



Literature Review: Implementation Of Risk-Based Internal Audit On The Effectiveness Of Risk Management And Fraud Prevention

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Abstract; *An increasingly complex and dynamic organizational environment increases exposure to operational, financial, compliance, and strategic risks, potentially hindering the achievement of organizational goals. Weak risk management can create control gaps that encourage fraud. In this framework, risk-oriented internal auditing has surfaced as a tactical methodology that accentuates supervision of elevated-risk domains and bolsters the enhancement of governance, risk administration, and fraud deterrence. This research aims to examine the application of risk-based internal auditing (RBIA) to the effectiveness of risk management and fraud prevention, and to identify RBIA's role in supporting managerial decision-making and organizational sustainability. The investigation was executed via a scholarly review employing the Systematic Literature Review (SLR) methodology. The scholarly articles scrutinized were chosen from publications within the 2020–2025 timeframe that addressed risk-oriented internal auditing, risk governance, and fraud deterrence. The findings indicate that the implementation of Risk-Based Internal Auditing (RBIA) assumes a substantial role in enhancing the efficacy of risk governance by concentrating audits on high-risk domains and facilitating more judicious resource distribution. RBIA has additionally been demonstrated to assist in fraud deterrence by permitting early detection of potential fraudulent activities, assessing the efficacy of internal controls, and fortifying a culture of risk cognizance and organizational integrity.*

Keywords: *Risk-Based Internal Audit; Risk Management; Fraud Prevention*

1. INTRODUCTION

In an increasingly intricate, dynamic, and uncertain organizational milieu, entities are confronted with a multitude of perils, encompassing operational, financial, regulatory, and strategic risks, which can directly obstruct the realization of organizational objectives. These hazards do not exist in seclusion; they interrelate with one another and can precipitate cascading repercussions if not administered systematically. One of the most severe ramifications of deficient risk management is an elevated likelihood of fraud. The Committee of Sponsoring Organizations of the Treadway Commission (2017) asserted that compromised risk management can lead organizations to forfeit the capacity to discern and react to occurrences that could impede the attainment of strategic objectives. Ineffectiveness in identifying, evaluating, and regulating risks engenders control deficiencies that can be exploited by individuals or collectives to perpetrate fraud. Under such circumstances, fraud is no longer perceived as an incidental occurrence, but rather as a manifestation of the inadequacies within the organization's risk management and governance frameworks.

Fraud constitutes a pervasive, recurrent, and multi-tiered organizational occurrence. No institution is entirely impervious to fraud, as offenders may emerge from various strata, encompassing operational personnel to senior management. Global empirical data show that fraud is not an incidental occurrence, but rather an inherent risk in organizational activities.

According to the Association of Certified Fraud Examiners (ACFE) Report to the Nations 2022, 2,110 cases of occupational fraud were investigated between January 2020 and September 2021 in 133 countries, with a median global loss of approximately USD 117,000 per case. Furthermore, the ACFE Report to the Nations 2024 recorded 1,921 cases in 138 countries between January 2022 and September 2023, with total losses exceeding USD 3.1 billion. These findings confirm that fraud has a significant financial impact and directly impacts an organization's sustainability and reputation.

In the Indonesian context, fraud risk exhibits more specific characteristics. The most prevalent form of malfeasance is corruption, particularly within the public sector and in entities that administer state resources. According to the 2024 Corruption Trends Monitoring Report published by Indonesia Corruption Watch (ICW), 364 corruption incidents were documented in 2024, with an estimated potential state loss of Rp 279.9 trillion. The magnitude of these losses suggests that malfeasance in Indonesia not only affects the financial sector but also erodes public confidence, the caliber of governance, and the efficacy of public policy.

These verities substantiate that deception is not solely an issue of bureaucratic adherence, but rather a tactical concern intimately connected to the efficacy of risk administration and institutional governance. This aligns with research by (Arum Setyowati et al., n.d., 2025) in a study entitled "Literature Study: Determinants of Financial Statement Fraud," which concluded that financial statement fraud is not caused by a single factor, but rather the result of a multidimensional interaction between pressure, opportunity, individual character, and weaknesses in governance and internal control.

