Digital Based Internal Auditor Effectiveness Modeling in Public Affair Offices

Suhartono[1], AsriAdyBakri[2], Mursalam Salim[3], Rika Lidyah[4], Ratih Kusumastuti[5]

[1]Faculty of Economics and Business, UniversitasBinaSaranaInformatika, Jakarta, Indonesia

[2]Faculty of EconomicsBusiness, Universitas Muslim Indonesia, Makassar, Indonesia

[3]Faculty of Economics, UniversitasYapis, Papua, Indonesia

[4]Islamic Banking Department, Faculty of Economics and Business, Universitas Islam NegeriRaden Fatah, Palembang, Indonesia

[5]Faculty of Economics and Business, Universitas Jambi, Indonesia

Abstract

Internal audit plays a critical role in ensuring that the public affairs office operates efficiently, effectively and ethically. The role of the internal auditor is to evaluate the adequacy and effectiveness of the organization's internal controls, risk management, and transparent and accountable digital-based governance processes. The objective of this study is to examine the impact of objectivity, competence, and management support on the effectiveness of digital-based internal audits conducted by the inspectorate in City X. The research methodology employed a quantitative approach with a causality design. The participants of the study were 38 employees from the government inspectorate in City X, selected through purposive sampling. Data was collected through questionnaires and documentation, and parametric statistics with multiple regression were used for data analysis. The findings of the study indicate that (1) Auditor objectivity positively and significantly influences the effectiveness of digital-based internal audits at the Inspectorate in City X, (2) Competence does not have a significant impact on the effectiveness of digital-based internal audits at the Inspectorate in City X, and (3) Management support also does not have a significant impact on the effectiveness of digital-based internal audits at the Inspectorate in City X.

Keywords:*Digital, Objectivity, Competence, Management Support, Internal Audit*

1. Introduction

Internal audit plays a critical role in ensuring that the public affairs office operates efficiently, effectively and ethically. The role of the internal auditor is to evaluate the adequacy and effectiveness of the organization's internal controls, risk management and governance processes. The effectiveness of internal auditors in a public affairs office can have a significant impact on the office's ability to achieve its objectives(Menza & Aga, 2019), maintain public trust(Unegbu & Kida, 2011), and comply with legal and regulatory requirements(Baheri et al., 2017). This study aims to model the effectiveness of internal auditors in public affairs offices, examining the relationship between internal auditing practices and organizational results.

Internal auditors are anticipated to make a greater contribution towards enhancing efficiency and effectiveness in order to uplift organizational performance(Los, n.d.). As a result, the role played by internal auditors employed by local governments is crucial in fostering accountability, transparency, and efficacy in financial management within the respective regions.

The provincial/district/city inspectorate is an oversight agency within the local government environment(da Gama, 1984), both at the provincial/district/city level, playing a vital and noteworthy role, regional government and its apparatus significantly contribute to the advancement and triumph of governance within the regional context. They play a pivotal role in administering governance in the region and attaining the predetermined goals and objectives.

The general roles and responsibilities of the provincial/regency/city inspectorate are governed by Article 4 of the Minister of Home Affairs Regulation Number 64 of 2007. This article outlines the functions of the provincial/regency/city inspectorate in conducting government affairs supervision, which include the following duties: (1) Program planning supervision; (2) Formulation of policies and facilitation of supervision; (3) Examination, investigation, testing, and assignment assessment.

Based on observations, there is a problem, namely the limited human resources in the Batam City Inspectorate, which has only 38 auditors. This number is still far from the ideal number of auditors so that the minimum number of auditors in the Batam City Inspectorate makes the supervision and development process less than optimal, besides that there are functional positions of auditors (JFA) whose level of competence is inadequate. as well as the lack of staff who master the field of auditing and the lack of support from superiors makes the audit process less effective.

Based on the description of the problems experienced by the inspectorate of the city of Batam, this is what makes the basis for determining the problems in this study.

There are several previous studies on the factors that influence the effectiveness of internal audit in an agency/company. Research from Prihartono et al (2018), has empirically explored the relationship between internal audit effectiveness and integrity, objectivity, competence, and leadership style. The existence of integrity, competence and objectivity is an important issue that has an impact on internal auditors who show the performance of related agencies(Obeid & Abdelnur, 2018). Meanwhile, leadership style does not strengthen integrity and objectivity, and only strengthens the impact of competence on internal audit effectiveness.

