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Analysis of the Influence of Audit Service Quality on Auditee Satisfaction in the Internal Audit Division

Zulhendrianto[1] , Khairani Ratnasari Siregar[2]
Telkom University Bandung, Indonesia
Zulhendriato@student.telkomuniversity.ac.id

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Keywords:
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Abstract
The increasing complexity and dynamics of the business environment at local, regional, and global levels have driven PT PLN (Persero)'s Internal Audit Unit (SPI) to adopt a Purpose-Driven Internal Audit approach, positioning the audit function as a strategic partner for long-term organizational success. However, the Internal Stakeholder Satisfaction Index for assurance services in the Construction, Generation, and New Renewable Energy Audit Division (AKP) fell short of its targets in 2023 and 2024. This study aims to analyze the impact of audit service quality—comprising tangibles, reliability, responsiveness, assurance, and empathy—on auditee satisfaction. Using a quantitative approach with PLS-SEM and Importance–Performance Map Analysis (IPMA), data were collected from AKP Division auditees in 2024. The results show that all dimensions of audit service quality positively and significantly influence satisfaction, with responsiveness and empathy being the most dominant factors. The findings offer practical insights for SPI PLN in prioritizing service improvements based on user perceptions and provide theoretical support for the SERVQUAL model as a key psychological mechanism in fostering satisfaction within trust-based professional services.

Abstrak
Meningkatnya kompleksitas bisnis mendorong PT PLN (Persero) melalui Satuan Pengawasan Intern (SPI) untuk mengadopsi pendekatan *Purpose-Driven Internal Audit* guna memperkuat peran audit sebagai mitra strategis organisasi. Namun, Indeks Kepuasan Pemangku Kepentingan Internal terhadap layanan assurance Divisi AKP belum mencapai target pada 2023–2024. Penelitian ini bertujuan menganalisis pengaruh kualitas layanan audit meliputi *tangibles, reliability, responsiveness, assurance,* dan *empathy* terhadap kepuasan auditee. Menggunakan metode PLS-SEM dan IPMA, data dikumpulkan dari auditee Divisi AKP pada tahun 2024. Hasil penelitian menunjukkan bahwa seluruh dimensi kualitas layanan audit berpengaruh positif dan signifikan terhadap kepuasan, dengan *responsiveness* dan *empathy* sebagai faktor dominan. Temuan ini memberikan kontribusi praktis bagi SPI PLN dalam menetapkan prioritas perbaikan layanan audit yang berorientasi pada penciptaan nilai, serta mendukung secara teoretis validitas model SERVQUAL dalam konteks layanan profesional berbasis kepercayaan.

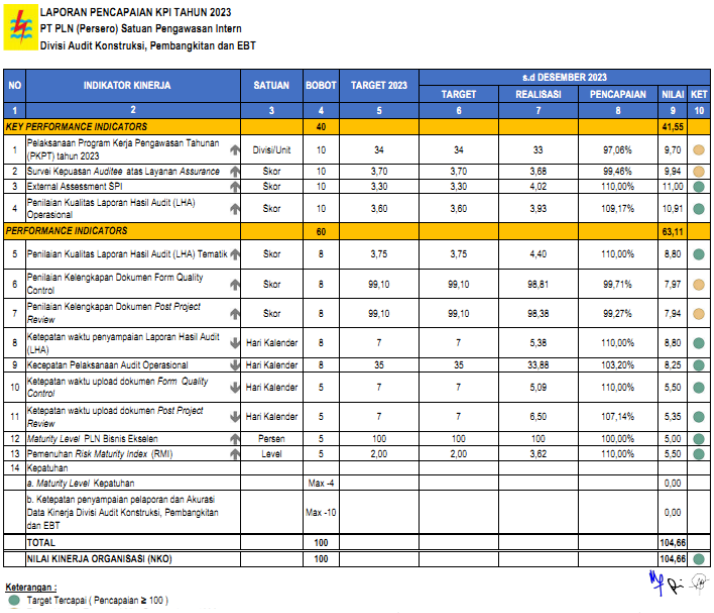
Kata Kunci: *Auditee*, Kepuasan, Kualitas Layanan Audit, *Importance–Performance Map Analysis*

INTRODUCTION

The transformation of internal audit functions from traditional administrative oversight to strategic business partnership has become essential in the era of globalization and digitalization. PT PLN (Persero), Indonesia's state-owned electricity company, adopted the Purpose-Driven Internal Audit approach in 2025, which positions internal audit as a strategic tool to support long-term corporate objectives. However, stakeholder satisfaction with audit services in the Construction, Generation, and Renewable Energy Audit Division (DIV AKP) fell short of target scores in 2023 (3.68 out of a 3.70 target) and in 2024 (3.86 out of a 3.93 target), indicating a misalignment between strategic audit implementation and the perceived value delivered to auditees.

