

THE INFLUENCE OF PERSONAL TECHNICAL ABILITY, LEVEL OF EDUCATION, TRAINING AND WORK EXPERIENCE ON THE PERFORMANCE OF ACCOUNTING INFORMATION SYSTEMS IN REGIONAL APPARATUS ORGANIZATIONS IN MEDAN CITY

Ekayanti Simare-Mare & Iskandar Muda
Universitas Sumatera Utara, Medan, Indonesia

Abstract

This study aims to determine the effect of personal technical ability, education level, training, and work experience on the performance of accounting information systems in Medan City Regional Apparatus Organizations. The population in this study was 55 OPDs consisting of OPD Heads, Secretaries, and Heads of Finance Sub-Divisions in Medan City Regional Apparatus Organizations. The number of samples in this study was 116 and with Purposive Sampling techniques. The research data was obtained by survey method, namely distributing questionnaires directly to respondents. The data analysis method used was multiple linear regression analysis method. The results of this study indicate that simultaneously personal technical ability, education level, training and work experience have a significant effect on the performance of accounting information systems in Medan City Regional Apparatus Organizations. Partial tests show that personal technical ability and education level do not affect the performance of accounting information systems in Medan City Regional Apparatus Organizations, while training and work experience each have a positive and significant effect on the performance of accounting information systems in Medan City Regional Apparatus Organizations.

Introduction

To achieve optimal service levels, organizations and institutions in the public sector must adopt effective management practices to generate benefits for the community. Evaluation of the performance of accounting information systems is one of the

crucial aspects. Therefore, it is mandatory to carry out an assessment of what factors can influence effectively and efficiently on the performance of accounting information systems [1].

Table 1. 1 Summary of Interim Audit Results (LHPS)

Regional Opinion	Year	
	2022	2023
Fair Without Exception	500	496
Fair With Exceptions	38	41
No Opinion Expressed	4	5
Total	542	542

Based on the Summary Table of Temporary Audit Results (LHPS) above, it can be seen that there is a decrease in the opinion obtained in the assessment report conducted by the Audit Board of Indonesia (BPK). In 2022 (the assessment was conducted to assess the 2021 financial report) the WTP opinion was achieved by 500 local governments, while in 2023 (the assessment was conducted to assess the 2022 financial report) there were 496 local governments that achieved this opinion, there were 4 local governments that experienced a decrease.

With the target of achieving an Unqualified Opinion (WTP), the Medan City Government is testing a budget and financial reporting system using a web-based application, namely the Regional Government Information System (SIPD). Previously, the Medan City Regional Apparatus Organization (OPD) used the Regional Management Information System (SIMDA). The purpose of using this web application is to increase efficiency and facilitate supervision and evaluation of public services in the Medan City Government. However, the implementation of this program encountered initial obstacles because several employees did not fully understand the application system, so that the maximum stage of achievement

had not been achieved. Until now, the use of SIPD in Medan City OPDs is still experiencing obstacles and is not optimal due to several factors such as frequent downtime, limited data and accurate information, bugs and errors in implementation, slow response from the help center and IT support, and the need for application improvements, and the existence of job changes or rolling tasks for employees. Sources also highlighted that SIPD is still in the development stage and the need for better integration and improvements in responsiveness and quality.

Research on factors that influence the performance of accounting information systems also shows mixed results. Research results from [2] show that the use of information technology has a positive effect on the performance of accounting information systems, while research by [3] shows different results where personal technical abilities do not affect the performance of accounting information systems. Likewise, the results of other variable studies have differences and similarities in results. The following is a table of research gaps from previous studies.

Based on the background above, the researcher is interested in conducting further research on "The Influence of Personal Technical Ability, Education Level, Training and Work Experience on the Performance of Accounting Information Systems in information system they have, the more familiar they are with the information system.

Literature Review

Theoretical basis

Contingency Theory

Contingency Theory comes from organizational theory, has been used in information systems research for the past 25 years [4]. According to [5] contingency theory is a theory that explains how different organizations can use different methods to achieve the same goals. Meanwhile, according to [6] contingency theory is an effort made to identify accounting-based control systems that are appropriate to all conditions faced.

Contingency theory is a theory based on the idea that organizational management can run well and smoothly if the leader of the organization is able to pay attention to and solve certain situations that are being faced. In this study, the performance of the accounting information system can run well if the user as an operator is able to utilize the accounting information system owned by paying attention to personal technical abilities, education level, training and work experience.