The difference between Prihartono et al (2018)'s research and this study is in the independent variables, namely the variables of integrity and leadership style where leadership style does not strengthen the influence of integrity and objectivity and only strengthens competence.

Tahajuddin& Mahmud's research(Kertali& Tahajuddin, 2018) on The Impact of Internal Audit Characteristics on the Effectiveness of Internal Auditors examines the relationship between independence and objectivity with internal audit effectiveness. The results of his research show that only independence is an important factor influencing the effectiveness of internal audit while objectivity does not affect the effectiveness of internal audit. Often, different approaches produce inconsistent results.

The difference between Tahajuddin& Mahmud's research (2018) and this research is in the independent variables where in Tahajuddin& Mahmud's research there are independence variables, and objectivity variables do not impact the effectiveness of internal audit so that objectivity variables need to be re-examined in this study.

The difference between Tahajuddin& Mahmud's research (2018) and this research is in the independent variables where in Tahajuddin& Mahmud's research there are independence variables, and objectivity variables do not impact the effectiveness of internal audit so that objectivity variables need to be re-examined in this study.

In their research titled "The Determinants of Internal Audit Effectiveness with Management Support as a Moderating Variable," Poltak et al. (2019) examine the relationship between internal audit effectiveness and various factors, including internal and external auditors, independence, professionalism, auditee perceptions, and the moderating role of management support (Poltak et al., 2019). Based on their study, the authors find that professionalism does not significantly impact the effectiveness of internal audit, and management support does not act as a moderating variable that strengthens the relationship between independent and dependent variables. However, given the conflicting results concerning these variables, further investigation is required to explore the effectiveness of internal audit by considering the influence of objectivity, competence, and management support

The difference between this study and Poltak et al's research (2019) is the internal external auditor variables, independence, professionalism, auditee perceptions, and management support as moderating variables where in Poltak et al's research the management support variable as a moderating variable does not moderate the relationship between independent variables and independent variables. dependent so that the management support variable was re-examined in this study as an independent variable.

In accordance with the previous research gaps, the research objectives to answer the formulation of the research problem are (1) to analyze the impact of objectivity on the effectiveness of digital-based internal audits in the public sector, (2) to analyze the impact of competence on the effectiveness of digital-based internal audits in the public sector, (3) Analyze the influence of management support on the effectiveness of digital-based internal audits in the public sector.

Aligned with the existing gaps in prior research, the research aims to address the formulated research problem by pursuing the following objectives: (1) examine the impact of objectivity on the effectiveness of digital-based internal audits within the public sector of Batam City, (2) assess the influence of competence on the effectiveness of digital-based internal audits within the public sector of Batam City, and (3) analyze the impact of management support on the effectiveness of digital-based internal audits within the public sector of Batam City.

2. Method

This study is an explanatory quantitative research endeavor that relies on primary data gathered through the use of questionnaires. The Likert scale is employed in the questionnaire, utilizing a range from 1 to 5 to gauge the respondents' agreement level with the provided statements(Joshi et al., 2015). The target population for this study comprises all auditors affiliated with the Batam City Inspectorate, with a purposive sampling technique resulting in a sample size of 38 auditors(Campbell et al., 2020). Subsequently, the collected data is processed and analyzed using inferential statistics, specifically employing multiple regression techniques (Luus, 2016) with the assistance of the SPSS 19 application program.

3. Results

The characteristics of the respondents in this study based on age, gender, education, and working time are presented in the table below

Table 1. Characteristics of Respondents

Age Characteristics	Frequency	Percentage (%)
21 – 30 years	5	13.2
31 – 40 years	18	47.4
41 – 50 years	13	34.2
50 – 60 years	2	5.3
Sum	**38**	**100**
Gender Characteristics	**Frequency**	**Percentage (%)**
Male	21	55.3
Female	17	44.7
Sum	**38**	**100**
Education Characteristics	**Frequency**	**Percentage (%)**

TuijinJishu/Journal of Propulsion Technology
ISSN: 1001-4055
Vol. 44 No.6 (2023)

Diploma 3	3	7.9
Graduate (S1)	30	78.9
Postgraduate (S2)	5	13.2
Sum	**38**	**100**
Characteristics of working time	**Frequency**	**Percentage (%)**
Less than 1 year	1	2.6
1 – 3 years	1	2.6
3 – 10 years	22	57.9
More than 10 years	14	36.8
Sum	**38**	**100**

Table 1 shows that the majority of respondents based on age are 31 to 40 years old, gender is male, last education level is bachelor (S1)., and has worked for the most between 3-10 years.