Based on the 2023–2024 Performance Report of the Division of Construction, Generation, and Renewable Energy Audit (AKP) of SPI PLN, the internal stakeholder satisfaction with assurance services remained below the target, with the Auditee Satisfaction Index in 2023 reaching 3.68 out of a target of

3.70 (achievement of 99.46%) (PLN, 2024a) and in 2024 reaching 3.86 out of a target of 3.93 (achievement of 98.22%) (PLN, 2025b), as shown in Figures 1 and 2.

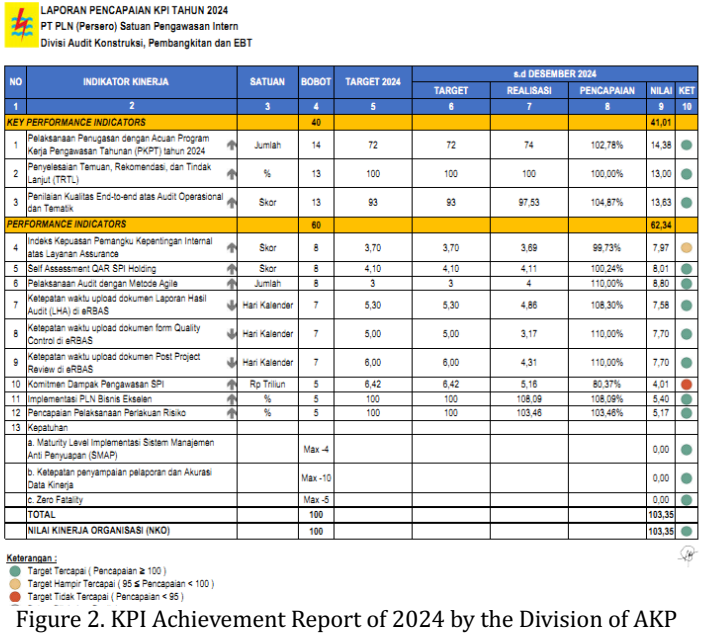


LAPORAN PENCAPAIAN KPI TAHUN 2023
PT PLN (Persero) Satuan Pengawasan Intern
Divisi Audit Konstruksi, Pembangkitan dan EBT

NO	INDIKATOR KINERJA	SATUAN	BOBOT	TARGET 2023	s.d DESEMBER 2023				
					TARGET	REALISASI	PENCAPAIAN	NILAI	KET
1	2	3	4	5	6	7	8	9	10
KEY PERFORMANCE INDICATORS			40					41,55	
1	Pelaksanaan Program Kerja Pengawasan Tahunan (PKPT) tahun 2023	Divisi/Unit	10	34	34	33	97,06%	9,70	
2	Survei Kepuasan *Auditee* atas Layanan *Assurance*	Skor	10	3,70	3,70	3,68	99,46%	9,94	
3	External Assessment SPI	Skor	10	3,30	3,30	4,02	110,00%	11,00	
4	Penilaian Kualitas Laporan Hasil Audit (LHA) Operasional	Skor	10	3,60	3,60	3,93	109,17%	10,91	
PERFORMANCE INDICATORS			60					63,11	
5	Penilaian Kualitas Laporan Hasil Audit (LHA) Tematik	Skor	8	3,75	3,75	4,40	110,00%	8,80	
6	Penilaian Kelengkapan Dokumen Form Quality Control	Skor	8	99,10	99,10	98,81	99,71%	7,97	
7	Penilaian Kelengkapan Dokumen *Post Project Review*	Skor	8	99,10	99,10	98,38	99,27%	7,94	
8	Ketepatan waktu penyampaian Laporan Hasil Audit (LHA)	Hari Kalender	8	7	7	5,38	110,00%	8,80	
9	Kecepatan Pelaksanaan Audit Operasional	Hari Kalender	8	35	35	33,88	103,20%	8,25	
10	Ketepatan waktu upload dokumen *Form Quality Control*	Hari Kalender	5	7	7	5,09	110,00%	5,50	
11	Ketepatan waktu upload dokumen *Post Project Review*	Hari Kalender	5	7	7	6,50	107,14%	5,35	
12	*Maturity Level* PLN Bisnis Eksalen	Persen	5	100	100	100	100,00%	5,00	
13	Pemenuhan *Risk Maturity Index* (RMI)	Level	5	2,00	2,00	3,62	110,00%	5,50	
14	Kepatuhan								
	a. *Maturity Level* Kepatuhan		Max -4					0,00	
	b. Ketepatan penyampaian pelaporan dan Akurasi Data Kinerja Divisi Audit Konstruksi, Pembangkitan dan EBT		Max -10					0,00	
	TOTAL		100					104,66	
	NILAI KINERJA ORGANISASI (NKO)		100					104,66	

