The Influence of Company Internal Factors on Accounting Information System Performance

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Abstract. This study aims to examine the effect of user technical skills, training and education programs, user involvement, and top management support on the performance of accounting information systems. The research population is the SAP application users in the office staff at the PEM Plant in one of the manufacturing companies in Batam City. The total respondents in this study were 39 respondents. This study uses a quantitative approach. The method of collecting data is through surveys by distributing questionnaires through google form. Before conducting the research, a pilot test was conducted which was distributed to 30 students who were already working. The result of the research is that the user's technical ability has a positive effect on the performance of the AIS. While training and education programs, user involvement, and top management support have no effect on the performance of the AIS.

Keywords: Accounting Information System Performance, User Technical Ability, Training and Education Programs, User Engagement, Top Management Support.

1 Introduction

The development of technology in this modern era can produce a variety of technologies that are specifically designed to make work easier. The system is said to be effective if it can produce quality information to improve the AIS performance of a company [13]. Every company must have an accounting information system that is specifically designed to meet the performance standards of its users. Sometimes it is known that the technology used in accounting information systems is often less accurate because it is not used properly by information users [5]. So it is necessary to measure the performance of AIS in the company to measure whether the implemented system has succeeded or failed.

Measuring the performance of information systems (AIS) in a company can be seen through how high the technical ability of the users of the information system. The technical ability of users can influence the success or failure of the implementation of AIS in a company. The implementation of AIS in a company is sometimes inseparable from several obstacles. The problem that occurs in one of the manufacturing companies in Batam City is the lack of understanding of the use of the application system used in the company to errors in inputting data on the application.

The user's technical ability can be obtained through training and education programs on the use of AIS so that the same mistakes do not occur. The importance of training and education programs for AIS users is to train and improve the work skills of system users for whom they are responsible, so that users of accounting information systems can complete their work accurately and precisely to improve AIS performance.

User involvement in the process of developing an information system can facilitate the acceptance of an accounting information system by employees because of their interest in it. The existence of such involvement is expected to improve the performance of AIS to improve the quality of the resulting information system.

Top management support can influence user satisfaction and use of AIS. Top management support can motivate information system users to improve performance so that they can change for the better.

This research refers to research [16] and [15]. Differences with research [16] and [15] lies in the location and object of research. The purpose of the study was to determine the effect of user technical skills, training and education programs, user involvement and top management support on the performance of AIS in a manufacturing company in Batam City.

2 Theory and Literature Study

TechnologyAcceptanceModel **(TAM)**
Theories about the use of information technology systems are very influential and are often used to explain the personal acceptance of information system users. The Technology Acceptance Model (TAM) was proposed by [3]. The theory is an adaptation of Theory of Reasoned Action (TRA).

The TAM model was developed from a psychological theory that describes the behavior of computer users on the basis of belief, attitude, intention & user behavior relationship. The theory explains that users of accounting information systems are influenced by two variables, that is : usefulness (users believe that using this system can help improve their performance) and ease of use (users believe that using the system is easy and does not require hard work in its use).

Accounting Information System Performance
According to [4] in his research on benchmarks for the success of AIS performance can be measured from 2 things, namely as follows:

1. Information System User Satisfaction

   User satisfaction with the information system proves the extent to which users are satisfied and believe in the information system used.

2. Use of Information Systems

   The use of information systems is the behavior and activities carried out by individuals during the process of developing information systems.

Factors Affecting Accounting Information System Performance
1.   User Engineering Ability
According to [17] explained that a user's technical ability is a skill that a person has to perform various tasks in a job that can be seen through 3 things, that is: knowledge, abilities, and skills.

2.   Training and Education Programs
According to [19], training and education programs aim to increase information awareness and decision-making skills related to skills and competencies to perform their duties.

3.   User Engagement
According to [10], user involvement is the behavior, work and activities carried out by users in the process of developing an information system. User involvement in the system development process has a positive impact on satisfaction, but can also provide new insights for system users.

4.   Top Management Support
According to [8], top management support is the level of top management's knowledge of computer systems and the level of interest, support, and understanding related to information systems. The level of top management support to users of accounting information systems is one of the important factors in the successful implementation of information systems.

Previous research conducted by [16], [1], and [12] stated that users' technical skills, training and education programs, user involvement, and top management support had an effect on AIS performance. In contrast to research [15] stated that the user's technical ability, user involvement and top management support had no effect on AIS performance.

Hypothesis

TAM theory explains that the user's technical ability is an important aspect. The higher the ability of the user, the better the understanding of the information system used. According to [20] User technical ability is the ability of a person to operate a system and process data into accurate and quality information so that users can trust the information.