The description of the data from filling out the questionnaire on the objectivity variable is shown in the following table.

Table 2. Description of Objectivity Variable Data

Statistics		Score Interval	Category	Frequency	Percentage
Mean	**43.32**	**45.5 – 50**	Very high	**13**	**34.21**
St. dev	4.55	40.9 – 45.4	High	12	31.58
Max	50	36.3 – 40.8	Low	12	31.58
Min	32	31.7 – 36.2	Very low	1	2.63
Range	18	**Sum**		**38**	**100**
Interval	4.5				

Table 2 shows the respondents' perceptions of auditor objectivity in the Batam City public sector. The average score for objectivity is 43.32 which is included in the high category. Of the 38 respondents, there were 13 respondents (34.21%) whose perceptions were in the very high category, there were 12 respondents (31.58%) who were in the high category, there were 12 respondents (31.58%) who were in the low category, and there were 1 respondent (2.63%) which is in the very low category. Thus it can be concluded that the objectivity variable is included in the high category.

Competency variables in this study are divided into 2 (two) dimensions, namely extrinsic motivation and intrinsic motivation. The description of the auditor's work motivation variable data is presented in the following table.

Table 3. Competency Data Description

Statistics		Score Interval	Category	Frequency	Percentage
Mean	**34.8**	37.25 – 40	Very high	6	15.79
St. dev	3.32	34.49 – 37.24	High	11	28.95
Max	40	**31.73 – 34.48**	Low	**13**	**34.21**

Min	29	28.69 – 31.44	Very low	8	21.05
Range	11	**Sum**		**38**	**100**
Interval	2.75				

Table 3 presents the perceptions of respondents regarding auditor competence within the public sector of Batam City. The average competence score is recorded as 34.8, indicating a high level of competence acquisition. Of the 38 respondents, there were 6 respondents (15.79%) who were in the very high category, there were 11 respondents (28.95%) who were in the high category, there were 13 respondents (34.21%) who were in the low category, and there were 8 respondents (21.05%) which belong to the very low category. Thus it can be stated that the competency variable is included in the low category.

Data descriptions of the management support variables from the results of this study are presented as follows.

Table 4. Data Description Variable Management Support

Statistics		Score Interval	Category	Frequency	Percentage
Mean	**23.76**	27.5 – 30	Very high	5	13.16
St. dev	2.44	24.9 – 27.4	High	2	5.26
Max	30	**22.3 – 24.8**	Low	**19**	**50.00**
Min	20	19.7 – 22.2	Very low	12	31.58
Range	10	**Sum**		**38**	**100**
Interval	2.5				

Table 4 illustrates the respondents' perceptions of management support in the public sector of Batam City. The average score for obtaining management support is recorded as 23.76, falling within the low category. Of the 38 respondents, there were 5 respondents (13.16%) who were in the very high category, there were 2 respondents (5.26%) who were in the high category, there were 19 respondents (50%) who were in the low category, and there were 12 respondents (31.58%) which is in the very low category. Thus it can be stated that the management support variable is included in the low category.

The following section presents the data description of the internal audit effectiveness variable, derived from the findings of this study

Table 5: Digital-based Internal Audit Effectiveness Variable Data Description

Statistics		Score Interval	Category	Frequency	Percentage
Mean	**59.39**	63.75 – 70	Very high	9	23.68
St. dev	5.65	**57.49 – 63.74**	High	**14**	**36.84**
Max	70	51.23 – 57.48	Low	13	34.21
Min	45	44.97 – 51.22	Very low	2	5.26
Range	25				
Interval	6.25	**Sum**		**38**	**100**

Table 5 displays the respondents' perceptions regarding the effectiveness of internal audit within the public sector of Batam City. The average score for assessing the effectiveness of digital based internal audit is recorded as 59.39, falling within the high category. Of the 38 respondents, there were 9 respondents (23.68%) who were

TuijinJishu/Journal of Propulsion Technology
ISSN: 1001-4055
Vol. 44 No.6 (2023)

in the very high category, there were 14 respondents (36.84%) who were in the high category, there were 13 respondents (34.21%) who were in the low category, and there were 2 respondents (5.26%) which belong to the very low category. Thus it can be concluded that the internal audit effectiveness variable is included in the high category.