Keterangan :
Target Tercapai (Pencapaian ≥ 100)

Figure 1. KPI Achievement Report of 2023 by the Division of AKP



LAPORAN PENCAPAIAN KPI TAHUN 2024
PT PLN (Persero) Satuan Pengawasan Intern
Divisi Audit Konstruksi, Pembangkitan dan EBT

NO	INDIKATOR KINERJA	SATUAN	BOBOT	TARGET 2024	s.d DESEMBER 2024				
					TARGET	REALISASI	PENCAPAIAN	NILAI	KET
1	2	3	4	5	6	7	8	9	10
KEY PERFORMANCE INDICATORS			40					41,01	
1	Pelaksanaan Penugasan dengan Acuan Program Kerja Pengawasan Tahunan (PKPT) tahun 2024	Jumlah	14	72	72	74	102,78%	14,38	
2	Penyelesaian Temuan, Rekomendasi, dan Tindak Lanjut (TRTL)	%	13	100	100	100	100,00%	13,00	
3	Penilaian Kualitas End-to-end atas Audit Operasional dan Tematik	Skor	13	93	93	97,53	104,87%	13,63	
PERFORMANCE INDICATORS			60					62,34	
4	Indeks Kepuasan Pemangku Kepentingan Internal atas Layanan Assurance	Skor	8	3,70	3,70	3,69	99,73%	7,97	
5	Self Assessment QAR SPI Holding	Skor	8	4,10	4,10	4,11	100,24%	8,01	
6	Pelaksanaan Audit dengan Metode Agile	Jumlah	8	3	3	4	110,00%	8,80	
7	Ketepatan waktu upload dokumen Laporan Hasil Audit (LHA) di eRBAS	Hari Kalender	7	5,30	5,30	4,86	108,30%	7,58	
8	Ketepatan waktu upload dokumen form Quality Control di eRBAS	Hari Kalender	7	5,00	5,00	3,17	110,00%	7,70	
9	Ketepatan waktu upload dokumen Post Project Review di eRBAS	Hari Kalender	7	6,00	6,00	4,31	110,00%	7,70	
10	Komitmen Dampak Pengawasan SPI	Rp Triliun	5	6,42	6,42	5,16	80,37%	4,01	
11	Implementasi PLN Bisnis Ekselen	%	5	100	100	108,09	108,09%	5,40	
12	Pencapaian Pelaksanaan Perlakuan Risiko	%	5	100	100	103,46	103,46%	5,17	
13	Kepatuhan								
	a. Maturity Level Implementasi Sistem Manajemen Anti Penyuapan (SMAP)		Max -4					0,00	
	b. Ketepatan penyampaian pelaporan dan Akurasi Data Kinerja		Max -10					0,00	
	c. Zero Fatality		Max -5					0,00	
	TOTAL		100					103,35	
	NILAI KINERJA ORGANISASI (NKO)		100					103,35	

Keterangan :
Target Tercapai (Pencapaian ≥ 100)
Target Hampir Tercapai (95 ≤ Pencapaian < 100)
Target Tidak Tercapai (Pencapaian < 95)