These circumstances necessitate entities to possess efficacious risk management and supervisory mechanisms adept at detecting, administering, and alleviating fraud vulnerabilities on a continual basis. Absent a flexible risk-oriented supervisory strategy, the likelihood of fraud tends to escalate as institutional operations become increasingly intricate, performance pressures amplify, and the external milieu transforms. In this framework, supervisory functions concentrated exclusively on formal adherence and routine examinations are no longer adequate (Jakfar & Supranata, 2025).

In line with the development of modern governance, research conducted by (Salasi Permatasari & Prasetya Nugrahanti, 2024) in "Literature Review: A Review of the Internal Audit Function in Corporate Governance" confirms that internal audit serves as a checks and balances mechanism that ensures operational activities and resource management are carried out in accordance with policies, procedures, and organizational objectives. Through

autonomous impartial assessments, the internal audit can discern hazards, regulatory deficiencies, and operational challenges promptly, allowing management to undertake timely remedial measures.

However, the increasing complexity of risks demands a shift in the oversight paradigm. Conventional audit methodologies, which are systematic and concentrated on adherence, are considered insufficient to confront modern risk dilemmas. In this framework, risk-oriented internal auditing has progressed into a tactical methodology. Risk-Based Internal Auditing (RBIA) directs audit planning and implementation towards domains with the greatest peril to the attainment of organizational aims, encompassing fraudulent risk, resulting in a more efficacious, productive, and value-enhancing distribution of audit assets.

Based on this background, this study aims to analyze the application of risk-based internal auditing to the effectiveness of risk management and fraud prevention. The results are expected to provide not only theoretical contributions to the development of risk-based internal audit literature but also practical implications for organizations in strengthening the internal audit function as a strategic instrument in governance, risk management, and fraud prevention.

2. LIBRARY REVIEW

Risk-Based Internal Audit

Risk-Based Internal Audit (RBIA) constitutes an internal audit methodology that emphasizes risk, delineates scopes, and ascertains audit techniques. In contrast to conventional audit methodologies that concentrate on procedural adherence and retrospective evaluation, RBIA is formulated to furnish assurance that substantial risks that may obstruct the attainment of organizational goals have been sufficiently administered and regulated.

According to the Institute of Internal Auditors (2017), a risk-oriented internal audit endeavors to evaluate, in a cohesive manner, the efficacy of an entity's risk management processes, internal controls, and governance structures. Internal auditors not only appraise whether controls have been instituted but also examine whether those controls are pertinent to the degree of risk the organization confronts.

In the RBIA paradigm formulated by David Griffiths (2020), the internal audit procedure initiates with a comprehensive comprehension of the entity's strategic aims. Internal audit must initially ascertain what the organization aspires to accomplish, as risk is fundamentally characterized as uncertainty that could influence the attainment of those aims. Consequently, a risk-oriented audit commences not with a compilation of activities or transaction cycles, but

with a risk map (risk universe) that encapsulates the organization's strategic, operational, financial, and compliance risks.

Risk Management

According to the International Organization for Standardization (2018), risk management constitutes a sequence of synchronized endeavors executed to guide and regulate an institution in confronting hazards, adverse consequences, and prospects that can be capitalized upon.

Risk management occupies a strategic position because it serves as a mechanism that bridges organizational planning, decision-making, control, and oversight. Without adequate risk management, organizations tend to be reactive, slow to respond to change, and vulnerable to performance failures. Conversely, implementing effective risk management enables organizations to anticipate potential threats, minimize the impact of undesired risks, and capitalize on opportunities.

Fraud Prevention

Fraud prevention constitutes a systematic initiative implemented by an organization aimed at diminishing the opportunities, incentives, and justifications for fraudulent activities. The focus of fraud prevention extends beyond mere post-incident detection to encompass the establishment of a control environment that effectively mitigates the vulnerabilities that facilitate fraud from its inception. Consequently, fraud prevention serves as a fundamental component of an organization's governance framework, internal control mechanisms, and risk management strategies.