To test the hypothesis of the impact of objectivity, competency, and management support variables on internal audit effectiveness, multiple regression analysis is used. Multiple regression analysis on hypothesis testing through 3 (three) statistical tests, namely partial analysis, simultaneous analysis, and analysis of the coefficient of determination.

The Impact of Objectivity on Digital-Based Internal Audit Effectiveness

Testing the first hypothesis of this study uses statistics through partial tests with multiple regression techniques which are exposed in the Table 6.

Table 6.Partial Test Results

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	1.438	.401		3.587	.001
	X_1	.621	.137	,684	4.536	**.000**
	X_2	.081	.136	,081	.598	**.554**
	X_3	.014	.011	,147	1.237	**.224**

Table 6 presents the outcomes of the partial statistical testing conducted using multiple regression, revealing a t-value of 4.536, which is greater than the critical value of 2.02. Moreover, the probability value (p-value) is calculated as 0.000, which is lower than the significance level of 0.05. These results indicate the rejection of the null hypothesis or the acceptance of the first hypothesis, suggesting that objectivity has a significant impact on the effectiveness of digital based internal audit.

The Impact of Competence on Digital-Based Internal Audit Effectiveness

Table 6 displays the outcomes of the partial statistical testing using multiple regression, revealing a t-value of 0.598, which is smaller than the critical value of 2.02. Additionally, the probability value (p-value) is calculated as 0.554, which is greater than the significance level of 0.05. These results suggest that the null hypothesis is supported or the second research hypothesis is rejected, indicating that the competence of auditors does not significantly impact the effectiveness of digital based internal audit.

The Impact of Management Support on Digital-Based Internal Audit Effectiveness

Table 6 shows the outcome of statistical partial testing with multiple regression which shows a t_{count} value of 1.237 <2.02 with a probability value of 0.224 > 0.05. This indicates that the null hypothesis is accepted or the third research hypothesis is rejected. Based on the findings, it can be inferred that the effectiveness of digital based internal audit is not significantly influenced by management support.

To find out how much influence all the independent variables have on the dependent variable. To prevent bias towards the coefficient of determination, it is recommended to use the Adjusted R^2 value when evaluating which is the best regression model (Ghozali,2011). The outcome of the analysis of the coefficient of determination are exposed in the following table.

Table 7. Coefficient of Determination

Model Summary [b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.808[a]	.653	.623	.059324812600288	1.797

a. Predictors: (Constant), ln MAS, ln K, ln O

b. Dependent Variable: ln E

Table 7 presents the results of the coefficient of determination analysis, indicating that the adjusted R-squared value is 0.623. This implies that 62.3% of the effectiveness of internal audit can be attributed to the variables of objectivity, competence, and management support. The remaining 37.7% of the influence is accounted for by other variables not considered in this study.

4. Discussion

The Impact of Objectivity on Digital-Based Internal Audit Effectiveness

The results of testing the second hypothesis indicate a regression coefficient of 0.621 for the relationship between the variable "auditor objectivity" (O) and "internal audit effectiveness" (EAI), along with a t-value of 4.536. This t-value surpasses the critical value in the t-table (1.960). Consequently, it can be concluded that the auditor's objectivity (O) significantly influences the effectiveness of internal audit (EAI), aligning with the first research hypothesis that proposes the ability of auditor objectivity to enhance internal audit effectiveness. Thus, the first research hypothesis is accepted and supported by the findings.

The results of this study reinforce the principles of auditing according to The Institute of Internal Auditors (2017) standard 1120, that internal auditors must have a mental attitude that is impartial and without prejudice, and always avoids the possibility of a conflict of interest. The results of this study are in accordance with the theory put forward by Mulyadi (2010) that in conducting an audit, the auditor must maintain an objective mental attitude and must not allow his audit considerations to be influenced by other parties.

The findings of this study align with prior research conducted by (Arya Adhitya Putra & Mulya, 2020), which established that objectivity contributes positively to the effectiveness of internal audits. These findings indicate that as the level of objectivity among internal auditors increases, the effectiveness of audits in relevant organizations also increases. Furthermore, this study's results reinforce the conclusions of previous research by (Dania et al., 2019), which demonstrated a noteworthy correlation between auditor objectivity and audit quality within the Regional Inspectorate of Internal Control Unit at the University of Jember.