Figure 2. KPI Achievement Report of 2024 by the Division of AKP

This issue highlights the need to re-evaluate how internal audit value is perceived by auditees in practice. Most existing research focuses on technical aspects of auditing such as compliance and reporting accuracy (Ismail et al., 2006);(Lai & Pham, 2020; Nguyen et al., 2023); (Do et al., 2023) while client-based service dimensions, particularly those captured by the SERVQUAL model (tangibles, reliability, responsiveness, assurance, empathy), remain underexplored, especially within internal audit contexts in state-owned enterprises (SOEs). Furthermore, previous studies predominantly apply

reflective measurement models, despite formative-reflective models being more suitable for capturing the multidimensional nature of perceived audit service quality (Peštović et al., 2021).

This study focuses on analyzing the influence of audit service quality on auditee satisfaction within the DIV AKP of PLN's Internal Audit Unit. The research scope includes testing the five SERVQUAL dimensions using a quantitative approach with Partial Least Squares Structural Equation Modeling (PLS-SEM). Additionally, Importance–Performance Map Analysis (IPMA) is applied to identify critical service dimensions with high importance but low actual performance. The importance of internal audit not only lies in its compliance and risk management role but also in its ability to foster effective communication and stakeholder engagement, as seen in communication audit practices in public training programs (Rhamadona et al., 2023)

The main objectives of this research are: (1) to evaluate the influence of each audit service quality dimension on auditee satisfaction; and (2) to assess the alignment between the importance and actual performance of each dimension based on auditee perceptions, thereby guiding strategic improvements in value-oriented internal audit services.

METHOD

This study adopts a quantitative research approach with a cross-sectional survey design to examine the effect of audit service quality dimensions on auditee satisfaction within the Construction, Generation, and Renewable Energy Audit Division (AKP) of PT PLN (Persero). The research population consists of internal stakeholders who were auditees during the 2023–2024 audit period. The sampling technique used is purposive non-probability sampling, targeting respondents with direct and relevant experience in internal audit activities, in line with methodological best practices for context-specific studies (Peštović et al., 2021). Data was collected using a structured questionnaire distributed electronically. The instrument was adapted from the SERVQUAL model developed by (Zeithaml & Berry, n.d.), which measures five core dimensions: Tangibles, Reliability, Responsiveness, Assurance, and Empathy. The questionnaire also included indicators of auditee satisfaction based on the Expectation–Disconfirmation Theory (Oliver, 1980), ensuring that the constructs reflect both perceived service quality and emotional-cognitive satisfaction outcomes ((Ismail et al., 2006; Peštović et al., 2021)

RESULTS AND DISCUSSION

The data collected were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM), an appropriate technique for testing complex models involving latent constructs and multidimensional service variables. This method allows for simultaneous evaluation of measurement and structural models, ensuring both validity and reliability (J. F. Hair et al., 2022). Furthermore, Importance–Performance Map Analysis (IPMA) was employed to assess which service dimensions are most critical from the auditee's perspective but currently underperforming, thus guiding practical service improvement strategies (Gunawan et al., 2025).

Table 1. Number of Respondents Filling Out the Questionnaire

No	Organization	Directorate / Company	Division	Number of respondents who filled out the questionnaire
1	Head Office	Directorate of Project Management and New and Renewable Energy	New and Renewable Energy Diversification Division	2
2			Construction Division for Java, Madura, Bali, Nusa Tenggara, Maluku, and Papua	4
3			Project Management Office Division	4
4			Supply Chain Management Division	4
5			Generation Strategic Planning Division	7

No	Organization	Directorate / Company	Division	Number of respondents who filled out the questionnaire
6		Direktorat Manajemen Pembangkitan	Generation Control and Independent Power Producer Division	4
7			Generation Operation and Independent Power Producer Division	8
8	Sub-holding / Subsidiary Company	PLN Nusantara Power		81
9		PLN Indonesia Power		57
10		PLN Batam		8
11		PLN Energi Primer Indonesia		13
12	Units / Centers	Project Management Center		2
13		Electric Power Maintenance Center		4
14		Generation Main Unit Tanjung Jati B		21
15		Development Main Unit Sumatera Bagian Utara		2
16		Development Main Unit Sumatera Bagian Selatan		2
17		Development Main Unit Jawa Bagian Barat		7
18		Development Main Unit Jawa Bagian Tengah		4
19		Development Main Unit Kalimantan Bagian Timur dan Bali		4
20		Development Main Unit Sulawesi		10
21		Development Main Unit Maluku dan Papua		9
22		Development Main Unit Nusa Tenggara		2
Total				**259**

Only the data from respondents who confirmed participation in the 2024 audits conducted by the AKP Division were considered for further analysis. Respondents who indicated no involvement in the 2024 AKP audits were classified as incomplete and therefore excluded from subsequent evaluation. Details of the response rate are presented in Table 2.