H_1: The user's technical ability affects the performance of accounting information systems

TAM theory explains that training and education programs are related to user perceptions of usefulness and convenience, which affect individual satisfaction and thus AIS performance.

According to [11] states that the company needs user training and education programs to train skills and improve user understanding of the accounting information system used by the company, so that users feel motivated and satisfied because they have a good understanding of the system.

H_2: User training and education programs affect the performance of accounting information systems.

TAM theory is an information systems theory that models the willingness of users to accept and use technology. User involvement is participation in the development of information systems. According to [18] The user is an integral part of the application implementation of the system or technology used.

H_3: User involvement affects the performance of accounting information systems.

The concept of TAM theory explains that top management supports information system users regarding productivity, the importance of a task, task performance, and overall utilization. According to [8] in [7] Top management support, namely: top management knowledge of computer systems, level of interest, support and knowledge of information systems or computers.

H_4: Top management support affects the performance of accounting information systems.
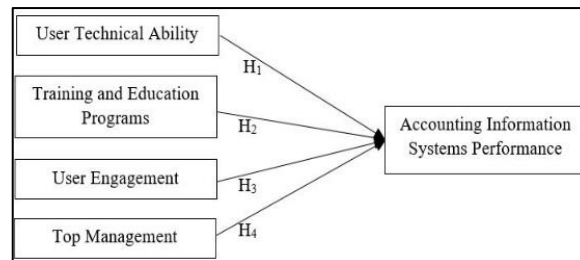

Fig. 1. Research Model

3 Research Methods

This research is a quantitative-research. The population used in the study were all staff office plant PEM at a manufacturing company in Batam City. This study uses a non-probability sampling technique and a purposive sampling technique with the following characteristics: (1) SAP users, and (2) staff office in Plant PEM. There are 2 types of variables in this study, namely, the independent variable and the dependent variable. The independent variables in this study are: user technical skills, training and education programs, user involvement and top management support. While the dependent variable is the performance of accounting information systems. This study uses primary data. The data used is a questionnaire distributed to respondents. This study uses a Likert scale with an index of 1-4. Before being distributed to the real respondents, a pilot test has been carried out. The pilot test was distributed to 30 respondents who were students who had worked or were doing

an internship. The purpose of the pilot test was to ensure that the questionnaire items were correct and sufficient according to the respondents.

4 Results and Discussion

The number of respondents who have met the characteristics in this study were 39 respondents. The following is a description of the characteristics of the respondents:

Table 1. Responden Characteristic

No		Criteria	Amount	%
1	Gender	Male	21	54%
		Female	18	46%
	Amount		**39%**	**100%**
2	Length	< 1 year	4	10%
	of work	1-5 year	19	49%
		> 5 year	16	41%
	Amount		**39**	**100%**

Source: Data Processed by the author (2022)

Based on Table 1 above, it can be concluded that the majority of respondents using SAP are male. The majority of the length of work is 1-5 years.

Based on the results of the validity test, it is stated that all item variables are valid because they have a correlation coefficient value greater than the minimum standard of 0.316. Correlation coefficient The User's Technical Ability variable amounts to 6 items ranging from 0.552 to 0.739. Correlation coefficient Training and Education Program variables amounted to 8 items ranging from 0.712 to 0.899. Correlation coefficient User Involvement variable amounted to 8 items ranging from 0.670 to 0.839. Correlation coefficient The Top Management Support variable is 8 items ranging from 0.506 to 0.800. Correlation coefficient Accounting Information System Performance variable amounted to 5 items ranging from 0.531 to 0.815. Based on the results of the reliability test, all variable items are said to be reliable because the Cronbach's Alpha value in each variable is > 0.60.

The normality test in this study is based on Kolmogorov-Smirnov which shows that the five variables used have a significance value of 0.104 where > 0.05 so it can be said that the research variables are normally distributed.

The multicollinearity test shows that the variable that the user's technical ability variable has a tolerance value of 0.697 where > 0.10 and a VIF value of 1.435 where < 10, the training and education program variable has a tolerance value of 0.610 where > 0.10 and a VIF value of 1.638 where < 10, the variable user involvement has a tolerance value of 0.714 where > 0.10 and a VIF value of 1.401 where < 10, the top management support variable has a tolerance value of 0.645

where > 0.10 and a VIF value of 1.551 where < 10. Based on these results, it is concluded that there is no multicollinearity.

The Heteroscedasticity test was carried out using the glejser test by regressing each variable independent with absolute residual as variable dependent. The results of the heteroscedasticity test showed that the significance of the user's technical ability variable was 0.136 where > 0.05. The significance of the training and education program variables is 0.250 where > 0.05. The significance of the user involvement variable is 0.697 where > 0.05. The significance of the top management support variable is 0.784 where > 0.05. Based on these results, it can be stated that there is no heteroscedasticity problem.

