



An Influence of Personal Engineering, Top Management Support, Training and Education System Performance Accounting Information at the Company PT. Bank Mandiri Taspen Medan

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Abstract: *This study aims to determine whether personal techniques, top management support, training and education partially and simultaneously have a positive and significant effect on the performance of accounting information systems at the company PT. Bank Mandiri Taspen Medan. The data analysis technique used is the Associative method with the help of the SPSS program. This study uses multiple linear regression analysis. The research sample was 70 respondents. Primary data collection using a questionnaire. The results showed that personal techniques, top management support, training and education partially and simultaneously had a positive and significant effect on the performance of the accounting information system at the company PT. Bank Mandiri Taspen Medan.*

Keywords: *personal engineering; top management support; training and education and accounting information system performance*

I. Introduction

Economic developments and technological advances that are very rapid at this time require the company's ability to allocate company resources effectively and efficiently. To be able to achieve this precise and accurate information plays a very important role. Of all the information needed by the company's management, accounting information is one of the important bases in making company resource allocation decisions. To obtain precise and accurate information, it is necessary to have an accounting information system that is made according to an integrated pattern in accordance with the conditions and needs of the company to carry out company activities.

For that we need an information system that is able to capture, create, and manage internal and external information early, so that management has the knowledge to detect effectively when changing conditions require strategic responses. The use of information systems is expected to provide great benefits in a highly competitive business world. Companies are required to improve the performance of their accounting information systems because conventional information processing systems are no longer adequate. Therefore, the need for quality information is indispensable in making business decisions and increasing productivity.

PT. Bank Mandiri Taspen Medan (Persero), as one of the state-owned companies (BUMN) engaged in the banking sector. DMS (Document Management System) which is a system built to assist the daily performance of employees. The performance of the accounting information system can be assessed, so as not to bring failure in the company. The performance of the accounting information system can be seen through the satisfaction of users of the accounting information system and the use of the accounting information system itself.

Based on the pre-survey there are problems at PT. Bank Mandiri Taspen Medan (Persero) is a personal engineering problem where they do not understand the technique to generalization, management support problems are lack of motivation and information from management, training and education problems are lack of training and education intensity, accounting information system performance problems are poor information system performance not maximal. Development is a change towards improvement (Shah et al, 2020). User participation in the development of accounting information systems is still considered lacking.

The ability of users to support their participation in the development of accounting information systems is still considered lacking.

Based on the description of the background, the researchers formulated the research problem as follows:

1. Does personal technique partially have a positive and significant effect on the performance of accounting information systems at the company PT. Bank Mandiri Taspen Medan?
2. Does top management support partially positive and significant effect on the performance of the accounting information system at the company PT. Bank Mandiri Taspen Medan?
3. Do training and education partially have a positive and significant effect on the performance of the accounting information system at the company PT. Bank Mandiri Taspen Medan?

Does personal technique, top management support, training and education simultaneously have a positive and significant effect on the performance of the accounting information system at the company PT. Bank Mandiri Taspen Medan?

II. Review of Literature

2.1 Accounting Information Performance System

Khadir (2013) suggests research on accounting information systems is the design and impact of effective information technology in society and organizations, and requires performance measurement to see the effectiveness of information systems. The performance of accounting information systems is difficult to measure its effectiveness directly. Some researchers prefer to measure the performance of information systems indirectly, by using the variables of user satisfaction and system use as benchmarks to measure the success of information system performance. Based on this, the performance of the accounting information system will show success as measured by using the variables of user satisfaction and use of information systems.