Table 2. Response Rate

No	Description	N	%
1	Jumlah responden yang didistribusikan	397	100%
2	Jumlah responden yang mengisi quesioner	259	65%
3	Jumlah responden yang mengisi quesioner namun tidak mengikuti audit Divisi AKP tahun 2024	55	14%
	Response Rate	**204**	**51%**

The response rate in survey research indicates the proportion of individuals who completed the survey relative to those invited, serving as a critical indicator of data quality. A low response rate can lead to nonresponse bias, where respondents differ systematically from non-respondents, thus threatening the validity and representativeness of findings (Shih & Xitao Fan, 2008). Meta-analysis found that mail surveys typically yield higher response rates (averaging 51%) compared to web surveys (34%), suggesting greater effectiveness in eliciting participation in professional and educational contexts.

In quantitative studies employing multivariate techniques such as PLS-SEM, determining an adequate sample size is essential for reliable model estimation. (J. F. Hair et al., 2022) recommend a minimum sample size of 100–200 for models with low to moderate complexity, while power analysis can provide more precise estimates. Additionally, (Uma Sekaran & Roger Bougie, 2016) propose the "10-times rule," which advises at least ten times the number of independent variables in the model.

For this study, G*Power analysis indicated a minimum required sample size of 146. With 204 valid responses collected, the data was deemed sufficient to proceed with further analysis.

In PLS-SEM, individual indicator reliability refers to the extent to which an item consistently and accurately reflects its associated latent construct, evaluated through outer loading values. (J. F. Hair et al., 2022) recommend a threshold of 0.70, indicating that an indicator explains at least 50% of the variance in the latent variable and can thus be considered a reliable representation.

Tabel 3. Individual Indicator Reliability

Variable	Indikator	*Outer Loadings*	Description
Tangibles	T1	0.911	Valid
	T2	0.913	Valid
	T3	0.856	Valid
Reliability	R1	0.864	Valid
	R2	0.911	Valid
	R3	0.918	Valid
	R4	0.905	Valid
Responsiveness	Re1	0.896	Valid
	Re2	0.859	Valid
	Re3	0.901	Valid
Assurance	A1	0.868	Valid
	A2	0.901	Valid
	A3	0.841	Valid
	A4	0.885	Valid
	A5	0.842	Valid
Empathy	E1	0.911	Valid
	E2	0.940	Valid
	E3	0.926	Valid
	E4	0.858	Valid
Satisfaction	S1	0.934	Valid
	S2	0.935	Valid
	S3	0.944	Valid
	S4	0.917	Valid
	S5	0.928	Valid

As shown in Table 3, all indicators in this study met or exceeded the recommended loading value, ranging from 0.841 to 0.944. For the Tangibles construct, indicators T1–T3 (0.856–0.913) consistently captured physical service attributes such as auditor appearance and facilities. The Reliability indicators R1–R4 scored between 0.864 and 0.918, indicating strong measurement consistency for the construct of dependable and timely service.

For Responsiveness, indicators Re1–Re3 (0.859–0.901) demonstrated high reliability, representing promptness and readiness of the audit team. The Assurance dimension, measured through A1–A5 (0.841–0.901), reflected respondents' confidence in the auditors' expertise and service security. Empathy indicators E1–E4 showed excellent reliability (0.858–0.940), highlighting the auditors' ability to provide personalized attention and understanding of client needs.

Finally, the endogenous Satisfaction construct also showed strong reliability, with S1–S5 scoring between 0.928 and 0.934, confirming each indicator's robust association with the overall construct.

Based on the outer loading analysis in Table 3, all measurement indicators meet the criteria for individual reliability, validating their use in subsequent construct validity assessment and structural model evaluation (J. F. Hair et al., 2022).