According to Donald R. Cressey (1953), fraud results from three main elements: pressure, opportunity, and rationalization. Effective fraud prevention must focus on minimizing these three elements, especially opportunity, because it is strongly influenced by the strength of an organization's internal control and oversight systems.

Albrecht et al. (2012) position fraud prevention as an integral part of an organization's management and governance system, not simply a rule-enforcement function. Fraud mitigation is a preemptive, continuous endeavor that encompasses fortifying internal regulations, cultivating an ethical milieu, enhancing supervision, and administering comprehensive organizational peril. This approach makes fraud prevention oriented not only toward compliance but also toward protecting the organization's value and sustainability.

3. RESEARCH METHODS

This investigation employs a literature review methodology, specifically the Systematic Literature Review (SLR), to identify, assess, and synthesize pertinent prior scholarship. The SLR approach is advantageous for acquiring an in-depth, comprehensive comprehension of a research subject. Booth et al. (2016) underscore that a literature review is not merely a recapitulation of antecedent research, but rather an analytical and interpretative intellectual endeavor. The reviewed literature must be systematically selected, evaluated for quality and relevance, and then synthesized to produce new understanding, patterns of findings, research gaps, or a conceptual framework. According to Sugiyono (2013), literature-based research is conducted through the stages of source identification, literature selection, critical analysis, and synthesis of findings to build a strong conceptual framework.

The criteria for inclusion in this scholarly investigation encompassed scientific literature disseminated between the years 2020 and 2025, which addressed themes such as risk-oriented internal auditing, risk management, and/or fraud mitigation. Moreover, a comprehensive search for relevant scientific literature was executed across a multitude of academic databases, including but not limited to Emerald, Scopus, Google Scholar, as well as national repositories such as Sinta and Garuda. The articles that were ultimately chosen for this study were published in esteemed international journals and accredited national periodicals.

The journal with the highest number of citations is *Internal Audit Governance Factors and Their Effect on the Risk-Based Auditing Adoption of Commercial Banks in Jordan* indexed in Scopus Q3 with 60 citations, followed by the article *Risk-Based Internal Audit: Factors Related to Its Implementation* published in *Managerial Auditing Journal* (Scopus Q1) with 56 citations, and *Risk-Based Approach and Quality of Independent Audit Using Structural Equation Modeling in European Research on Management and Business Economics* (Scopus Q1) with 46 citations. The substantial volume of citations in these esteemed international journals signifies that risk-based internal auditing garners considerable scholarly interest, especially concerning audit quality, governance, and risk management. Overall, the literature search process in this study successfully identified 20 scientific articles, with Scopus-indexed journals, which included 9 articles with Q1 to Q4 classifications, while the other 13 articles came from Sinta-accredited national journals (Sinta 2 to Sinta 5 rankings).

The final stage of the research is literature synthesis, which integrates the analysis results from all selected articles to build a comprehensive conceptual understanding and formulate research conclusions. Through this SLR approach, the research is expected to provide a

comprehensive overview of how risk-based internal auditing contributes to strengthening risk control and fraud prevention, while also identifying suggestions for further research.

4. RESULTS AND DISCUSSION

In order to obtain studies that are in accordance with the research focus, the literature search process is carried out in a structured and systematic manner on a number of databases and academic sources, as follows:

