

# The Impact of the Use of Computer-Assisted Audit Technique, Professional Ethics, and Motivation on Auditors' Performance

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## ABSTRACT

The purpose of this study was to examine the impact of the use of Computer-Assisted Audit Techniques (CAAT), professional ethics, and auditor's motivation on auditors' performance. The study was conducted by using survey method which distributed the questionnaires to auditors in Public Accounting Firm. The objects of this research were managers and partners in Public Accounting Firm in Tangerang and Jakarta areas. Sampling was conducted by using convenience sampling method and total sample obtained were 109 respondents. Data analysis method was multiple linear regression. This study concluded that the use of CAAT and professional ethic had significant effect on the auditor's performance. Meanwhile, auditor's motivation had no effect on performance. In addition, Public Accounting Firms (KAP) could provide more various assignments for auditors in order to improve their experience. Thus, the auditor's performance would be increased.

**Keywords:** *the use of Computer-Assisted Audit Techniques, professional ethics, auditor's motivation, auditor's performance*

## 1. INTRODUCTION

The role of auditor is very important in determining the achievement of organization's goal. Financial statements present the information on financial position, financial performance, and cash flows of entities which benefit the financial statements users in decision making (IAI, 2014: 13). According to IAI (2014: 5), the four main qualitative characteristics are understandable, relevant, reliable, and comparable. The financial statements should be investigated by an independent auditor to ensure that the financial statements are presented fairly and reported in accordance with generally accepted accounting standards. Public Accounting Firm (or Kantor Akuntan Publik / KAP), is a business entity that has a license granted from the Ministry of Finance in providing auditing and assurance services. KAP as an organization that provides audit services to clients must provide training to its employee (auditors) in order to achieve high level of performance. An independent auditor is an auditor who works professionally by giving his / her services to public, especially in the field of auditing and to provide opinions on client's financial statements.

An auditor's performance can be measured from the quality in terms of how the auditor can conduct his / her work in accordance with the Indonesian applicable auditing standards, which will then increase the auditor's performance. Performance is a benchmark for an auditor when performing the duties whether the audit performance is in accordance with the Indonesian auditing standards. Based on the importance of an auditor to achieve organization goals, there are several factors that affect the

auditor's performance, of which the performance indicators are the use of CAAT techniques, professional ethics, auditor's motivation, and auditor's performance.

## 2. LITERATURE REVIEW

The use of computer in auditing activities is called Computer-Assisted Audit Techniques (CAAT) (I Gusti Agung Made Wira Praktiyasa, 2016). CAAT can generate better information, because the calculations performed by using the audit software will be more accurate than that conducted manually by the auditor, thus the information obtained from CAAT will be considered more appropriate. The use of CAAT can also make the completion time of an audit work faster and more efficient, because the auditor does not need to do all the work manually. By using the audit system in carrying out the audit work to meet the rapid job completion, the results obtained can reduce the errors that may occur if it is done manually. This result is supported by the previous research conducted by I Gusti Agung Made Wira Praktiyasa, Ni Luh Sari Widhiyani (2016), which stated that the use of CAAT has significant impact on auditor's performance.

Professionalism according to Ida Bagus Satwika Adhi Nugraha (2015) is professional ethics that has positive effect on auditor's performance. An auditor who does not have professional ethics or does not comply with professional ethics can not deliver good performance. Professionalism, according to Rahma (2012), is an important individual attribute without seeing a job as a profession or not. So, it can be said that professionalism is the responsibility of an auditor in completing his / her audit

work with all his / her ability as an auditor. The reason for the existence of high professional behavior of an auditor is needed to public trust through the quality of services provided. The measurement of professionalism in auditor's performance can be seen from his / her dedication to the profession. Since it was very important for an auditor to convince the clients and all users regarding the audit quality, the auditor will have to work with full responsibility. A professional auditor must have a high sense of independence of his / her work such as in decision making. An independent auditor must make decisions in accordance with his / her own decisions in the absence of other parties under the conditions and circumstances it faces, so there will be a higher sense of independence and professionalism as well. In addition to a dedication of professionalism and independence, the auditor's professionalism measurement can also be viewed from the high level of social obligation. Motivation is defined as the power of resources that drive and control human behavior. The higher the work motivation of an auditor, the higher the auditor's performance will be in auditing the financial statements and vice versa. So, the work-related motivation has impact on auditors' performance.

