

The Effect of Audit Quality and Government Internal Control on the Follow-up of BPK Audit Recommendations with Information Technology as a Moderation Variable

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ABSTRACT

This study examines the effects of audit quality and government internal control on the follow-up of audit recommendations (TLRHP) issued by BPK RI, with information technology as a moderating variable. Using a quantitative approach with PLS-SEM, data were collected from 114 auditors at the BPK RI Head Office involved in monitoring audit follow-ups. The results indicate that audit quality has a positive and significant effect on TLRHP, while government internal control has no significant effect. Information technology does not moderate the relationships between audit quality and TLRHP nor between internal control and TLRHP. These findings highlight the importance of high-quality audit recommendations in improving follow-up effectiveness and suggest that information technology has not yet functioned optimally as an enabler of accountability in the public sector.

INTRODUCTION

Audits of state financial management are an important instrument in ensuring accountability, transparency, and good governance. Audited financial statements provide confidence in the fairness of their presentation and reduce information asymmetry between the government as a financial manager and the public as stakeholders (Mulyadi, 2002; Mardijuwono & Subianto, 2018; Muslim et al., 2020).

As the Supreme Audit Institution (SAI), the Audit Board (BPK) is tasked with carrying out audits on the management and responsibility of state finances in accordance with the mandate of Law Number 15 of 2004 and Law Number 15 of 2006. The results of the audit are outlined in the Audit Results Report (LHP) which contains recommendations as a basis for improving governance and internal control of the government.

The success of the audit is not only determined by the quality of the audit process and reports, but also by the effectiveness of the follow-up of the audit recommendations. BPK emphasized that recommendations should ideally be followed up within 60 days to ensure optimal benefits (Yatun, 2021). International and national research shows that the implementation of follow-up contributes to increased fiscal accountability and reduced risk of corruption (Huang & Wang, 2010; Kuntadi et al., 2023).

Improved governance is reflected in the increase in BPK's opinion on the financial statements of the central government and institutions, as shown below:

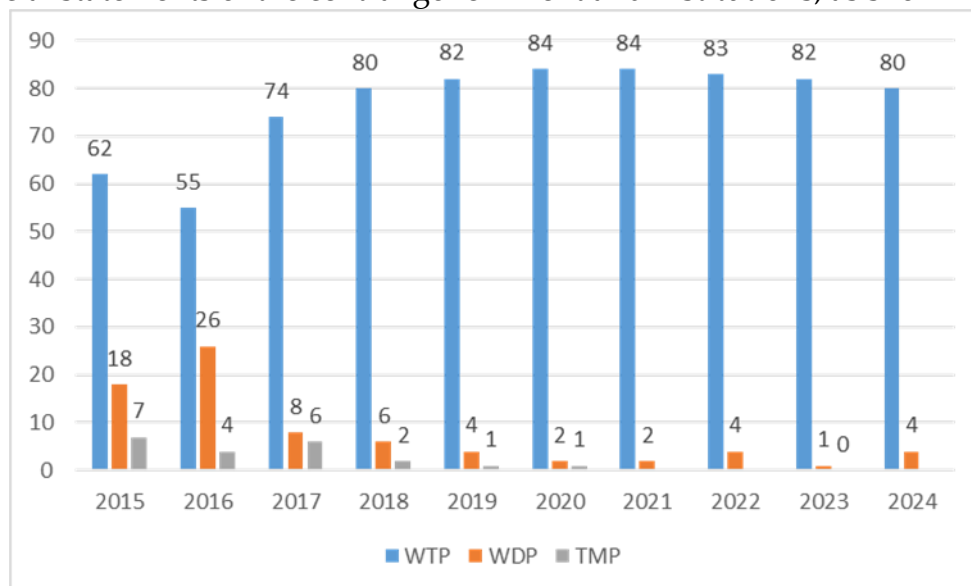


Figure 1. Development of Government/Central Institution Opinion

Source: BPK RI, Overview of Semester Audit Results (IHPS)

The figure shows a consistent positive trend in WTP opinion over the past decade, reflecting the improvement in the quality of state financial management. However, an increase in opinion does not always go hand in hand with the effectiveness of follow-up on audit recommendations.

IHPS II data in 2023 shows that there are still recommendations that have not been followed up or are not in accordance with the recommendations, including recommendations that are more than five years old. This condition

illustrates that there are still significant challenges in completing the follow-up of audit recommendations.

In line with this phenomenon, various international and domestic studies have emphasized the strategic role of audit recommendation follow-up to improving public sector governance. Lin & Liu (2012) emphasized that the ability of auditees to implement follow-up recommendations is a fundamental indicator of the government's audit power because appropriate corrective actions can prevent the recurrence of irregularities and mitigate potential corruption. In addition, a number of empirical studies have found that the effectiveness of follow-up recommendations has a significant relationship with improving the quality of governance and accountability of financial statements (Trelnawati, 2016; Din et al., 2017; Alzelban, 2019; Furqan, 2020). Furthermore, Kuntadi et al. (2023) stated that the implementation of follow-up audit recommendations can reduce the potential for corruption in government agencies.