2.2 A Factors Affecting Accounting Information System Performance

Based on research conducted by Soegiharto (2011) suggests that the factors that affect the performance of accounting information systems are:

a. Information Systems Personal Engineering Ability

According to Soegiharto (2011), the ability of personal information system techniques is the ability of system users. Potential user contributions should be higher during the planning and implementation stages of system development. The more users understand the technology, the tasks and decisions involved, and the socio-political environment in which the system will be used, the more likely they are to contribute to the development of the system. The average education or experience level of information system user groups can be used to measure the ability of information systems personnel. The technical capabilities of IS personnel have a major influence on the analysis of information requirements and the design of information systems. For example, a competent systems analyst has a positive effect on the information needs assessment. Bruwer 1984 in Soegiharto also suggested that IS performance is related to the technical quality or design quality of the system, which is the responsibility of system personnel. The ability of IS personal technique is divided into specialist ability and generalist

ability. Jen (2002) argues that the higher the SIA's personal technical ability, the higher the SIA's performance due to the positive relationship between SIA's personal engineering ability and SIA's performance.

b. Top Management Support

Soegiharto (2011) top management support is top management's understanding of computer systems and the level of interest, support, and knowledge of information systems. Top management is the highest management consisting of a small group of executives. Often referred to as the President Director, Deputy Director, Senior Vice President, Division Head and so on. Top management support includes securing funding and setting development priorities. Top management support and involvement plays an important role in the successful implementation of information systems. Top management support is not only important for the allocation of the necessary resources, but also provides a strong signal to employees that the changes made are important.

c. Training and Education

According to Jen (2012) training and training is user education that can affect the performance of accounting information systems. Jen (2012) argues that SIA performance will be higher if user training and education programs are introduced. Meanwhile, Soegiharto (2011) suggested that the lack of education is the main reason for the lack of utilization of information systems.

A study on the virtues of information systems proposed by Soegiharto (2011), namely "user education" greatly affects the performance of accounting information systems.

III. Research Methods

Research approachnamely associative research which aims to determine the effect between two or more variables.(Erlina, 2017: 12).The sample in this study were all employees of PT. Bank Mandiri Taspen Medan, namely in the field of services, personnel, finance, information systems and services functional controller so that the sample is 70 respondents.

Primary data was obtained by using a list of questionnaires.

IV. Result and Discussion

4.1 Validity Test Results

Table 1. Validity Test (X1) Of Personal Technique

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Statement X1.1	26.3953	18,197	.503	.802
Statement X1.2	26.2093	18,550	.516	.801
Statement X1.3	26.3721	18001	.476	.805
Statement X1.4	26.1163	18.105	.464	.807
Statement X1.5	26.0233	17,738	.490	.804
Statement X1.6	26.2791	17.301	.630	.786
Statement X1.7	26.2791	17.301	.630	.786
Statement X1.8	26.1395	17,551	.579	.793
Statement X1.9	26.0930	18,420	.395	.816

Based on in the table above, the results of the SPSS output show that the validity value is in the Corrected Item-Total Correlation column, which means the correlation value between the scores of each item and the total score in the tabulation of respondents' answers. The results of the validity test of 9 (nine) questions on the personal technique variable can be declared valid (valid) because all coefficient values are greater than 0.30.

Table 2. Validity Test (X2) Top Management Support

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
statement X2.1	28.8372	44,044	.502	.827
Statement X2.2	29.2558	42.862	.464	.836
Statement X2.3	28.8837	44,153	.451	.835
Statement X2.4	28.7442	47.004	.612	.818
Statement X2.5	28.9767	41,690	.667	.806
Statement X2.6	29.3953	44,292	.677	.809
Statement X2.7	29.1628	47.806	.465	.829
Statement X2.8	29.2326	45,754	.639	.814
Statement X2.9	29.2791	45.016	.646	.812

Source: SPSS Version 16.0 Processing Results

Based onIn the table above, the results of the SPSS output show that the validity value is in the Corrected Item-Total Correlation column, which means the correlation value between the scores of each item and the total score in the tabulation of respondents' answers. The results of the validity test of 9 (nine) questions on the top management support variable can be declared valid (valid) because all coefficient values are greater than 0.30.