This research reinforces the principle of auditing according to The Institute of Internal Auditors (2017) standard 1120, that internal auditors must have a mental attitude that is impartial and without prejudice, and always avoids the possibility of a conflict of interest.

The Impact of Competence on Digital-Based Internal Audit Effectiveness

The findings from testing the second hypothesis reveal a regression coefficient of 0.081 for the relationship between auditor competence (KA) and internal audit effectiveness (EAI), accompanied by a t-value of 0.598. This t-value is lower than the critical value in the t-table (1.960). Consequently, it can be concluded that the competence of the internal auditor (KA) does not have a significant impact on the effectiveness of internal audit (EAI). This outcome contradicts the second hypothesis, which suggests that auditor competence should enhance the effectiveness of digital based internal audit. As a result, the second research hypothesis is rejected based on these results

In this study, competence demonstrates no impact on the effectiveness of digital based internal audit and is categorized as low in descriptive statistics. This suggests that while employees possess the necessary competence, they perceive their daily tasks as routine work. As a result, they do not prioritize the effectiveness of digital based internal audit to a great extent.

The study's findings reveal that competence doesn't have a significant impact on the effectiveness of internal audit. This finding contradicts the theory proposed by (Riska Destiana & Donie Tuah Fitriano Putra, 2022), which posits that competency serves as the primary asset in generating high-quality output for organizational evaluation and the attainment of stated goals.

The findings of this study diverge from the results of previous research conducted by (Rika Gamayuni & Nurdiono, 2018), and (Aidi et al., 2022), which indicated that the competence of internal auditors significantly influences the effectiveness of the internal audit function.

The competence of internal auditors is a crucial factor in establishing an impactive internal audit function, necessitating improvements in areas such as the knowledge and expertise of internal auditors. However, this study's results align with prior research conducted by (Sulila, 2020), which suggested that competence and independence partially do not have a significant impact on the performance of local government auditors in East Luwu Regency.

The Impact of Management Support on on Digital-Based Internal Audit Effectiveness

The results of testing the third hypothesis reveal a path coefficient of 0.014 for the relationship between management support (MAS) and internal audit effectiveness (EAI), along with a t-value of 1.237. The t-value in question is below the critical value found in the t-table (1.960). Therefore, we can infer that the impact of management support on the effectiveness of internal audit (EAI) is not statistically significant. This finding contradicts the third hypothesis, which proposes that leadership-provided management support enhances digital based internal audit effectiveness. Hence, the third research hypothesis is rejected based on these findings

Based on the statistical findings, it is observed that management support doesn't have a significant impact on the effectiveness of digital-based internal audit. Moreover, the descriptive statistics indicate that management support falls within the low category in this study. This suggests that in each instance of internal audit implementation, leadership may not consistently provide the necessary management support due to considerations related to the objectivity and independence of the auditors (employees).

These results are not in line with Hailemariam's theory, which asserts that management support plays a crucial role in supporting the audit process by providing essential resources, financial support, transportation if required, training opportunities, introducing auditors to new technology and procedures, allocating budget funds for certification, and facilitating the overall work of internal audit (Rahmad, 2011).

The findings of this study diverge from the previous research conducted by (Rahmatika Dien, 2014), which suggested a positive relationship between management support and the effectiveness of internal audit in the Inspectorate of West Sumatra province. However, the results of this study align with the earlier research conducted by (Saputra et al., 2020), and(Alkebsi & Aziz, 2017), indicating that top management support doesn't have a significant impact on the effectiveness of internal audit at the Inspectorate Office of North Maluku Province

This research has limitations: (1) This research only focuses on the Batam City inspectorate, so it cannot be generalized to other regions. Future research is expected to focus on other areas as well, (2) This research is limited to certain variables and there are still several variables that are expected to be added in the future with further research, (3) Researchers have difficulty communicating with respondents, because not all respondents filled out the researcher's questionnaire with correct, because not all respondents want to fill in the research correctly. It is hoped that future research can more easily persuade respondents to fill out the research questionnaire correctly.

5. Conclusion

The developed classroom supervision application for PAK teachers in Lamandau District has the following features: high data mobility, the ability to perform mathematical calculations, saves costs, can store and maintain data, is capable of obtaining data quickly, and can process data carefully.