BPK continuously develops standards, guidelines, and audit tools to ensure the quality of the recommendations produced and improve compliance with their implementation. The State Financial Audit Standard (SPKN, 2017) stipulates that recommendations must be constructive, on target, actionable, and in line with the findings and conclusions of the audit.

However, despite progress in the quality of the central government's financial statement opinions, the level of completion of the follow-up of recommendations has not been fully optimal. This shows the need for an in-depth study of the factors that affect the effectiveness of the implementation of follow-up recommendations, both in terms of audit quality, internal government control, and the use of information technology that supports the follow-up process.

Based on the above background description, there are indications that improving the quality of the opinion of the central government's financial statements does not always go hand in hand with the optimal completion of the follow-up of the recommendations of the BPK audit results. This condition shows a gap in the effectiveness of the management of follow-up recommendations, even though the government has a strong commitment to fiscal transparency and accountability.

Various previous studies have confirmed that audit quality, the effectiveness of government internal control, and information technology support are factors that affect the success of the follow-up of audit recommendations. However, empirical studies that simultaneously examine these three factors—especially with information technology as a moderation variable—are still very limited in the context of Indonesia's public sector. This research gap is important to answer, considering that the ability of government agencies to follow up on BPK recommendations is one of the indicators of the success of external supervision and improving the quality of governance.

LITERATURE REVIEW

The literature review of this research is based on Agency Theory and Signaling Theory as a conceptual foundation. Agency Theory explains that there is a conflict of interest and information asymmetry between the principal (the public) and agents (the government) which has the potential to cause moral hazard, so that a supervisory mechanism such as an audit by the BPK is needed to ensure accountability and transparency in state financial management. Signaling Theory complements this perspective by emphasizing that timely and adequate follow-up of audit recommendations is a positive signal of the quality of government governance to stakeholders. In this context, the use of information technology, especially the Follow-Up Monitoring Information System (SIPTL), is seen as able to reduce information asymmetry and strengthen accountability signals through increased transparency and real-time data access.

Furthermore, audit quality, internal government control, follow-up of audit results recommendations (TLRHP), and information technology are the main variables in this study. The quality of the audit reflects the auditor's ability to detect and report findings in a relevant, reliable, and clear manner, which has been proven to have a positive effect on the effectiveness of the TLRHP. The government's internal control through SPIP and APIP's capabilities play a role in supporting oversight and accelerating follow-up, although its success is highly dependent on organizational commitment and leadership support. The TLRHP itself is an important indicator of public sector accountability, but it still faces various implementation obstacles. Information technology, particularly SIPTL, is expected to increase the efficiency, productivity, and effectiveness of follow-up monitoring, although its effectiveness is largely determined by user readiness and organizational capacity.

Frame of Mind

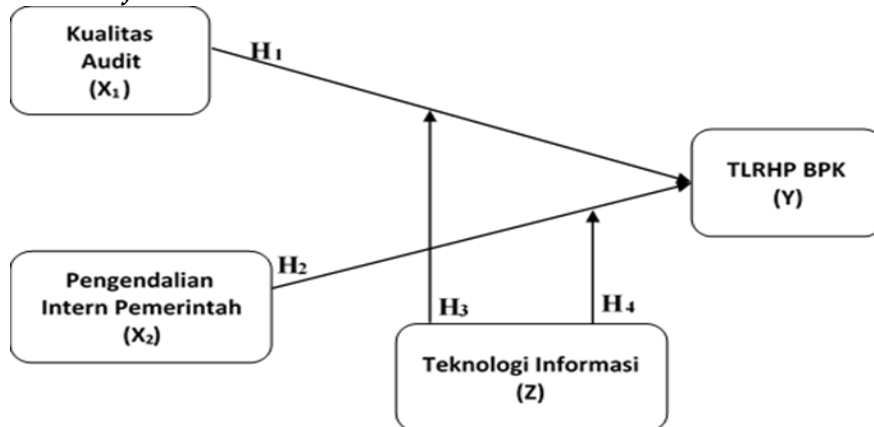


Figure 2. Frame of Mind

Hipotesis

A hypothesis is a brief understanding of a particular action, event, or condition that has been or will occur. The hypothesis, according to Nanda el al. (2021), is a temporary answer to the formulation of the research problem. The formulation of the research problem is written in the form of a statement sentence. The hypotheses proposed in this research are as follows.

The Effect of Audit Quality on BPK's TLRHP

A quality audit is an audit that produces recommendations that the auditor is able to act on effectively. These qualities are built from the planning stage, the implementation of audit procedures, to the preparation of reports and the provision of recommendations. Thus, the quality of the audit is reflected in the accuracy of the auditor in carrying out the audit process and compliance with applicable laws and standards (Zulfakar et al., 2016).