Accounting Information System Performance

According to [7] the performance of the accounting information system as a measure or evaluation of the implementation of the accounting information system applied by an organization with a focus on its ability to provide accurate and relevant financial information according to needs. An effective accounting information system ensures timely information and perfect financial reporting and accurate accounting information creates reliable financial records for decision making [6].

Personal Technical Skills

According to [8], personal technical ability refers to an individual's capacity to carry out tasks in a job. A high level of personal technical ability will encourage users to adopt information systems. The greater the user's personal technical ability towards the Regional Government Organizations in Medan City ".

Referring to the research background that has been described previously, the research problem can be formulated as: is there a significant influence of the factors of Personal Technical Ability, Education Level, Training and Work Experience on the Performance of Accounting Information Systems?. Based on the formulation of the problem above, the aim of this research is to identify whether Factors of Personal Technical Ability, Education Level , Training and Work Experience on the Performance of the Accounting Information System of the Medan City Regional Government Organization .

Level of education

According to [9] the level of education is a long-

term process using analytical and structured methods. In this context, workers or employees deepen conceptual and theoretical knowledge to achieve general goals. With the level of education, a person can improve the individual's ability to do work more effectively.

Training

According to [10] training is a program designed to provide employees with a supportive environment in learning certain attitude skills needed to improve their performance. So, they can carry out their obligations better and in line with the criteria required by the organization or agency.

Work experience

According to [11] Work experience is an individual's skills that have been applied in work, both past and ongoing. Work experience is a reflection of a person's quality. The work experience that a person has in mastering their job is based on the length of work. the longer a person works in a place, the more skilled they are in completing tasks without facing many difficulties.

Research Hypothesis

H 1: Personal Technical Ability has a positive effect on Accounting Information System Performance.

H 2: Education level has a positive effect on Accounting Information System Performance.

H 3: Training has a positive effect on Accounting Information System Performance.

H 4: Work experience has a positive effect on Accounting Information System Performance.

H 5: Personal Technical Ability, Education Level, Training and Work Experience have a simultaneous effect on Accounting Information System Performance.

Research Methods

Types of research

This study uses a causal associative research type, functioning to test the causal relationship between independent variables and dependent variables. The approach used is a quantitative approach, focusing on mathematical data calculations to examine the state of a particular population and sample.

Place and Time of Research

This research was conducted at the Medan City Regional Government Organization and the research period was from October 2023 to December 2023.

Population and Research Sample

The population in this study, the population consists of 55 OPDs consisting of OPD heads, secretaries and heads of financial sub-sections in the Medan City Regional Apparatus Organization. In this study, the sample taken using the non-probability sampling method using purposive sampling techniques. To obtain a more representative sample, the researcher determines the criteria that will determine the selected sample. Based on the number of population and criteria ($55 \text{ OPD} \times 3 = 165 \text{ Respondents}$).

Method of collecting data

The data collection method in this study is a survey method that uses a questionnaire as a tool for collecting information.

Data Analysis Techniques Descriptive Statistical Analysis

A type of statistical analysis that visualizes data as it has been collected to analyze the data, and is not intended to be a conclusion or generalization that applies generally. Descriptive statistics can be characterized by the presence of mean, standard deviation, maximum and minimum values (Ghozali, 2018).

Classical Assumption Test

The classical assumption tests that will be used

include the normality test, multicollinearity test, and Glejser test.

Normalistic Test

This test is conducted to evaluate whether the dependent and independent variables have followed a normal distribution, and whether the regression model has met the required normality assumptions (Ghozali, 2018).

Multicollinearity Test

The basic conclusion of this reference is: There is no multicollinearity in a study, if the tolerance value is > 0.10 and VIF < 10 and there are symptoms of multicollinearity that can interfere with the data of the study, if the tolerance value is < 0.10 and VIF > 10.

Multiple Linear Regression Analysis

Multiple linear regression involves analyzing the impact of one or more independent variables on the dependent variable. Because this study involves four independent variables, the statistical analysis used is the multiple linear regression test. Multiple Linear Analysis can be formulated as follows:

$$Y = \alpha + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \beta_4x_4 + e$$

Hypothesis Testing

F Test (Simultaneous Test)

The F test can be done by observing the significance value of F in the regression output results, with the significance level usually set at 0.05 ($\alpha = 5\%$). If the probability (significance value) is > 0.05, it indicates that the regression model is not significant or does not fit.

t-test (Partial Test)

If t count > t table (nk-1) then Ho is rejected. Then, if t count < t table (nk-1) then Ho is accepted. Then, the t-test can also be seen from the magnitude of the probability value (p- value) which is compared to 0.05 (significant level $\alpha = 5\%$). So the test criteria used are: If the p value < 0.05 then Ho is

rejected and if the p value > 0.05 then Ho is accepted.