Most of the objectivity of the auditors at the Batam City Regional Inspectorate is already high. The test results show that auditor objectivity has a significant impact on internal audit effectiveness at the Batam City Regional Inspectorate, so high auditor objectivity will improve audit quality at the Batam City Regional Inspectorate.

In this study, the competence factor does not contribute to the effectiveness of digital-based internal audits. Moreover, when considering the descriptive statistics, the competence factor falls within the low category. This implies that even though every employee has the required competence, in carrying out daily tasks it is considered a routine job. Therefore, employees do not attach too much importance to the effectiveness of internal audit at the Batam City Regional Inspectorate, as well as in the results of this study management support is included in the low category, this leads to the interpretation that in every implementation of internal audit the leadership does not always provide support because it relates to objectivity and auditor independence (employee).

Most of the objectivity of the auditors at the Batam City Regional Inspectorate is already high, this of course must be maintained. However, when viewed based on the statement items, it can be seen that the average response score of most of the respondents is included in the very high category, and some are included in the sufficient category. Which is included in the sufficient category, namely regarding the refusal of audit assignments with parties who have a cooperative relationship, most respondents often refuse audit assignments with parties who have a cooperative relationship. However, there are also many respondents who only occasionally have and have never refused an audit assignment with a party that has a cooperative relationship. Therefore, it is hoped that the auditor at the Regional Inspectorate will not participate in activities or relationships that may interfere or be considered to interfere with an impartial assessment or which may cause a conflict of interest so that objectivity is maintained so as to produce good audit quality.

Competence in this study has no impact on the effectiveness of digital-based internal audit and is included in the low category. Likewise, when viewed based on the statement items, it can be seen that the average score of respondents' responses to most of the statement items is included in the very low category. This implies that employees have competence in carrying out tasks as well as work routines. In order to further improve competence, it is suggested that the Regional Inspectorate auditors hold seminars, training, workshops, and so on.

Management support has no significant impact on the effectiveness of digital-based internal audit in this study and is included in the low category. When viewed based on the statement items, it can be seen that the average score of respondents' responses is mostly included in the low category. Therefore, management support should be improved in the effectiveness of internal audit.

For future researchers, they can choose other variables besides those in this study in order to obtain a more accurate, objective and complete study of the factors that influence the effectiveness of internal audit at the Regional Inspectorate of Batam City.

This study will have important implications for public affairs offices and their efforts to ensure impactive and ethical operations. By modeling the effectiveness of internal auditors and identifying the factors that influence their effectiveness, public affairs offices can develop more impactive strategies to improve their internal auditing practices. Ultimately, this study aims to contribute to a better understanding of the role of internal auditors in public affairs offices and their contribution to organizational results.

Credit S tatements

Theauthorconfirmssoleresponsibilityforthefollowing:studyconception and design, data collection, analysis and interpretation ofresults,andmanuscriptpreparation.

Declarationsofinterest

The author declared no potential conflicts of interest with respect totheresearch,authorship,and/orpublicationofthisarticle

Acknowledgement

All authors contributed to data analysis, drafting,andrevisingofthepaperandagreedtoberesponsibleforallthe aspectsofthiswork

Reference

[1] Aidi, A., Sayuthi, Susanto, I., Junaidi, A., & Abdurohim. (2022). The effect of competencies and independence internal auditors on internal audit quality: The theoretical review approach. *Ilomata International Journal of Tax & Accounting*, *3*(1), 103–116. https://doi.org/10.52728/ijtc.v4i1.434

[2] Alkebsi, M., & Aziz, K. A. (2017). Information Technology Usage, Top Management Support and Internal Audit Effectiveness. *Asian Journal of Accounting and Governance*, *8*(Special Issue), 123–132.https://doi.org/10.17576/ajag-2017-08si-11

[3] Arya Adhitya Putra, F., & Mulya, H. (2020). Effect of Internal Audit Quality on the Effectiveness of Good Corporate Governance (Case Study At Pt Jasa Raharja). *Dinasti International Journal of Management Science*, *2*(2), 203–217. https://doi.org/10.31933/dijms.v2i2.440

[4] Baheri, J., Sudarmanto, & Wekke, I. S. (2017). The effect of management support to effectiveness of internal audit for public universities. *Journal of Engineering and Applied Sciences*, *12*(7), 1696–1700. https://doi.org/10.3923/jeasci.2017.1696.1700