This research formulated the problems as follows: (1) Does the use of CAAT affect the performance of auditor in public accounting firm? (2) Does professional ethics affect the auditor's performance? (3) Does auditor's motivation affect the auditor's performance?

### 3. RESEARCH METHOD

The method used in this research was causal study method. Causal study is a study in which researchers want to find the cause of one or more problems in the study (2016). This study proves the direct causal relationship between independent variables (variables that affect), which are the use of CAAT, professionalism, auditor's motivation, with the dependent variable (variable that is influenced), that is the auditor's performance.

#### 3.1 Variables

##### Dependent Variable

The dependent variable in this research is auditor's performance. The performance of an auditor ( $Y_1$ ) is the result of the work's quality and quantity achieved by an auditor in performing his / her duties objectively by using all the knowledge, experience and ability to work in accordance with applicable procedures and regulations. The indicators used for auditor's performance variable ( $Y_1$ ) are quality, quantity, and timeliness.

##### Independent Variables

##### 1. Computer-Assisted Audit Techniques

How does the use of computers help in conducting the audit activities?

##### 2. Professionalism

Is there an attitude of responsibility towards the work?

##### 3. Motivation

Is there a condition in which the work-related motivation of an auditor can increase the auditor's performance?

#### 3.2 Data Collection Technique

Data collection in this study used primary data. Primary data is the data taken directly from the source. The technique of collecting this research data was questionnaires distribution to the auditors who work in Public Accounting Firms (KAP) located in Tangerang and Jakarta.

#### 3.3 Data Analysis Technique

This study used the IBM SPSS program as a tool to help in analyzing the data. The research model used was multiple linear regression.

### 4. RESULT & DECISIONS

#### 4.1 Multicollinearity Test

The Multicollinearity Test aims to find out whether there is a correlation among the independent variables. A good regression model is the one that has no correlation among the independent variables. Below is the result of the multicollinearity test.

**Table 1** Multicollinearity Test

Model	Collinearity Statistics	
	Tolerance	VIF
1	X <sub>1</sub>	.619
	X <sub>2</sub>	.439
	X <sub>3</sub>	.689
		1.616
		2.279
		1,430

a. Dependent Variable: Y

The multicollinearity test result showed no independent variable having tolerance value less than 0.10. The calculation of Variance Inflation Factor (VIF) value also showed the same result, that there was no independent variable having VIF value greater than 10. Thus, it can be concluded that there was no multicollinearity among the independent variables in this regression model.

#### 4.2 Hypothesis Test

##### 4.2.1 Coefficient of Determination Test

The coefficient of determination is used to test the Goodness-of-Fit of a regression model. The result of the coefficient of determination is are shown in Table 2 as follow.

**Table 2** Coefficient of Determination Test Model Summary<sup>b</sup>

Model	R	R Square	Adjusted Square	RStd. Error of the Estimate
1	.628 <sup>a</sup>	.394	.365	1.6103

a. Predictors: (Constant) X<sub>3</sub>, X<sub>1</sub>, X<sub>2</sub>

b. Dependent Variable: Y

The determination coefficient test result (R-value) equals to 0.628. This R-value is almost close to 1 indicating a strong correlation between the independent and dependent variable. The test result also obtained the Adjusted R-Square value of 0.365. The independent variables (the use of CAAT, professional ethics, and auditor’s motivation) could only explain the dependent variable (auditor’s performance) as much as 36.5%. The remaining 63.5% of variation in auditor’s performance could be explained by other independents variables.