Convergent validity evaluates the degree to which multiple indicators of a latent construct consistently correlate and represent the same underlying concept. In the PLS-SEM context, it is assessed using the Average Variance Extracted (AVE), which quantifies the average variance explained by the

construct in its indicators. According to (J. F. Hair et al., 2022), an AVE value of ≥ 0.50 indicates acceptable convergent validity.

Table 4. Convergent Validity

Variable	Convergent Validity	Description
Tangibles	0.799	Valid
Reliability	0.809	Valid
Responsiveness	0.784	Valid
Assurance	0.753	Valid
Empathy	0.827	Valid
Satisfaction	0.868	Valid

As shown in Table 4, all constructions in the model meet this criterion. The AVE values for Tangibles (0.799), Reliability (0.809), and Responsiveness (0.784) indicate that their respective indicators reflecting physical evidence, service dependability, and responsiveness—are measured with high internal consistency. Similarly, Assurance (0.753) and Empathy (0.827) also demonstrate strong convergent validity, affirming that indicators effectively represent respondent perceptions of auditor trustworthiness and personal care.

The endogenous construct Satisfaction yields an AVE of 0.868, the highest among all constructs, highlighting excellent internal consistency and confirming that most of the indicator variance is attributable to the latent construct rather than measurement error. These findings confirm that all latent constructions in the model possess strong convergent validity and are suitable for further structural model evaluation.

Discriminant validity assesses the extent to which a construction is empirically distinct from other constructions within the model. In PLS-SEM, it ensures that indicators for one construction are not excessively correlated with those of another, confirming the uniqueness and non-redundancy of each theoretical concept.

N. Hair et al. (2022) identify three primary methods for evaluating discriminant validity: (1) the Fornell-Larcker criterion, (2) cross loadings, and (3) the Heterotrait-Monotrait Ratio (HTMT). The Fornell-Larcker criterion requires that the square root of a construct's AVE exceeds its correlations with other constructs in the model. Meanwhile, HTMT is considered a more sensitive and accurate approach, with a commonly accepted threshold of ≤ 0.90. HTMT values above this threshold suggest that two constructions may not be empirically distinct.

Evaluating the R-Square (R^2) value is a critical step in assessing the structural model (inner model) within PLS-SEM, as it reflects the model's predictive accuracy regarding endogenous latent constructs. Conceptually, R^2 represents the proportion of variance in an endogenous construct explained by its directly linked exogenous variables. According to (J. F. Hair et al., 2022), an R^2 value of 0.75 is considered substantial, 0.50 moderate, and 0.25 weak.

To enhance interpretability, Adjusted R^2 is also considered, especially in models with multiple predictors, as it adjusts for the number of explanatory variables and helps prevent overfitting. However, (J. F. Hair et al., 2022) caution against relying solely on R^2, emphasizing the importance of theoretical context and research objectives.

Table 5. Coefficient of Determination (R^2)

Variable	R-square	R-square adjusted	Result
Satisfaction	0.725	0.718	Substantial

As shown in Table 5, the R^2 value for the endogenous construct Satisfaction (Sat) is 0.725, indicating that approximately 72.8% of its variance is explained collectively by Tangibles, Reliability,

Responsiveness, Assurance, and Empathy. This value suggests strong explanatory power and confirms that the structural model is reliable for predicting stakeholder perceptions of audit service quality.

Overall, both endogenous constructs in the model meet the interpretive standards of R^2 evaluation in PLS-SEM, supporting the robustness of the model and providing a solid foundation for hypothesis testing and managerial implications.

In the PLS-SEM framework, effect size (f^2) assesses the relative contribution of each exogenous construct to an endogenous construct, beyond what is explained by the R^2 value. It quantifies the impact of removing a specific predictor on the variance explained in the target construct. According to (J. F. Hair et al., 2022), f^2 values are interpreted as follows: ≥ 0.02 (small), ≥ 0.15 (medium), and ≥ 0.35 (large). Values below 0.02 are considered negligible in practical relevance. This metric is particularly useful when R^2 is already high, offering insight into the practical importance of each predictor. For instance, a statistically significant path may still have a negligible effect size, highlighting its limited predictive utility.