Coefficient of Determination (R2)

The coefficient of determination (R2) is used to estimate how far the instrument is able to describe the diversity of the dependent variable or how much the model can explain the dependent variable. The value of the coefficient of determination ranges between 0 and 1.

Results And Discussion

Descriptive Statistical Test

Table 2. Descriptive Statistics

Variables	N	Theoretical Range			Practical Range			Std. Deviation
		Min.	Max.	Mean	Min.	Max.	Mean.	
Accounting Information System Performance (Y)	116	7	30	21	22	35	29.03	3.390
Personal Technical Ability (X1)	116	4	20	12	11	20	16.68	2.140
Education Level (X2)	116	4	20	12	12	20	16.55	2,032
Training (X3)	116	5	25	15	15	25	20.77	2.263
Work Experience (X4)	116	5	50	15	16	25	20.84	2.179

1. mean value of the practical range > the mean value of the theoretical range, namely 29.03 > 21.00, so it can be concluded that the performance variable of the accounting information system is high.
2. mean value of the practical range > the mean value of the theoretical range, namely 16.68 > 12.00, so it can be concluded that the personal technical ability variable is high.
3. mean value > theoretical range mean value, namely 16.55 > 12.00, so it can be concluded that the education level variable is high.
4. mean value > theoretical range mean value , namely 20.77 > 15.00, so it can be concluded that the training variable is high.
5. mean value of the practical range > the mean

value of the theoretical range, namely $20.84 > 15.00$, so it can be concluded that the work experience variable is high.

Classical Assumption Test

Normality Test

The results of the normality test are intended to prove whether the residuals in the regression model have a normal distribution. The normality test can be presented through graphical analysis, namely with Histogram graphs and PP Plot graphs.

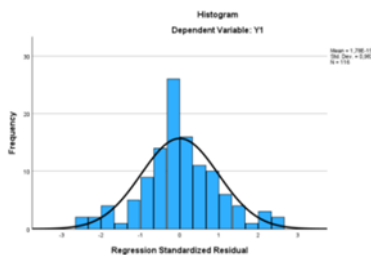
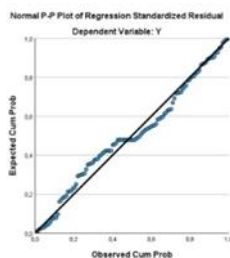


Figure 4.1 Histogram Graph

Source: Processed data (2024)



Source: Processed data (2024)

Figure 1. PP Plot Graph

In graphical analysis, data that has a bell-like pattern on the histogram diagram and on the PP Plot graph the points spread around the diagonal line are good data. Based on Figure 4.1 and Figure 4.2 above, it can be concluded that the data is normally distributed because the data has a bell-like pattern on the histogram diagram and on the PP plot graph the points spread around the diagonal line. This study also conducted a statistical normality test, namely by conducting the One Sample Kolmogorov Smirnov test, here are the results of the normality test with One

Sample Kolmogorov Smirnov.

Multicollinearity Test

Table 3 Multicollinearity Test Results

Coefficients ^a		
Model	Collinearity Statistics	
	Tolerance	VIF
Constant		
Personal Technical Skills	.728	1,373
Level of education	.709	1,410
Training	.667	1,498
Work experience	.700	1,428
Dependent Variable: Accounting Information System Performance		

Based on Table 3, it is known that the tolerance value for the accounting information system quality variable, the use of information technology, expertise user And intensity user > 0.1 and also VIF value < 10 so it can be concluded that the model tested in this study does not indicate multicollinearity.

Heteroscedasticity Test

Coefficient of Determination Test

Table 4. Results of the Model Summary Determination Coefficient Test

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error Of the Estimate
1	.747 a	.558	.542	1,847
a. Predictors: (constant), Personal Technical Ability, Education Level, Training and Work Experience.				
b. Dependent Variable: Accounting Information System Performance				

Based on Table 5 above, it can be seen that F is greater than 4 with a significance level of $0.000 < 0.05$ and the calculated F value $> F$ table. So it can be concluded that the variables of Accounting Information System Quality, Use of Information Technology, Intensity of Use, User Expertise simultaneously have a significant effect on the Quality of Accounting Information.

t-Test Results (Partial Test)