Research by Setyaningrum et al. (2013) using data from the Regional Government Financial Statements (LKPD) for 2010–2012 found that audit quality had a positive effect on the level of completion of follow-up to audit recommendations. These findings indicate that auditors with good competence and quality are able to produce precise, clear, and operational recommendations so that they are easier to implement by the entity. The more recommendations that are followed up, the better the quality of the local government's financial statements.

According to Gichana (2015), the success of the completion of audit follow-up is not only influenced by the auditee's commitment, but also by the effectiveness and clarity of the auditor's recommendations. On the other hand, recommendations that are less specific or non-operational can be an obstacle in the follow-up process. In line with that, various studies show that audit quality and auditor competence contribute significantly to the success of the follow-up of recommendations of BPK audit results (Dharmawati & Yusran, 2015; Zulfakar et al., 2016; Dain & Rahmat, 2017; Puspitasari & Ratmono, 2017; Lestari & Lestari, 2022; Harlin et al., 2023).

H1: Audit quality has a positive effect on BPK's TLRHP.

The Effect of Government Internal Control on BPK's TLRHP

Lestari & Lestari (2022) found that the capabilities of the Government Internal Supervision Apparatus (APIP) have a significant effect on the completion of follow-up to the recommendations of audit results in district and city governments on the island of Kalimantan.

Research on the role of APIP, in this case the inspectorate, was also conducted by Vidiyana (2016) with the aim of identifying the role and factors that support the performance of the Surakarta City Inspectorate in helping the Surakarta City Government maintain a Reasonable Opinion Without Exception (WTP) on the LKPD from 2010 to 2015. The results of the study show that the inspectorate plays a role in various supervisory activities, including reviewing the activity plan and budget (RKA) in each SKPD, carrying out regular and thematic audits, reviewing the LKPD, providing guidance to the SKPD, assisting in regional asset management, assisting in the BPK audit process, and implementing follow-up recommendations on the results of the BPK audit.

H2: Government Internal Control has a positive effect on BPK's TLRHP.

Information Technology Moderates the Influence of Audit Quality on BPK's TLRHP

According to the Great Dictionary of the Indonesian Language (KBBI, 2023), information technology refers to the use of technology, including computers, electronic devices, and telecommunications, to process and disseminate information in digital format. The implementation of information technology aims to speed up and simplify the process of data collection, processing, and distribution, so that information can be optimally utilized by various stakeholders, while increasing transparency.

Research conducted by Ramadanty Sasmito & Sumardjo (2020), Adhi Suryadnyana et al. (2023), and Jaelani & Iskak (2024) shows that the more optimal the use of the Follow-up Monitoring Information System (SIPTL), the higher the effectiveness of monitoring the follow-up of the recommendations of the BPK audit results. Conversely, low use of SIPTL can reduce the effectiveness of the follow-up monitoring process.

SIPTL itself is an information system that utilizes technological infrastructure in the form of hardware, software, communication networks, and other supporting systems used by BPK to monitor the implementation of follow-up on audit recommendations. The use of this system is expected to be able to increase the speed, accuracy, and transparency of the monitoring process, thereby encouraging the effectiveness of follow-up recommendations.

H3: Information technology moderates the positive influence of audit quality on BPK's TLRHP.

Information Technology Moderates the Influence of Government Internal Control on BPK's TLRHP

Government internal control (SPIP) is a systematic framework that aims to ensure the effectiveness of state financial management, reporting reliability, and compliance with regulations. However, the effectiveness of SPIP in encouraging follow-up on recommendations is greatly influenced by the ability of the internal oversight unit and the availability of adequate information. This is where information technology plays an important role.

SIPTL as a follow-up monitoring platform allows government agencies to document follow-up in a more structured, accurate, and verified manner. This system can assist APIP and management in monitoring work unit compliance with BPK recommendations, thereby increasing internal supervision support for the follow-up process.

Previous research has shown that the use of SIPTL is able to improve the accuracy of follow-up documentation and improve coordination between auditors and auditees (Suryadnyana et al., 2023; Jaelani & Iskak, 2024). However, its effectiveness is highly dependent on user readiness, internal monitoring capabilities, and compliance culture within the organization.

Thus, information technology can strengthen (moderate) the influence of the government's internal control on the BPK's TLRHP, because an integrated system allows for more efficient, transparent, and targeted supervision in ensuring the implementation of audit recommendations.

H4: Information technology moderates the influence of government internal control on the BPK's TLRHP.

METHODOLOGY

This study uses a quantitative approach with the type of explanatory research, which aims to analyze the influence of audit quality and government internal control on the follow-up of audit results recommendations (TLRHP) BPK RI, as well as test the role of information technology as a moderation variable. Research data were obtained through surveys using structured questionnaires compiled based on relevant indicators from the literature and related regulations. The research population is all BPK RI auditors, with a sample of 114 auditors at the BPK RI Head Office who were selected using the purposive sampling technique, namely auditors who are directly involved in monitoring and evaluating follow-up activities of audit recommendations.