[5] Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. *Journal of Research in Nursing*, *25*(8), 652–661. https://doi.org/10.1177/1744987120927206

[6] Da Gama, C. D. (1984). Microcomputer Simulation of Rock Blasting To Predict Fragmentation. *Proceedings - Symposium on Rock Mechanics*, 1018–1030. https://doi.org/10.1016/0148-9062(86)91166-6

[7] Dania, S. P., Wardayati, S. M., Wahyuni, N. I., Arianto, A. C., & Ningsih, N. (2019). Analysis of Factors Affecting the Quality of Audit Results at Internal Control Unit of University of Jember. *Proceeding of The 3rd International Conference on Accounting, Business & Economics(UII-ICABE 2019)*, *47*, 123–132.

[8] Joshi, A., Kale, S., Chandel, S., & Pal, D. (2015). Likert Scale: Explored and Explained. *British Journal of Applied Science & Technology*, *7*(4), 396–403. https://doi.org/10.9734/bjast/2015/14975

[9] Kertali, M., & Tahajuddin, S. (2018). The Effect of Internal Auditors' Involvement in Enterprise Risk Management on Internal Audit Objectivity: Evidence from Malaysia. *Asian Journal of Economics, Business and Accounting*, *6*(3), 1–11. https://doi.org/10.9734/ajeba/2018/40693

[10] Los, U. M. D. E. C. D. E. (n.d.). *Internal Audit*.

[11] Luus, R. (2016). *Statistical inference of the multiple regression analysis of complex survey data*. *December*, 1–262. http://scholar.sun.ac.za/handle/10019.1/100109

[12] Menza, S. K., & Aga, A. (2019). Determinants of Internal Audit Effectiveness (IAE) in the Ethiopian Public Enterprise, Case of Southern Region. *Journal of Resources Development and Management*, *52*, 22–36. https://doi.org/10.7176/jrdm/52-02

[13] Obeid, O. A., & Abdelnur, A. (2018). An Evaluation of Objectivity and Competence of Internal Audit Departments in Sudanese Government Units. *International Journal of Economics and Financial Issues*, *8*(3), 9–16. http: www.econjournals.com

[14] Poltak, H., Sudarma, M., & Purwanti, L. (2019). The Determinants of the Effectiveness of Internal Audits with Management Support as the Moderating Variable. *International Journal of Multicultural and Multireligious Understanding*, *6*(1), 33. https://doi.org/10.18415/ijmmu.v6i1.483

[15] Rahmad, B. (2011). *Introduction to IT Audit*.

[16] Rahmatika Dien, N. (2014). The Impact of Internal Audit Function Effectiveness on Quality of Financial Reporting and its Implications on Good Government Governance Research on Local Government Indonesia. *Research Journal of Finance Accounting*, *5*(1), 64–75.

[17] Rika Gamayuni, R., & Nurdiono. (2018). The Effect of Internal Auditor Competency on Internal Audit Quality and Its Implication on the Accountability of Local Government. *European Research Studies Journal*, *XXI*(4), 426–434.

[18] Riska Destiana, & Donie Tuah Fitriano Putra. (2022). Leadership Patterns in Improving the Quality of State Civil Apparatus (ASN) Training in the Human Resources Development Agency (BPSDM) of Riau Islands Province. *KEMUDI : Jurnal Ilmu Pemerintahan*, *7*(1), 85–101. https://doi.org/10.31629/kemudi.v7i1.4939

[19] Saputra, K. R., Winarningsih, S., & Puspitasari, E. (2020). The Effect of Top Management Support on The Effectiveness of Public Sector Internal Audit in Indonesia with Competence and Independence as Intervening Variables. *Mbia*, *19*(3), 243–257. https://doi.org/10.33557/mbia.v19i3.1146

[20] Sulila, I. (2020). The Effect Of Competence and Independence to Work Effectiveness Of Auditor. *Publik (Jurnal Ilmu Administrasi)*, *9*(2), 176. https://doi.org/10.31314/pjia.9.2.176-185.2020

[21] Unegbu, A. O., & Kida, M. I. (2011). Effectiveness of Internal Audit as Instrument of Improving Public Sector Management Corresponding Author : Angus Okechukwu Unegbu. *Journal of of Emerging Trends n Economics and Management Sciences*, *2*(4), 304–309.