**4.2.3 Partial Significance Test (t-Test)**

**Table 4** Partial Significant Test (t-Test) Result Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	7.926	2.891		2.738	.007		
X <sub>1</sub>	.275	.135	.196	2.021	.046	.619	1.616
X <sub>2</sub>	.329	.049	.273	3.349	.001	.439	2.279
X <sub>3</sub>	-.032	.045	-.065	-.715	.988	.699	1.430

a. Dependent Variable: Y

Based on the result of the t-Tests performed, a regression equation can be formed as follows:

$$Y = 7.926 + 0.275 X_1 + 0.329 X_2 - 0.032 X_3$$

Note:

- Y = Auditor’s Performance
- X<sub>1</sub> = The Use of Computer-Assisted Audit Techniques (CAAT)
- X<sub>2</sub> = Professional Ethics
- X<sub>3</sub> = Auditor’s Motivation

Based on the generated regression equation, it can be seen that there were 2 independent variables that had positive effect on the dependent variable. Those were CAAT and Professional Ethics. This positive effect can be seen through the variables of X<sub>1</sub> (0.275) and X<sub>2</sub> (0.329). The generated regression equation also shows that there was one independent variable that had negative but not significant effect, which was the Auditor’s Motivation. Negative

**4.2.2 Simultaneous Significance Test (F-test)**

**Table 3** Simultaneous Significance Test Results ANOVA<sup>a</sup>

Model	Sum Squares	ofdf	Mean Square	F	Sig.
1	Regression	202.010	5	40.402	14.525 .000b
	Residual	275.380	99	2.782	
	Total	477.390	104		

a. Dependent Variable: Y

b. Predictors: (Constant) X<sub>3</sub>, X<sub>1</sub>, X<sub>2</sub>

The ANOVA test result or statistical F-test shows that the value of F-test was 14.525 with a significance value of 0.000. A significance value smaller than 0.05 indicates that those three independent variables consisting of the use of CAAT, professional ethics, and auditor’s motivation simultaneously had significant effect on auditor’s performance.

relationship can be seen from the slope of X<sub>3</sub> that was equal to -0,032. Table 4 shows that the use of CAAT also had a value of 2.021 with a significance of 0.046, which is smaller than 0.05. The results of this study indicated that Ha<sub>1</sub> was accepted, so it can be concluded that the variable of CAAT had a positive influence on Auditor’s Performance. Ha<sub>1</sub> was accepted, because auditors are required to be able to improve their performance in working with financial statements more quickly and better. Such performance improvements should be encouraged by the use CAAT, either by using programs such as Excel or those specifically designed to assist auditors such as ACL (Audit Command Language) resulting in higher auditor’s expertise in using CAAT, that makes it easier for them in terms of data analysis, increased effectiveness, and efficiency of time, cost, and human resources. The results of this study were in line with the research conducted by Praktiyasa and Widhiyani (2016); Amanuddin Shamsuddin, Logenthiran A/L Rajasharen, Dhinesh A/L Maran (2015); I Gusti Agung

Made Wira Praktiyasa (2016); and I Gede Girinatha Surya (2016) studies which showed that CAAT had positive effect on auditor's performance

The Professional Ethics variable ( $X_2$ ) has a regression coefficient of 0.329. This means that every addition or increase of one unit in professional ethics, then there will be an increase in auditor's performance of 0.329. As the result of t-test, Professional Ethics ( $X_2$ ) has t-stats of 3.349 with 0.001 as its significance value (or less than 0.05). Thus,  $H_{a2}$  was accepted, which means that the Professional Ethics variable has positive and significant influence on Auditor's Performance. The higher the professional ethics an auditor has, the more he or she will have the sense of responsibility for the job. Responsibility makes the auditor do his / her best to accomplish the job properly and with high quality result. An auditor who has professional ethics has a broad effect on how to behave towards the clients in order to behave in conformity with generally accepted accounting rules. In addition, professional ethics can be a benchmark for the community and is a tool of trust for the wider community. The higher the professional ethics level an auditor has in carrying out the audit process, the higher the auditor's performance will be. The auditor must be able to maintain his / her professional ethics during the audit process, because if he / she loses the professional ethic, the auditor may be subject to ethical violations and he / she will not be able to generate a satisfactory performance, either for the auditor or for the client. This is usually caused by the psychological pressure that an accountant receives from a company that will not use his / her services back in the future. The auditor can maintain his / her professional ethics by obeying the ethics associated with the services provided when it concerns the interests of the wider community, while the ethics of the auditor's profession can be improved by giving opinion on Company's Financial Statement. This study result is in line with Desak Made Muliani (2015) research, which showed that professional ethics has impact on auditor's performance, as well as Ciprian Costel, Munteanu, (2013) research concluding that IT supports in their work, the learning and use of CAAT and business intelligence system can be beneficial for this profession.