Data processing and analysis were carried out using the Partial Least Squares-Structural Equation Modeling (PLS-SEM) method using SmartPLS software. This method was chosen because it is able to test causal relationships between latent variables simultaneously, accommodates complex research models with moderation variables, and is suitable for relatively limited sample sizes and data that do not have to be normally distributed. The analysis stages include testing convergent and discriminant validity, construct reliability test, evaluation of structural models (inner model) through path coefficient values, determination coefficients (R^2), and hypothesis significance tests using bootstrapping procedures, including testing the effect of information technology moderation.

RESEARCH RESULT

Descriptive statistics were used to analyze respondents' answers to statements in the questionnaire. In this study, respondents were given seven alternative answers, namely Never (TP), Rarely (JR), Reef-Sometimes (KD), Frequent (SR), Always (SL). The variables used in this study with the questionnaire were audit quality and information technology. The data obtained was then analyzed using SmartPLS 4.1.1.2. The results of the descriptive analysis of the respondents' answers in this study are as follows:

Audit Quality Variables (X1)

In the audit quality variable, there are 11 statements that need to be filled in by respondents with the following descriptions and results:

Table 1. Descriptive Statistics of Audit Quality Variables (X1)

Indicator Code	Respondent's Response				
	1	2	3	4	5
	(HCMC)	(JR)	(KD)	(SR)	(SL)
KA1	0	0	13	72	46
KA2	0	0	1	33	97
KA3	0	0	2	30	99
KA4	0	0	2	46	83

Indicator Code	Respondent's Response				
	1	2	3	4	5
	(HCMC)	(JR)	(KD)	(SR)	(SL)
KA5	0	0	2	38	91
KA6	0	0	0	36	95
KA7	0	0	4	75	52
KA8	0	0	7	69	55
KA9	0	0	8	70	53
KA10	0	0	5	87	39
KA11	0	0	27	38	66
Quantity	0,00%	0,00%	4,93%	41,22%	53,85%

Source: Questionnaire Processing Results (2025)

Based on the results of the research, the highest average score of the audit quality variable is on a scale of 5 (Always) with an average score of 53.85%. This condition shows that the respondents of this study always do things related to statements in the audit quality variables. This is in line with the many internal regulations of BPK RI that require auditors to carry out audit steps to ensure the audit quality of the audits carried out.

Information Technology Variable (Z)

In the information technology variable, there are 7 statements that need to be filled in by respondents with the following descriptions and results:

Table 2. Descriptive Statistics of Information Technology Variables (Z)

Indicator Code	Respondent's Response				
	1	2	3	4	5
	(HCMC)	(JR)	(KD)	(SR)	(SL)
TI1	0	0	6	45	80
TI2	1	2	8	46	74
TI3	1	1	5	48	76
TI4	1	2	13	51	64
TI5	1	2	7	49	72
TI6	1	0	15	66	49
TI7	1	1	11	53	65
Quantity	0,42%	0,56%	4,51%	24,84%	33,31%

Source: Questionnaire Processing Results (2025)

Based on the results of the research, the highest average value of the information technology variable is on a scale of 5 (Always) with an average value of 33.31%. This condition shows that respondents always use information technology or the follow-up monitoring application system (SIPTL) in carrying out the assignment of monitoring the follow-up of recommendations implemented by the entity. And this step is a policy of BPK RI's top leadership so that the implementation of monitoring is more up-to-date and faster by entities.

Data Quality Testing

Outer Model Review

An important part of the research that uses Partial Least Squares (PLS) as an analysis method is the Outer Model Analysis. According to Ghazali and Latan (2020), this analysis focuses on measuring the relationship between latent variables and reflective indicators used to measure these variables. This process involves several important steps, including convergent validity testing, discriminant validity, and reliability.

Convergent Validity Test

Table 3. Convergent Validity Test Results (Outer Loading)

Variable Indicators	Loading Indicator	Value	Valid (Y/T)
Audit Quality (X1)			
KA1	0.616		Yes
KA2	0.726		Yes
KA3	0.759		Yes
KA4	0.784		Yes
KA5	0.832		Yes
KA6	0.734		Yes
KA7	0.664		Yes
KA8	0.656		Yes
KA9	0.693		Yes
KA10	0.643		Yes
KA11	0.741		Yes
Internal Control (X2)			
APIP	0.903		Yes
SPIP	0.996		Yes
TLRHP BPK (Y)			
TL1	0.979		Yes
TL2	0.970		Yes
Information Technology (Z)			
TI1	0.719		Yes
TI2	0.898		Yes
TI3	0.931		Yes
TI4	0.903		Yes
TI5	0.930		Yes
TI6	0.778		Yes
TI7	0.770		Yes

Source: Questionnaire Processing Results (2025)

Based on the loading value, it can be seen that there are two variable indicators whose values are below 0.70, but the values of the two indicators are still above 0.60 so they can still be used as instruments for this research. This

shows that all indicators used in this study are valid. The validity test can be seen from the Average Variance Extracted (AVE) value.