Table 6. t-Test Results

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Constant	6.015	2.004		3.002	.001
	Personal Technical Skills	.127	.094	.099	1,344	.182
	Level of education	.196	.101	.146	1,948	.054
3	Training	.559	.093	.463	6,000	<.001
4	Work experience	.290	.094	.232	3.075	.003
1. Dependent Variable: Accounting Information System Performance						
2. Predictors: (Constant) Personal Technical Ability, Education Level, Training and Work Experience						

Based on Table 6, the results of the t-test state that the intensity of use does not have a significant effect on the quality of accounting information, whereas the quality of the accounting information system and the use of information technology, and expertise user each has a positive and significant influence on the quality of accounting information.

1. calculated t value (1.334) < t table (1.98) significant value for personal technical ability (X₁) 0.182 more than 0.05. The results of the study indicate that the personal technical ability variable does not have a significant effect on the performance of the accounting information system.

2. calculated t value (1.948) < t table (1.984) significant value of education level (X₂) 0.054 is greater than 0.05. The results of the study indicate that the education level variable does not have a significant effect on the performance of the accounting information system.

3. calculated t value (6,000) > t table (1.984) the significance of training (X₃) 0.001 is less than 0.05. The results of the study indicate that training has a significant effect on the performance of the accounting information system.

4. calculated t value (3.075) > t table (1.984) significant value of work experience (X₄) 0.003 is less than 0.05. This means that work experience has a significant effect on the performance of the accounting information system.

Discussion of Research Results

1. The Influence of Personal Technical Ability on Accounting Information System Performance

Personal Technical Ability does not affect the Performance of Accounting Information Systems. High personal technical ability in operating information systems is very much needed, this is important in terms of operating the system so that it can operate optimally [12, 13]. However, in reality, in the object of research, the high or low personal technical ability possessed in operating the system will not reduce the effectiveness of the system.

2. The Influence of Education Level on System Performance Accounting Information

Education level does not affect the Performance of Accounting Information Systems in the Regional Government Organization of Medan City. This study is in accordance with research conducted by [3] which shows that Education Level does not affect the Performance of Accounting Information Systems. This is because an employee with a higher educational background is not necessarily able to implement the knowledge gained compared to employees with a lower educational background.

3. The Influence of Training on Accounting Information System Performance

The results of this study explain that the Training variable has an effect on the Performance of the Accounting Information System in the Medan City Regional Government Organization. This study is in accordance with research conducted by [14], [15] which shows that Training has an effect on the Performance of the Accounting Information System. Training programs attended by employees can provide knowledge that can be used in operating the system. In addition, the training provided to employees can provide benefits to an organization because if employee skills increase,

the information system used will be more effective [16].

4. The Influence of Work Experience on Accounting Information System Performance

The results of this study explain that the Work Experience variable has an effect on the Performance of the Accounting Information System in the Medan City Regional Government Organization. This study is in accordance with research conducted by [17] and [18] which shows that Work Experience has an effect on the Performance of the Accounting Information System. Work experience refers to the skills that a person has applied in the past and present work environment. Work experience reflects the quality of a person. When people spend more time in a job, they usually find it easier to carry out tasks with less difficulty.

5. The Influence of Personal Technical Ability, Education Level, Training and Work Experience on Accounting Information System Performance

Based on the results of the determination coefficient test, it can be seen that the value of the adjusted R square is 0.542, which means that the independent variables, namely: personal technical ability, education level, training and work experience on the performance of the accounting information system are 0.542 or 54.2%, while the remaining 45.8 % is explained or described by other variables that are not included in the research model.

Conclusion And Suggestions

Based on the formulation of the problem and testing of the hypothesis in this study as explained in chapters 1 and 4, the researcher can make several conclusions as follows:

1. Ability Personal techniques do not have a significant effect on the performance of the Accounting Information System in the Regional Government Organization of Medan City.
2. Education level does not have a

significant effect on the Performance of Accounting Information Systems in the Regional Government Organization of Medan City.

3. Training has a positive and significant effect on the Performance of Accounting Information Systems in the Regional Government Organization of Medan City.

4. Experience work has a positive and significant influence on the Performance of the Accounting Information System in the Regional Government Organization of Medan City.

5. Personal technical skills , education level , training , and work experience simultaneously influence the performance of the Accounting Information System in the Regional Government Organization of Medan City.