Table 6. Effect Size (f2)

Variable	Satisfaction	Tingkat Efek
Tangible	0.109	Low
Reliability	0.116	Low
Responsiveness	0.160	Medium
Assurance	0.106	Low
Empathy	0.096	Low

As presented in Table 6, Responsiveness exhibits the strongest influence on Satisfaction (f^2 = 0.160), categorized as moderate to strong. Other constructs, such as Reliability, Assurance, and Tangibles, show small yet meaningful effects (f^2 between 0.106 and 0.116). Empathy, while showing smaller contributions ($f^2 < 0.10$), still surpasses the minimum threshold for practical significance per Hair et al. (2022). Overall, the effect size analysis reveals that the influence of exogenous constructs on the endogenous variable is unequal, with Responsiveness emerging as the most impactful driver of satisfaction in the internal audit service context.

Predictive relevance (Q^2) is a critical component in evaluating the structural model (inner model) within PLS-SEM, particularly in assessing the model's ability to accurately predict indicators of endogenous constructs. The Q^2 value is derived through a blindfolding procedure, which systematically omits parts of the data and predicts them using the established model. According to Hair et al. (2022), a Q^2 value greater than zero ($Q^2 > 0$) indicates predictive relevance. Values can be classified as follows: strong ($Q^2 > 0.35$), moderate ($Q^2 > 0.15$), and weak ($Q^2 > 0.00$), while $Q^2 \leq 0$ denotes no predictive relevance.

Table 7. Predictive Relevance (Q^2)

Variable	Q^2	Predictive Relevance
Satisfaction	0.711	Strong

As shown in Table 7, the Q^2 value for the endogenous construct Satisfaction is 0.711, indicating strong predictive relevance. This implies the model effectively predicts unseen observations and provides practical value beyond statistical significance.

In addition, a PLS Predict analysis was conducted to compare the predictive accuracy of the PLS-SEM model against a benchmark Linear Model (LM). Two key metrics were used: Root Mean Square Error (RMSE) and Mean Absolute Error (MAE). RMSE penalizes larger errors more heavily due to

squaring the differences, making it suitable for outlier-sensitive contexts, whereas MAE treats all errors equally and is more robust to outliers (J. F. Hair et al., 2022).

Table 8. PLS Predict MV Summary Results

Indicators	Q^2predict	PLS-SEM_RMSE	PLS-SEM_MAE	LM_RMSE	LM_MAE
S1	0.607	0.414	0.308	0.445	0.326
S2	0.615	0.415	0.308	0.449	0.333
S3	0.606	0.462	0.340	0.480	0.363
S4	0.605	0.396	0.305	0.416	0.318
S5	0.630	0.390	0.294	0.395	0.302

As presented in 9, the PLS-SEM model demonstrates lower or comparable values of RMSE and MAE across all satisfaction indicators (S1–S5) when compared to the benchmark linear regression model (LM). This indicates that the PLS-SEM model performs equally well or better in terms of predictive accuracy.

According to (J. F. Hair et al., 2022), when Q^2_predict > 0 and the PLS-SEM RMSE/MAE values are lower than those of the LM, the model is considered to have strong predictive power. Based on these criteria, the results confirm that the PLS-SEM model in this study exhibits strong predictive capability and can be reliably used to project outcomes in new data scenarios.

CONCLUSIONS

This study demonstrates that service quality dimensions significantly influence internal stakeholder satisfaction with audit services in PLN's Audit Division for Construction, Generation, and Renewable Energy (AKP). Specifically, Responsiveness emerged as the most influential factor, followed by Reliability, Tangibles, and Assurance, while Empathy contributed modestly.

The model exhibits strong explanatory and predictive power, as evidenced by an R^2 value of 0.725 and Q^2 of 0.711. Furthermore, the PLS-SEM model outperformed the benchmark linear model in predictive accuracy, confirming its robustness and practical relevance for forecasting satisfaction outcomes.

These findings reinforce the strategic importance of audit responsiveness and reliability in enhancing stakeholder satisfaction. Practically, audit divisions should prioritize improving timely, consistent service delivery while maintaining professional assurance to strengthen perceived audit value and stakeholder trust.