To determine the level of convergent validity of the research results, it is also necessary to look at the AVE value of each variable. The AVE Value Criteria for each variable was >0.50 . The results of AVE measurements for this study are presented in the following table:

Table 4. Results of Calculation of Average Variance Extracted (AVE) Values

Variabel	AVEL Value	Valid (Y/T)
Audit Quality (X1)	0.513	And
Internal Control (X2)	0.904	And
Information Technology (Z)	0.724	And
TLRHP (Y)	0.949	And

Source: Questionnaire Processing Results (2025)

Discriminant Validity Test

Table 5. Cross Loading Discriminant Validity Test Results

Variable Indicators	KA (X1)	PI(X2)	TI(Z)	TLRHP(Y)	HEY AND	TI x PI
Audit Quality (X1)						
KA1	0.616	-0.061	0.350	0.321	-0.281	-0.167
KA2	0.726	-0.089	0.202	0.421	-0.241	-0.052
KA3	0.759	-0.075	0.390	0.401	-0.427	-0.030
KA4	0.784	-0.050	0.331	0.376	-0.285	-0.129
KA5	0.832	-0.112	0.443	0.434	-0.434	-0.054
KA6	0.734	-0.125	0.380	0.369	-0.383	-0.058
KA7	0.664	-0.152	0.339	0.451	-0.113	-0.014
KA8	0.656	-0.142	0.534	0.355	-0.175	0.005
KA9	0.693	-0.073	0.517	0.332	-0.168	0.024
KA10	0.643	-0.072	0.366	0.309	-0.218	0.029
KA11	0.741	-0.052	0.394	0.375	-0.230	-0.066
Internal Control (X2)						
SPIP	-0.137	0.996	-0.168	-0.142	-0.081	0.153
APIP	-0.081	0.903	-0.120	-0.031	-0.109	0.105
Information Technology (Z)						
TI1	0.592	-0.046	0.719	0.246	-0.417	-0.010
TI2	0.336	-0.171	0.898	0.160	-0.066	0.381
TI3	0.460	-0.178	0.931	0.269	-0.140	0.425
TI4	0.466	-0.124	0.903	0.299	-0.159	0.373
TI5	0.455	-0.122	0.930	0.198	-0.202	0.411
TI6	0.406	-0.182	0.778	0.235	-0.059	0.288
TI7	0.389	-0.163	0.770	0.178	-0.049	0.364
TLRHP (Y)						

Variable Indicators	KA (X1)	PI(X2)	TI(Z)	TLRHP(Y)	HEY AND	TI x PI
TL	0.560	-0.110	0.291	0.979	-0.215	0.047
TL2	0.471	-0.135	0.248	0.970	-0.249	0.060

Source: Questionnaire Processing Results (2025)

The results of the above measurement show that the cross loading of the construct indicator relationship is higher than that of the cross loading of other constructs.

Reliability Test

Table 6. Cronbach's Alpha Value Calculation Results

	Cronbach's alpha	Keltelrangan
Audit Quality	0.904	Relliable
Internal Control	0.924	Relliable
Information	0.947	Relliable
Technology	0.935	Relliable
TLRHP	0.935	Relliable

Source: Questionnaire Processing Results (2025)

All variables in this study have shown fairly high consistency or reliability based on the results of Cronbach's Alpha analysis. All variables have Cronbach's Alpha values above 0.8 and still below 0.95. According to Hair (2021), the maximum value is 0.95 to avoid indicator redundancy with a recommended value of 0.80 to 0.90. Cronbach's Alpha value is still below 0.95 so that the existing indicators are reliable and avoid redundancy of indicators according to recommendations. However, it should be noted that Cronbach's Alpha results can be conservative. Therefore, it is necessary to carry out other reliability tests.

In a study using the Partial Least Squares (PLS) method, Composite Reliability is an alternative to Cronbach's Alpha to test the convergent validity of reflective models. The recommended minimum Composite Reliability value is 0.60, while for the confirmatory model it is 0.70; values above 0.80 indicate good quality in confirmatory research (Garson, 2016). The results of the reliability test of the variables of this study using Compositel Reliability are as follows:

Table 7. Composite Reliability Value Calculation Results

	Compositel reliability (rho_a)	Compositel reliability (rho_c)	Keltelrangan
Audit Quality	0.908	0.920	Relliable
Internal Control	3.036	0.949	Relliable
Information	0.966	0.974	Relliable
Technology	0.950	0.948	Relliable
TLRHP	0.950	0.948	Relliable

Source: Processing Results (2025)

The above results show that all constructs in the model have a Compositel Reliability (CR) value above 0.70. These values show that each construct in the model has excellent reliability. This means that the indicators used to measure Audit Quality, Government Internal Control, Information Technology and Audit

Result Recommendation Follow-up (TLRHP) consistently measure these constructs.