Taking into account the conclusions and limitations explained above, the researcher can provide several suggestions as follows:

1. It is hoped that future researchers, if they want to conduct research like the focus of this research, will use other independent variables outside of this research.
2. It is hoped that future researchers will be able to research other organizations or agencies.

References

1. Maiercherinra, D., Oba, Y.D., & Randa, F. (2024). The Influence Of Implementing Accounting Information Systems, Internal Control And Work Motivation On Employee Performance. Paul Journal of Research, 1 (1).
2. Budiarto, Ningrum, & Diansari. (2021). The performance of information systems: Empirical research on government organizations. Journal of Physics: Conference Series, 1823 (1)
3. Unayah . (2020). The Influence of Internal Supervision, Personal Technical Ability, Education and Training Programs on the Performance of Accounting Information Systems (Case Study at the Office of the Ministry of Religion of Regency/City in Banten Province). TIRTAYASA Accounting Research Journal, 5 (1), 57- 72.

4. Reinking, J. (2012). Contingency theory in information systems research. *Explaining and Predicting Our Digital Society*, 1 , 247-263.
5. Siboro, D.; Siahaan, A.; and Ginting, S. (2018). Corporate Social Responsibility is Viewed from a Contingency Perspective. In *Proceedings of the 1st Unimed International Conference on Economics Education and Social Science - Volume 1: UNICEES*, ISBN 978-989-758-432-9, pages 973-977. DOI: 10.5220/0009499109730977. <https://www.scitepress.org/PublicationsDetail.aspx?ID=ZCm8UHO7gNI=&t=1>
6. Alfian, F, Purba, V,(2020). The Contingency Approaches to the Design of Accounting Systems. *Turkish Online Journal of Qualitative Inquiry*. 11(4). 949-956. <https://tojqi.net/index.php/journal/article/view/8207>
7. Evanti, A., & Eko, T. (2022). Factors Affecting the Performance of Accounting Information Systems at PT Dharma Husada Mandiri. *Scientific Horizon Journal*, 1 (8).
8. Robbins, S. (2005). *Organizational Behavior* (10th ed.). Jakarta: PT. Indeks.
9. Mangkunegara, AA (2013). *Corporate Human Resource Management*. Bandung: Rosdakarya Youth.
10. Messya, MN, Putu, K., & Kadek, AI (2022). The Influence of Information Technology Sophistication, System Development Formalization, Personal Technical Ability and Training on Accounting Information System Performance at LPD in Ubud District. *Collection of Accounting Student Research Results (KHARISMA)* , 4 (1), 1-12.
11. Hardani, K.N., & WayanRamantha, I. (2023). The Effect Of Age Differences, Work Experience And Education Levels On The Effectiveness Of Using Accounting Information Systems. *American Journal of Humanities and Social Sciences Research*, 4 (5), 183-189.
12. Ablelo, J., Anakotta, F., & Loupatty, L. (2021). The Influence of User Participation, Top Management Support, and Personal Technical Ability on Accounting Information System Performance (At OPD of Southwest Maluku Regency). *Conference on Economic and Business Innovation (CEBI)* , 868-893.
13. Tiara, S., & Fuadi, R. (2018). The Influence of User Involvement, Personal Technical Ability, and Training on Accounting Information System Performance (Study on Islamic Banking in Banda Aceh). *Journal of Accounting Economics Students*, 3 (4), 703-711.
14. Damana, AW, & Suardikha, IM (2016). The Influence of User Involvement, Training, Organization Size and User Expertise on the Performance of Accounting Information Systems. *E-Journal of Accounting*, Udayana University, 14 (2), 1452.
15. Medina, DJ-M., Jiménez, D.K., Mora, D.A., & Ábrego, M.D. (2022). Training in Accounting Information Systems for Users' Satisfaction and Decision. *International Journal of Business and Social Science*, 5 (7).
16. Sutrisno, E. (2019). Analysis of the Influence of Job Training and Job Satisfaction on Employee Performance at PT. Bank Negara Indonesia (Persero) Tbk Tulungagung Branch. *Journal of Business Management and Entrepreneurship*, 10 (2), 154-169.
17. Cahyaningsih, & Fahmi. (2023). The Role of Work Experience and User Capabilities in Improving Accounting Information Systems Effectiveness. *Proceedings of the 3rd Asia Pacific International Conference on Industrial Engineering and Operations* , 13-15.
18. Maszah, S. (2023). Exploring the influence of organizational culture and training on organizational citizenship behavior (OCB) as human capital: review of the international scientific journal. *International Journal of Economy, Education, and Entrepreneurship*, 3 (2), 454-465.