Tables 3. TestValidity (X3) Training And Education

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Statement X3.1	26.4884	23.065	.745	.805
Statement X3.2	26.9302	25,685	.560	.826
Statement X3.3	26.8372	23,425	.762	.804
Statement X3.4	26.8372	22,282	.718	.806
Statement X3.5	26.5349	24,445	.508	.833
Statement X3.6	26.5814	24,868	.480	.835
Statement X3.7	26.6047	25,721	.436	.839
Statement X3.8	26.6047	26,911	.452	.836
Statement X3.9	26.5814	27,344	.367	.843

Source: SPSS Version 16.0 Processing Results

Based onIn the table above, the results of the SPSS output show that the validity value is in the Corrected Item-Total Correlation column, which means the correlation value between the scores of each item and the total score in the tabulation of respondents' answers. The results of the validity test of 9 (nine) questions on the training and education variables can be declared valid (valid) because all coefficient values are greater than 0.30.

Tables 4. Validity Test (Y) Performance of Accounting Information Systems

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Y.1 Statement	27.1395	24,742	.710	.825
Y.2 Statement	27.2791	23,206	.628	.828
Y.3 Statement	27.0000	23.333	.558	.837
Y.4 Statement	27.2791	25.111	.573	.835
Y.5 Statement	27.0930	24,086	.663	.826
Y.6 Statement	26.7442	24,100	.477	.847
Y.7 Statement	27.0930	24,896	.556	.836
Y.8 Statement	27.0698	25.590	.445	.847
Y.9 Statement	27.0233	24,452	.607	.831

Source: SPSS Version 16.0 Processing Results

Based onIn the table above, the results of the SPSS output show that the validity value is in the Corrected Item-Total Correlation column, which means the correlation value between the scores of each item and the total score in the tabulation of respondents' answers. The results of the validity test of 9 (nine) questions on the accounting information system performance variable can be declared valid (valid) because all coefficient values are greater than 0.30.

4.2 Reliability Test Results

a. Reliability Test (X1) Personal Technique

Reliability Statistics

Cronbach's Alpha	N of Items
.818	9

Source: SPSS Version 16.0 Processing Results

Based onIn the table above, the results of the SPSS output are known to have Cronbach's Alpha value of $0.818 > 0.60$ so it can be concluded that the questions that have been presented to respondents consisting of 9 statements on the personal technique variable are reliable or said to be reliable.

b. Reliability Test (X2) Top Management Support

Reliability Statistics

Cronbach's Alpha	N of Items
.838	9

Source: SPSS Version 16.0 Processing Results

Based on in the table above, the results of the SPSS output are known to have Cronbach's Alpha value of $0.838 > 0.60$ so it can be concluded that the questions that have been presented to respondents consisting of 9 statements on the top management support variable are reliable or reliable.

c. Reliability Test (X3) Training And Education

Reliability Statistics	
Cronbach's Alpha	N of Items
.842	9

Source: SPSS Version 16.0 Processing Results

Based on the table above, the results of the SPSS output are known to have Cronbach's Alpha value of $0.842 > 0.60$ so it can be concluded that the questions that have been presented to respondents consisting of 9 statement items on the training and education variables are reliable or said to be reliable.

d. Reliability Test (Y) Accounting Information System Performance

Reliability Statistics	
Cronbach's Alpha	N of Items
.850	9

Source: SPSS Version 16.0 Processing Results

Based on the table above, the results of the SPSS output are known to have Cronbach's Alpha value of $0.850 > 0.60$ so it can be concluded that the questions that have been presented to respondents consisting of 9 statements on the accounting information system performance variable are reliable or reliable.