Based on the results of the external model test which includes the Convergent Validity Test, the Discriminant Validity Test, and the Reliability Test, all indicators show a significant loading factor value, indicating that each indicator is able to measure the variable in question. It can be concluded that the Validity and Reliability of all indicators used as benchmarks for each variable have met the necessary criteria. Based on the results of Composite Reliability and Cronbach's Alpha, all constructs in this model show excellent reliability. The high CR and Cronbach's Alpha values show that the indicators used in this study are consistent in measuring latent constructs. In this study, the high consistency of the indicators showed that the measurement results could be trusted and used as a solid basis for further analysis.

Inner Model Analysis

Measurement of R-Square Values

Table 8. R-Square and R-Square Adjusted Measurement Results

	R-squarel	R-squarel adjusteld
TLRHP	0.305	0.277

Source: Processing Results (2025)

The R-Square value in this study is 0.305 so that it can be interpreted that the research model used has a weak inner model level. R-Square Adjusted of 0.277 means that independent variables, mediator variables and their interactions are able to explain the dependent variable by the remaining 27.7% percent by other variables outside the model.

Measurement of Q-Square Value (Stone-Geisser Q-square test)

The Q-square value is used to measure how well the observation value is produced by the model and its parameters. A model that can be said to have predictive rellevance is when the value of Q-Square is >0 , and conversely, it can be said that Q-square is less than < 0 indicates that the model lacks predictive rellevance.

The results of Q-Square measurements in this study can be used as follows:

$$\begin{aligned} Q^2 &= 1 - (1 - R^2) \\ Q^2 &= 1 - (1 - 0.305) \\ &= 0.305 \end{aligned}$$

The Q-square value in this study is $0.305 > 0$ indicating that the model has a predictive rellevance value.

Estimated Path Coefficient

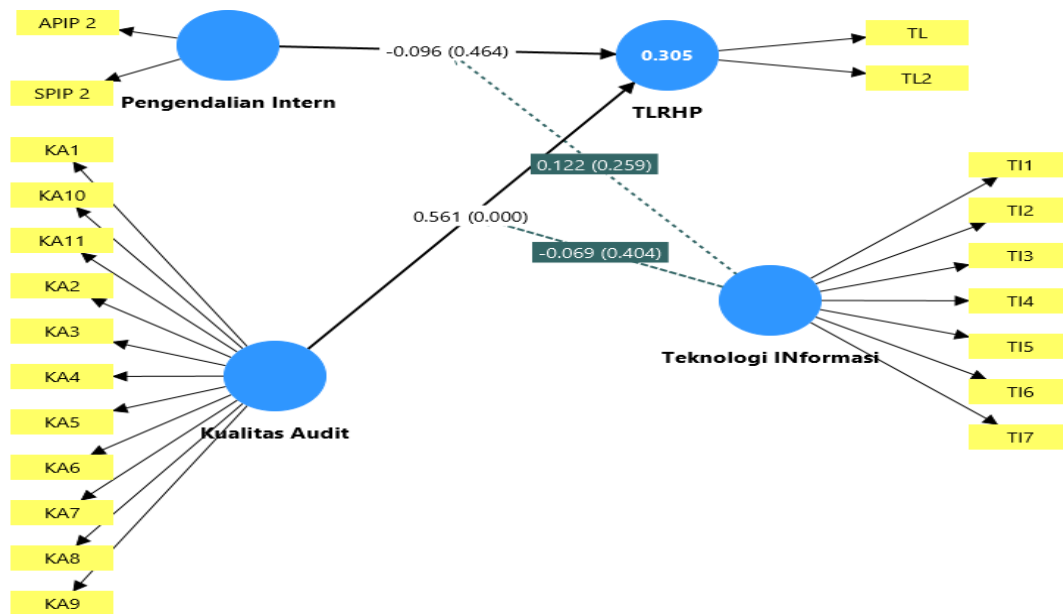


Figure 2. Estimated Path Coefficient

Hypothesis Testing

Table 9. Hypothesis Testing Results

No.	Hipotesis	Original Sample	Sample Mean	Std Dev	T-Statistics	P-Value	Ket
H1	X1 -> Y	0.561	0.567	0.097	5.805	0.000	Accepted
H2	X2 -> Y	-0.096	-0.075	0.131	0.732	0.464	Rejected
H3	Z x X1 -> Y	-0.069	-0.062	0.083	0.835	0.404	Rejected
H4	Z x X2 -> Y	0.122	0.111	0.108	1.128	0.259	Rejected

Based on the table of hypothesis test results, the conclusion of the hypothesis can be explained as follows:

