this test is if the value of Cronbach's Alpha > 0.60 (Nunnaly scale) then the questionnaire is said to be reliable.

Table 7. Reliability Test Results

Variable	Cronbach's Alpha value	Information
Technological Knowledge	0.714	Reliable
Technical Capability	0.809	Reliable
Training/training	0.782	Reliable
Management Support	0.881	Reliable
Effectiveness	0.843	Reliable

The results of the reliability test (Table IV.8) show that the Cronbach's Alpha value for each variable is greater than 0.6. Thus, it can be concluded that each question in the questionnaire is reliable.

4. Classical Assumption Test Results

The Regression Analysis method requires classical assumption testing to be carried out to find out whether the data is free from heteroscedasticity, autocorrelation and normally distributed problems. Or the failure to fulfill the classical assumption test will cause a bias in the research results. In this study, the classical assumption tests performed were the heteroscedasticity test and the normality test.

a. Heteroscedasticity Test

The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residual one observation to another (Ghozali, 2005).

Table 8. Heteroscedasticity Test Results

Model	Unstandardized Coefficients		standardized Coefficients		Sig.
	B	std. Error	Betas	t	std. Error
1 (Constant)	.242	2035		.119	.906
X1	093	083	.122	1.118	.267

Knowledge Top staff technology X2	048	.065	080	.736	.464
Training Staff X3	041	.073	061	.559	.578
Ability Technical X4	076	.049	.166	1,536	.128
Support Management					

From the Glejser test table above, it can be seen that the significance probability values are 0.267 for X1, 0.464 for X2, 0.578 for X3, and 0.128 for X4. Because these four values are greater than 0.05, it can be concluded that the regression model in this study is free from heteroscedasticity problems.

b. Normality test

Identification of normality is done by looking at the significance value on the Kolomogorov-Smirnov test. From table (IV.10) below it can be seen that the significance probability value is 0.595. Value 0.595 > 0.05 so it can be concluded that the data used in this regression model is normally distributed and can be used to calculate the regression analysis.

c. Correlation Auto Test

Another important assumption of the classical linear model is the absence of autocorrelation, that is, the correlation between members of a series of observations ordered by time or space. Autocorrelation will have consequences including the confidence interval being wide and the variation and standard error being underestimated. Detection of the presence or absence of autocorrelation in this study using statistical tests from Durbin Watson. To test autocorrelation, the DW or Durbin Watson test is used.

5. Hypothesis Test Results

From the results of the t test, it is known that each independent variable in the study has a significance value and an Unstandardized Coefficient Beta value as follows. From the t-test table above (table IV.12), it can be concluded, Kontanta has an influence on the regression model, because the significance value of the constant is 16.330. The staff knowledge variable on technology does not have a positive influence on the effectiveness of the AIS, because the significance value is -0.176, The staff training variable has a positive influence on the effectiveness of AIS, because of a significance value of 0.113, The technical ability variable has a positive influence on the effectiveness of AIS, because of a significance value of 0.834, The management support variable has a positive influence on the effectiveness of AIS, because of a significance value of 0.217.

4. CONCLUSION

Based on the data analysis in the previous chapter, the following conclusions can be put forward; The independent variables, namely the technological knowledge of staff, staff training, technical capabilities, and management support, are able to explain the dependent variable, namely the effectiveness of the accounting information system by 47.3%. While 50.2% is explained by variables outside the model. Variables outside the factors used as research items, for example: staff knowledge of technological changes, communication with users or users, number of workers, career advancement in staff, control of accounting information systems, planning, and organizational acceptance of information system concepts accounting, The first aim of this research is to partially test the technological knowledge of staff, technical ability, training, and management support for the effectiveness of accounting information systems. Through the t test it can be seen that the variable technological knowledge of staff and staff training partially has no positive effect on the effectiveness of the accounting information system at -1.003 and 0.749.

However, the factor of technical ability and management support partially has a positive influence on the effectiveness of the information system of 5.125 and 2.140. This shows that technical capabilities and management support still affect the effectiveness of information systems along with the development of information. The second objective of this research is to simultaneously test the technological knowledge of staff, technical skills, training, and management support on the effectiveness of accounting information systems. From the F test that has been done, we can see simultaneously (together) there is a positive influence of technological knowledge on staff, technical capabilities, training, and management support on the effectiveness of accounting information systems. partially has a positive influence on the effectiveness of information systems of 5.125 and 2.140. This shows that technical capabilities and management support still affect the effectiveness of information systems along with the development of information. The second objective of this research is to simultaneously test the technological knowledge of staff, technical skills, training, and management support on the effectiveness of accounting information systems. From the F test that has been carried out, we can see that simultaneously (together) there is a positive influence of technological knowledge on staff, technical capabilities, training,

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