4.3 Classic Assumption

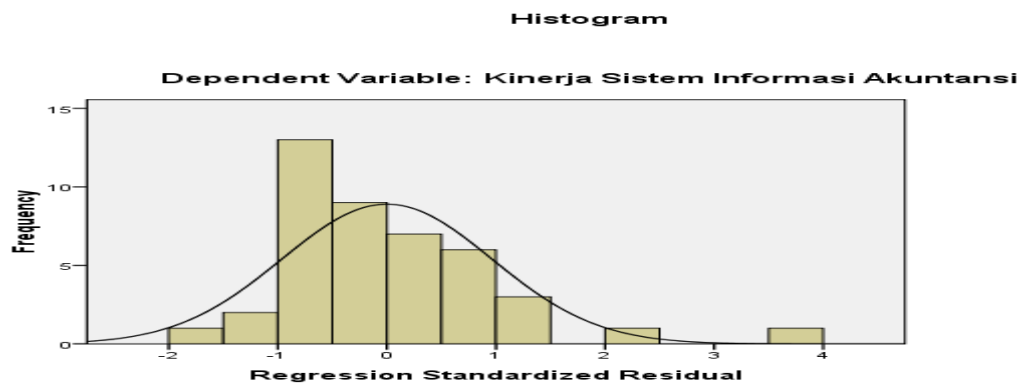


Figure 1. Data Normality Test

Based on the picture above, the results of the normality test of the data show that the data is normally distributed, where the histogram image has a line that forms a bell and has a balanced convexity in the middle.

4.4 Multicollinearity Test

The multicollinearity test aims to test whether there is a correlation between the independent variables in the regression model. Variance Inflation Factor (VIF) numbers less than 10 include personal technique $3.336 < 10$, top management support $1.54 < 10$ and training and education $3.439 < 10$, and personal technique tolerance value $0.300 > 0.10$, top management support $0.605 > 0.10$ and training and education $0.291 > 0.10$ so that it is free

from multicollinearity.

4.5 Heteroscedasticity Test

The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residuals of one observation to another observation. A good regression model is one that does not occur heteroscedasticity

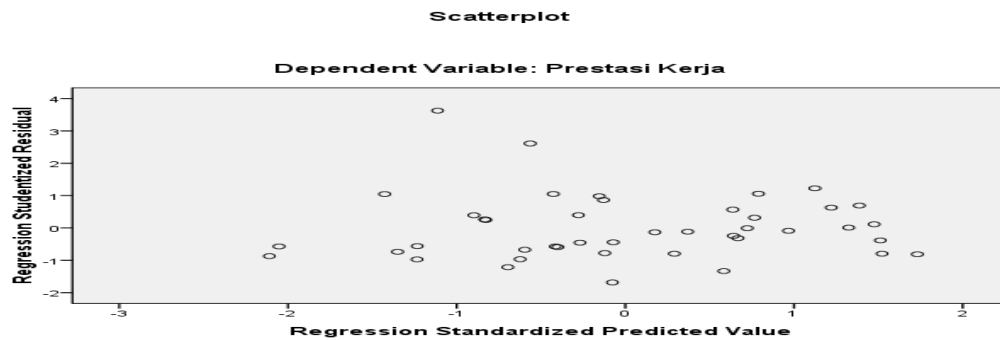


Figure 2. The Regression Model

Based on the picture above, it shows that this regression model is free from heteroscedasticity problems, in other words: the variables to be tested in this study are homoscedasticity.

4.6 Multiple Linear Regression Results

Based on multiple linear regression as follows $Y = -0.329 + 0.658 X_1 + 0.150 X_2 + 0.216 X_3 + e$.

The interpretation of the multiple linear regression equation is:

1. If everything on the independent variables is considered zero, then the performance value of the accounting information system (Y) is -0.329.
2. If there is an increase in personal technique 1, the performance of the accounting information system (Y) will increase by 0.658.
3. If there is an increase in top management support by 1, then the performance of the accounting information system (Y) will increase by 0.150.
4. If there is an increase in training and education by 1, the performance of the accounting information system (Y) will increase by 0.216.

4.7 Simultaneous Test Results (F Test)

The result of Fcount is 51.412 while Ftable is 2.85 which can be seen at $\alpha = 0.05$. Significant probability is much smaller than 0.05, namely $0.000 < 0.05$, so the regression model can be said that in this study personal techniques, top management support, training and education simultaneously have a significant effect on the performance of accounting information systems.

4.8 Partial Test Results (t Test)

1. The influence of personal techniques on the performance of accounting information systems, tcount 4.286 > ttable 2.022 and significant $0.000 < 0.05$, then H_a is accepted and H_0 is rejected, which states that personal techniques have a significant partial effect on accounting information system performance.
2. The effect of top management support on the performance of accounting information

systems, $t_{count} 2.195 > t_{table} 2.022$ and significant $0.034 < 0.05$, then H_a is accepted and H_0 is rejected, which states that top management support has a partially significant effect on accounting information system performance.