- Audit Quality has a positive effect on BPK's TLRHP (H1)
The value of the influence coefficient of Audit Quality (X1) on TLRHP BPK (Y) was 0.561 with p-values of 0.000 and t-statistics of 5.805. The resulting p-values are much smaller than the criterion, namely p-values ≤ 0.05 and even smaller than 0.01, indicating that the independent variable has a very significant effect on the dependent variable. The value of t-statistics produced was much greater than the criterion, namely t-statistics > 1.96 indicating that independent variables had a very significant effect on dependent variables. It can be concluded that the first hypothesis (H1) is accepted or can be interpreted that Audit Quality has a positive and significant effect on BPK's TLRHP.
- Government Internal Control has no effect on BPK's TLRHP (H2)
The value of the coefficient of the influence of Government Internal Control (X2) on the TLRHP BPK (Y) is 0.096 with p-values of 0.464 and t-statistics of 0.732. The resulting p-values are much greater than the criterion, namely p-

values ≤ 0.05 , indicating that the independent variable has no significant effect on the dependent variable. The value of t-statistics produced was also smaller than the criterion, namely t-statistics > 1.96 indicating that independent variables did not have a significant effect on dependent variables. It can be concluded that the second hypothesis (H2) is rejected or it can be interpreted that the Government's Internal Control does not have a significant effect on the BPK's TLRHP.

- c) Information Technology does not moderate the effect of audit quality on TLRHP (H3)

The value of the influence coefficient of Information Technology (Z) on TLRHP BPK (Y) when interacted with Audit Quality was 0.069 with p-values of 0.404 and t-statistics of 0.835. The resulting p-values are greater than the criterion, namely p-values ≤ 0.05 , indicating that the independent variable does not have a significant effect on the dependent variable. The value of t-statistics produced was smaller than the criterion, namely t-statistics ≤ 1.96 indicating that information technology moderation did not play a role in strengthening the influence of independent variables of audit quality on the TLRHP. It can be concluded that the jumping hypothesis (H4) is rejected or it can be interpreted that information technology does not strengthen the influence of Audit Quality on BPK's TLRHP.

- d) Information Technology does not moderate the influence of Government Internal Control on BPK's TLRHP (H4)

The value of the influence coefficient of Information Technology (Z) on the TLRHP BPK (Y) when interacted with Government Internal Control is 0.122 with p-values of 0.259 and t-statistics of 1.128. The resulting p-values are greater than the criterion, namely p-values ≤ 0.05 , indicating that the IT moderation variable does not play a role in strengthening the influence of internal control on TLRHP. The value of t-statistics produced was smaller than the criterion, namely t-statistics ≤ 1.96 indicating that independent variables did not have a significant effect on dependent variables. It can be concluded that the fifth hypothesis (H4) is rejected or it can be interpreted that information technology does not strengthen the influence of the government's internal control on the BPK's TLRHP.

DISCUSSION

The Effect of Audit Quality on BPK's TLRHP

The results of the study show that audit quality has a positive and significant effect on the level of completion of the follow-up of recommendations from the BPK audit results. The coefficient value of 0.561 with a p-value of 0.000 and a t-statistic of 5.805 confirms that the higher the quality of the audit conducted by the auditor, the higher the level of effectiveness of the follow-up of recommendations by the auditee.

These findings are in line with agency theory which states that audits act as a mechanism to minimize conflicts of interest between principals and agents through increased transparency and accountability of information (Jensen & Meckling, 1976). A quality audit provides clear, relevant, and actionable

recommendations, thereby encouraging the auditee to improve the weaknesses of the internal control and governance system.

These results support previous research that found that audit quality has a positive correlation with the completion of follow-up audit recommendations (Setyaningrum et al., 2013; Dharmawati & Yusran, 2015; Zulfakar et al., 2016; Puspitasari & Ratmono, 2017; Lestari & Lestari, 2022; Harlin et al., 2023). These studies concluded that competent auditors and an adequate audit process are able to produce more implementable recommendations, thereby increasing the auditee's commitment to implementing improvements.

Thus, the results of this study emphasize that audit quality is a key factor in influencing the effectiveness of the follow-up of recommendations of BPK audit results, in line with the principles of the State Financial Audit Standard (SPKN, 2017) which emphasizes the quality of recommendations as an indicator of audit success.

The Effect of Government Internal Control on TLHRP

The test results showed that the government's internal control had no significant effect on the BPK's TLRHP (coefficient = -0.096 ; p-value = 0.464 ; t-statistic = 0.732). This indicates that even if an entity has a certain level of SPIP maturity or APIP capabilities, it does not necessarily contribute directly to the acceleration of the completion of the follow-up to BPK's recommendations.

These findings may be due to the implementation of SPIP that has not been optimal, a weak compliance culture, or a lack of commitment from leaders in encouraging the completion of audit recommendations. This is in line with the BPKP report (2023) which notes that most government agencies are still at the intermediate SPIP maturity level (levels 2-3), so they are not fully able to implement strong and responsive internal supervision of external audit results.

In addition, Mansnandifu (2018) and Vidiyana (2016) found that APIP's role has not been consistent in encouraging the implementation of TLRHP, among others due to limited capacity of internal auditors, lack of leadership support, or organizational priorities that do not focus on audit follow-up.