Auditor's Motivation variable ( $X_3$ ) has regression coefficient of -0,032. This means that the increase of one unit of work-related motivation can generate a decrease in auditor's performance of 0.032. Based on the t-test result, the auditor's motivation ( $X_3$ ) has t-stats of -0.715 with 0.988 as its significance value (or greater than 0.05). Thus,  $H_{a3}$  was rejected, which means that work-related motivation had no effect on auditor's performance. This is because the respondent's full assignment must be motivated by using the salary, rewards, occupation profession, and treatment within the company. In other word, the auditor can improve his / her performance only because there is a large income, award, and health insurance obtained, so the performance will not be good if there is no motivation given by the superiors. This research is in line with the ones conducted by Rindang Widuri, Synthia A. Sari, Indang Widuri, Syntia A. Sari (2017); and Dwilita (2011), which stated that work-related motivation has no effect on auditor's performance.

The motivation variable still preaches the question about what kind of motivation that influence or not influence the performance of the auditor, so this needs further explanation. This research is in contrast to Meylinda Triyanthi, Ketut Budiarta (2015) research which showed that work-related motivation has significant effect on the performance of auditor.

## 5. CONCLUSIONS

The impacts of the use of CAAT, professional ethics, and auditor's motivation on auditor's performance were the purpose of this research. The ability of the auditor to deliver the audit report and the quality audit findings were considered as the performance of an auditor. The objects of this research were senior auditors, supervisors, managers, and partners working in KAP (Public Accounting Firm) in Tangerang and Jakarta areas. The research conclusion was that the use of CAAT and professional ethics had significant impact on auditor's performance. However, auditor's motivation had no impact on auditor's performance. In addition, Public Accounting Firms (KAP) could provide more various assignments for auditors in order to improve their experiences. By this way, the auditor's performance would be increased.

### 5.1 Limitations

As limitations of this study, the distribution of questionnaires was only targeted to 18 KAP (Public Accounting Firms) with limited scope, which was only distributed to KAP in Tangerang and Jakarta areas and conducted during the peak-season, so that it could not generalize the conditions of all auditors. The independent variables (the use of CAAT, professional ethics and auditor's motivation) in this study could only explain the variation of auditor's performance as much as 36.5%. The remaining 63.5% variation in the auditor's performance could be explained by other independent variables not explained in this study.

Suggestions that can be provided regarding the limitations in this research are: the next researcher could send the questionnaire to more Public Accounting Firms and spread it during the low-season, so that it might get more respondents as well as creating other independent variables that may affect the auditor's performance.

## 6. IMPLICATIONS OF THIS STUDY

This research will impact the study of audit case, so the purpose of the audit will help the stakeholders who use the

audit report. Measuring an auditor's performance could be seen from the quality of work on how well the auditor complete his / her work in accordance with applicable audit standards and the Professional Standards of Public Accountant (SPAP). The quantity of work is how much work that can be completed by the auditor. The more the work that can be accomplished, the higher the quantity of work that can be possessed by the auditor will be. This indicates that the higher the quantity of auditor's work, then the auditor's performance will be better. Moreover, performance is also a benchmark for an auditor in performing his / her duties whether it is in accordance with the standards that have been specified, or not. For further research, it is advisable to add other independent variables (such as: audit fee, auditor's independence, and expertise) that may affect the auditor's performance.

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