3. The effect of training and education on the performance of accounting information systems, $t_{count} 2.631 > t_{table} 2.022$ and significant $0.011 < 0.05$, then H_a is accepted and H_0 is rejected, which states that training and education have a partially significant effect on accounting information system performance.

4.9 Determination Test Results

Figures Adjusted R Square 0.783 which can be called the coefficient of determination which in this case means 78.3% of the performance of accounting information systems can be obtained and explained by personal techniques, top management support, training and education. While the remaining $100\% - 78.3\% = 21.7\%$ is explained by other factors or variables outside the model.

4.10 The influence of personal techniques on the performance of accounting information systems

The results show that $t_{count} 4.286 > t_{table} 2.022$ and significant $0.000 < 0.05$, then H_a is accepted and H_0 is rejected, which states that personal techniques have a partial significant effect on accounting information system performance. The higher the personal technical ability possessed by the information system user, the higher the performance of the accounting information system, because it is in line with the theory that supports the variable of personal technical ability of information systems, namely the theory of achievement. If employees have qualified abilities, both specific and general abilities, the company's goals will be easily achieved. Thus, the technical ability of personal information systems has a positive relationship to the performance of accounting information systems. The results of this study are in accordance with Jayanti's research (2017),

4.11 The effect of top management support on the performance of accounting information systems

The results show that $t_{count} 2.195 > t_{table} 2.022$ and significant $0.034 < 0.05$, then H_a is accepted and H_0 is rejected, which states that top management support has a significant partial effect on accounting information system performance. If the greater the support provided by top management, it will increase the performance of the accounting information system, because it is in line with the theory that underlies the top management support variable, namely the theory of organizational support. Employees who feel they have the support of top management will have a greater sense of enthusiasm to develop the performance of accounting information systems, this will also increase their commitment to employees in achieving company goals. Thus, top management support has a positive relationship to the performance of accounting information systems.

4.12 Effect of training and education on accounting information system performance

The results show that $t_{count} 2.631 > t_{table} 2.022$ and significant $0.011 < 0.05$, then H_a is accepted and H_0 is rejected, which states that training and education have a significant partial effect on the performance of accounting information systems. Information system performance will be higher if user training and education programs are introduced properly, because information system users will better understand information systems within the company with training and education from experts, users will have more knowledge so they can sort out the best in the process to facilitate management in decision making. Thus, training and education programs have a positive relationship to the performance of accounting information systems. The results of this study are in accordance with Lestari's

4.13 The effect of personal techniques, top management support and training and education on accounting information system performance

The results show that F_{count} is 51.412 while F_{table} is 2.85 which can be seen at $= 0.05$. Significant probability is much smaller than 0.05, namely $0.000 < 0.05$, so the regression model can be said that in this study personal techniques, top management support, training and education simultaneously have a significant effect on the performance of accounting information systems. If employees have qualified abilities, both specific and general abilities, the company's goals will be easily achieved. Thus, the ability of personal information systems techniques has a positive relationship to the performance of accounting information systems.

Increase commitment to employees in achieving company goals. Thus, top management support has a positive relationship to the performance of accounting information systems. With training and education from experts, users will have more knowledge so they can sort out the best in the process to facilitate management in decision making. Thus, training and education programs have a positive relationship to the performance of accounting information systems. The results of this study are in accordance with the research of Jayanti (2017) and Lestari (2017), where personal techniques, top management support, training and education have a significant effect on the performance of accounting information systems.

V. Conclusion

Based on the results of research conducted by the authors, the authors can draw several conclusions.

1. Personal technique partially positive and significant effect on the performance of accounting information systems at the company PT. Bank Mandiri Taspen Medan.
2. Top management support partially positive and significant effect on the performance of the accounting information system at the company PT. Bank Mandiri Taspen Medan.
3. Training and education partially have a positive and significant effect on the performance of the accounting information system at the company PT. Bank Mandiri Taspen Medan.
4. Personal techniques, top management support, training and education simultaneously have a positive and significant effect on the performance of the accounting information system at the company PT. Bank Mandiri Taspen Medan.

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