Thus, these results indicate that although the internal control system is important, the success of the completion of audit recommendations is determined more by the factors of execution, governance commitment, and the effectiveness of the follow-up management system, not just the existence of a formal SPIP/APIP system.

The Role of Information Technology as a Moderation between Audit Quality and TLHRP

The results showed that information technology (SIPTL) did not moderate the relationship between audit quality and BPK TLRHP, indicated by an insignificant interaction coefficient value (p-value = 0.404 ; t-statistic = 0.835). Empirically, this means that even though auditors produce quality recommendations, the existence of a follow-up information system has not been able to strengthen the influence of audit quality on the level of completion of BPK recommendations.

These findings indicate that the auditor's ability to provide relevant and implementable recommendations is more determined by the auditor's professional quality, clarity of recommendations, and auditor-auditor communication, rather than just information technology support. In other words, good audit information does not automatically ensure faster follow-up when it is not accompanied by organizational capacity and management's commitment to follow through.

According to the theory of technology adoption, the use of technology is not only influenced by its availability, but also by the intention, ability, and discipline of users in operating it (Davis, 1989; Venkatesh et al., 2003). This is in line with the research of Ramadanty Sasmito & Sumardjo (2020) and Suryadnyana et al. (2023) who stated that the effectiveness of SIPTL is highly dependent on the quality of input and discipline of the reporter, not just the existence of the system.

In addition, based on the perspective of Agency Theory, audits are a control mechanism to reduce information asymmetry. However, information systems are only an auxiliary tool, not the main determinant. Quality recommendations must still be followed by a strong commitment from management—technology cannot replace the role of moral accountability and organizational support (Furqan et al., 2020).

Thus, these findings suggest that information technology has not played a sufficiently strong moderation role in strengthening the relationship between audit quality and follow-up recommendations. Digital implementation has not replaced the role of human factors, organizational ethics, and governance commitment as the main drivers of follow-up effectiveness.

The Role of Information Technology as a Moderation between Government Internal Control and TLRHP

The results of the study also showed that information technology did not moderate the influence of government internal control on the TLRHP (coefficient = 0.122; p-value = 0.259; t-statistic = 1.128). This means that even if an entity has an internal control system and follow-up IT tools such as SIPTL, it is not enough to increase the effectiveness of follow-up on audit recommendations.

This finding can be explained by the fact that the success of internal control and follow-up audit recommendations depends on the maturity of internal processes, compliance culture, and the strengthening of APIP's role (BPKP, 2023). IT systems only function as a reporting medium, not a substitute for coaching, internal supervision, and managerial priority functions.

According to the SPIP maturity model, Indonesian government entities are on average at levels 2–3 (repeatable–defined), where processes are not fully documented, consistent, and digitally integrated (BPKP, 2023). This makes IT systems such as SIPTL not yet able to function optimally to support the success of SPIP in responding to audit results.

These results are also in line with Vidiyana (2016) and Mansnandifu (2018) who emphasized that the success of TLRHP is more influenced by leadership support, internal auditor competence, and active monitoring, not just the availability of technology systems.

From the perspective of institutional theory, technology is often used ceremonially as formal compliance, but it does not automatically produce substantive performance if it is not accompanied by changes in organizational processes and behavior (Meyer & Rowan, 1977).

Thus, the results of this study confirm that information technology is an enabler, not the main driver, so it is only effective if supported by governance maturity, a culture of accountability, and a strong internal supervisory system.

CONCLUSION

This study concludes that audit quality has a positive and significant effect on BPK's Audit Result Recommendation Follow-up (TLRHP), which shows that clear, relevant, and implementable audit recommendations encourage auditee response and effectiveness in following up on audit findings. These findings are in line with agency theory which emphasizes the role of audit as a mechanism to increase accountability and reduce information asymmetry.

On the other hand, the government's internal control has no significant effect on TLRHP, and information technology (SIPTL) has not been shown to moderate the relationship between audit quality and internal control over TLRHP. These results indicate that the existence of control systems and technology is not effective enough without the support of leadership commitment, organizational capacity, APIP's active role, and strong accountability culture. Thus, audit quality is the dominant factor in encouraging the effectiveness of BPK recommendation follow-up.

RECOMENDATIONS

Based on the findings of the study, BPK and audit institutions are advised to continue to improve audit quality through strengthening auditor competence and professionalism, improving risk-based audit methodologies, and improving the quality of more specific and implementable recommendations. Auditees (ministries/institutions) need to strengthen leadership commitment, the role of APIP, and the integration of audit results into the internal planning and control system to accelerate the completion of follow-ups.

Regarding information technology, the optimization of SIPTL needs to be directed at increasing ease of use, monitoring progress, and system integration, along with increasing users' digital literacy. For further research, it is recommended to expand the objects and variables of the research and use a longitudinal or mixed methods approach to obtain a more comprehensive understanding of the effectiveness of follow-up audit recommendations.

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