Multiple Linear Regression Analysis
Aims to determine the dependence of the dependent variable with one or more independent variables.

Tabel 2. Multiple Linear Regression Analysis Test Result

Variabel	Regression Coefficient	$t_{calculate}$	Sig.
Constant	9,229	2,603	0,014
X_1	0,435	2,599	0,014
X_2	0,044	0,463	0,646
X_3	-0,002	-0,024	0,981
X_4	-0,059	-0,454	0,652

Source: Data processed by the author (2022)

Based on Table 2 above, it can be seen that the regression equation is as follows:

$$\text{KSIA} = 9{,}229 + 0.435\text{KTP} + 0.044\text{PPP} + \qquad\qquad (1)$$
$$-0.002\ \text{KP} + -0.059\text{DMP}$$

The Influence of User's Technical Ability on Accounting Information System Performance
Table 2 shows that the user's technical ability has an effect on the performance of the AIS. It is known through the results of the analysis obtained by 2,599 > 2,032, it can be interpreted that H_1 is accepted

It is proven that the user's technical ability in one of the manufacturing companies in Batam City is quite good. Consistent with TAM theory, this theory explains that there are two factors that influence individual behavior in accepting and using technology. The existence of the technical ability of users who are skilled in operating the application system used affects the performance of the AIS thereby having an impact on the quality of the resulting system.

The results of this study are in line with research [16], [9], and [1] which concludes that the user's technical ability has a positive effect on the performance of AIS.

The Effect of Training and Education Programs on Accounting Information System Performance

Table 2 shows the results that training and education programs have no effect on AIS performance. the results of the analysis obtained by 0.463 < 2.032 and a significance of 0.646 > 0.05, which can be interpreted that H_2 is rejected.

Based on the results of the questionnaire, it shows that the training and education programs at the company are not often carried out and are only carried out in certain departments. The lack of training and education programs for AIS users is an obstacle in measuring the success rate of AIS performance in a company. Basically, the more often training and education programs are implemented, the greater the impact on the output. The need for this training and education program is not only to measure It is known through knowledge but also how knowledgeable and skilled users are in using the application or system used.

The TAM theory does not support this research. The TAM theory explains that it is necessary to hold training and education programs for AIS users in order to increase understanding and make it easier for users to use the system. The results of this test are contrary to research [1], and [14]. But this research is in line with research [6], stated that the training and education program had no effect on the performance of AIS.

The Effect of User Involvement on Accounting Information System Performance

Table 2 shows that user involvement has no effect on AIS performance. This is known through the results of the analysis obtained by -0.024 < 2.032 and a significant amount of 0.981> 0.05, which can be interpreted that H_3 is rejected. This is due to the lack of user involvement in the system development process, resulting in user dissatisfaction with the accounting information system used. The process of developing AIS application systems used in the company involves only a few users.

The TAM theory does not support this research. TAM theory explains that to be able to use accounting information system applications, user involvement is needed, because the greater the contribution given by users in implementing the system, the better the impact of the effectiveness of the system used. The results of this test are contrary to research [1], [12], and [2]. However, this research is in line with research [15] and [9] which states that user involvement has no effect on AIS performance.

The Effect of Top Management Support on Accounting Information System Performance

Table 2 shows that top management support has no effect on AIS performance. This is known through the results of the analysis obtained by -0.454 < 2.032 and a significant amount of 0.652 > 0.05, it can be interpreted that H_4 is rejected.

This shows that despite the lack of support from management, AIS performance is still good. Top management who pays less attention to the development and use of the system makes system users

feel dissatisfied. The support provided such as attention to the performance of the AIS, and the planning of information systems to the users of the system can have an impact on the performance of the AIS.

The TAM theory does not support this research. The TAM theory explains that top management support is related to productivity, the importance of a task, task performance, and overall use. The increased support and involvement of top management in the AIS planning and development process can show how serious management is in helping subordinates to operate the system so that it can affect the performance of the AIS.

This research is contrary to research [16]. However, this research is consistent with research [15], concluded that top management support has no effect on AIS performance.

5 Conclusion

Conclusions from the results of the analysis above, the conclusions obtained are: (1) The technical ability of users has a positive effect on the performance of accounting information systems. (2) Training and education programs, user involvement, and top management support have no effect on the performance of accounting information systems. Future research, it is suggested that other researchers can examine other factors that affect the performance of accounting information systems and the object of research can be expanded not only to one manufacturing company.

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