SUGGESTIONS

Based on the study's findings, several practical and academic recommendations are proposed:

Managerial Implications for Internal Audit Units

Audit divisions particularly in public enterprises such as PT PLN (Persero)—should focus on enhancing responsiveness and reliability, as these dimensions have the strongest influence on stakeholder satisfaction. This can be achieved through training auditors in communication, timeliness, and consistent follow-through during engagements.

Audit Service Innovation

The moderate impact of empathy suggests a need for more personalized and stakeholder-sensitive approaches without compromising operational efficiency. Incorporating feedback mechanisms post-audit and offering advisory elements could improve the perceived value of audit services.

Model Application and Benchmarking

The validated PLS-SEM model with strong predictive capability can be adopted as a framework for performance monitoring in other divisions or state-owned enterprises. Benchmarking against this model can guide quality improvement efforts in internal audit services.

Future Research

Further studies could extend this research by including external stakeholders or comparing divisions across different sectors. Additionally, integrating qualitative insights might help deepen the understanding of empathy's limited role and explore contextual factors affecting stakeholder perceptions.

REFERENCES

Do, D. T., Dang, V. S., Pham, V. D., Le, V. L., & Dang, V. T. (2023). Influence of local independent audit firms' service quality on customer satisfaction. *Corporate Governance and Organizational Behavior Review*, *7*(3, special issue), 307–317. https://doi.org/10.22495/cgobrv7i3sip7

Gunawan, S., Tambunan, W. F., & Sundjaja, A. M. (2025). Factors Influencing the Intention to Reuse Self-Service Technology in Fast Food Restaurants: Integration of Delone Mclean and Stimulus-Organism-Response. *Ingénierie Des Systèmes d Information*, *30*(2), 317–327. https://doi.org/10.18280/isi.300203

Hair, J. F., Tomas, G., Hult, M., Ringle, C. M., & Sarstedt, M. (2022). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. https://www.researchgate.net/publication/354331182

Hair, N., Akdevelioglu, D., & Clark, M. (2022). The Philosophical and Methodological Guidelines for Ethical Online Ethnography. *International Journal of Market Research*, *65*(1), 12–28. https://doi.org/10.1177/14707853221137459

Ismail, I., Haron, H., Nasir Ibrahim, D., & Mohd Isa, S. (2006). Service quality, client satisfaction and loyalty towards audit firms. *Managerial Auditing Journal*, *21*(7), 738–756. https://doi.org/10.1108/02686900610680521

Lai, T. T. T., & Pham, D. H. (2020). The quality of audit services: An assessment from FDI clients in Vietnam. *Accounting*, 1071–1076. https://doi.org/10.5267/j.ac.2020.7.012

Nguyen, H., Hoang, D. H., Do, D. T., Tran, T. N., Dao, T. T., & Vu, H. P. (2023). A study on customer loyalty to service quality in independent auditing firms. *Journal of Governance and Regulation*, *12*(3, special issue), 243–254. https://doi.org/10.22495/jgrv12i3siart6

Oliver, R. L. (1980). A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions. *Journal of Marketing Research*, *17*(4), 460. https://doi.org/10.2307/3150499

Peštović, K., Milicevic, N., Djokic, N., & Djokic, I. (2021). Audit Service Quality Perceived by Customers: Formative Modelling Measurement Approach. *Sustainability*, *13*(21), 11724. https://doi.org/10.3390/su132111724

Rhamadona, S., Sufa, S., Indrasari, M., Brumadyadisty, G., & Asnawi, A. (2023). Communication Audit of Digital Entrepreneurship Academy of Human Resources Research Program and Development Agency of the BPSDMP Kominfo Surabaya in Pamekasan Region. *Jurnal Riset Multidisiplin Dan Inovasi Teknologi*, *2*(01), 197–206. https://doi.org/10.59653/jimat.v2i01.422

Shih, T.-H., & Xitao Fan. (2008). Comparing Response Rates from Web and Mail Surveys: A Meta-Analysis. *Field Methods*, *20*(3), 249–271. https://doi.org/10.1177/1525822X08317085

Uma Sekaran, & Roger Bougie. (2016). *An easy way to help students learn, collaborate, and grow*. www.wileypluslearningspace.com

Zeithaml, V. A., & Berry, L. L. (n.d.). *SERVQUAL A Multiple-item Scale for Measuring Consumer Perceptions of Service Quality*. https://www.researchgate.net/publication/200827786