Table 1: Journal Sources

No	Research Title	Publication Year	Researcher Name	Publication Name	Number of Citations	Index
1	Risk-based internal audit: Factors related to its implementation	2021	Petros Lois, George Drogalas, Michail Nerantzidis, Ifigenia Georgiou, dan Eleni Gkampeta	Managerial Auditing Journal (Emerald Publishing)	56	Scopus Q1
2	Factors Affecting Risk-Based Audit and Quality Audit	2024	Nguyen Ngoc Khanh Dung	Emerging Science Journal	0	Scopus Q1
3	Factors Affecting the Implementation of Risk-Based Internal Auditing	2024	Abdulwahab Mujalli	Journal of Risk and Financial Management (JRFM)	16	Scopus Q2
4	The Effect of Internal Audit Planning on Risk Factors: Evidence from Yemen's Banks	2024	Adeeb Alhebri, Radwan Hussien Alkebsee, Ebrahim Mohammed Al-Matari, Mohammed A. Al-bukhrani, dan Adam Mohamed Omer	Banks and Bank Systems	3	Scopus Q2

No	Research Title	Publication Year	Researcher Name	Publication Name	Number of Citations	Index
5	Internal Audit Governance Factors and Their Effect on the Risk-Based Auditing Adoption of Commercial Banks in Jordan	2025	Anber Mohammad, Suleiman Shelash, Ibtihaj Taher Saber, Asokan Vasudevan, Riyad Neman Darwazeh, Rania Almajali, Zhou Fei	Data and Metadata	60	Scopus Q3
6	The Influence of Sustainable Risk Management on the Implementation of Risk-Based Internal Auditing	2024	Ahmed Almgrashi, Abdulwahab Mujalli	Sustainability (MDPI, Basel, Switzerland)	10	Scopus Q3
7	Designing Risk-Based Internal Audit Plan in the Internal Auditor Division	2022	Sudarmono dan Agustinus Nicholas L. Tobing	Budapest International Research and Critics Institute – Journal	4	Scopus Q4
8	A Review on Risk-Based Audit Approach: Malaysian Public Sector's Perspective	2023	Noor Afza Amran, Mazrah Malek, Mohamad Sharofi Ismail, dan Mohamad Naimi Mohamad Nor	IPN Journal of Research and Practice in Public Sector Accounting and Management	4	Scopus Q4
9	The Role of Audit Risk in Improving Audit Quality	2023	Tio Arriela Doloksaribu dan Rizalnur Firdaus	International Journal of Environmental Sustainability, and Social Science	3	Scopus Q4

No	Research Title	Publication Year	Researcher Name	Publication Name	Number of Citations	Index
10	Moderating Effect of Implementati on Risk-Based Auditing on Audit Quality	2021	Entar Sutisman, Yana Ermawati, Siti Mariani, Kartim, dan Aditya Halim Perdana Kusuma Putra	Jurnal Akuntansi, Volume XXV, No. 02	15	Sinta 2
11	The Factors Influencing the Risk-Based Internal Audit in Improving the Effectiveness of Internal Audit	2023	Taufik Kurniawan, Rina Br. Bukit, dan Keulana Erwin	International Journal of Social Science and Business (IJSSB)	3	Sinta 2
12	Evaluation of Risk Based Internal Audit Implementati on	2024	Nabilah Aulia, Lufti Julian	Riset & Jurnal Akuntansi	1	Sinta 2
13	Evaluation of the Implementati on of Risk-Based Audit to Detect Public Accountants' Non-Compliance with Professional Standards and Regulations	2023	Diky Mahendra, Agung Nugroho Soedibyo	Riset & Jurnal Akuntansi	6	Sinta 3
14	The Impact of Risk-Based Internal Audit Implementati	2025	Susi Astuti, Agustina Riyanti	Riset & Jurnal Akuntansi	1	Sinta 3

No	Research Title	Publication Year	Researcher Name	Publication Name	Number of Citations	Index
	on on Fraud Prevention					
15	The Role of Risk Based Internal Audit and Risk Management in the Prevention and Detection of Fraud in Auction Companies	2025	Silmy Auliya Zahra	Indonesian Journal of Economics, Social, and Humanities	1	Sinta 3
16	Risk-Based Audit as a Strategic Approach in Assessing Material Misstatement Risk	2025	Adila Yashthafya Thahirah, Andi Aisyah Rahmatillah, Ira Titin Ombe, Nur Rifka Amalia, dan Nur Hasan Triadi	PERMANA: Jurnal Perpajakan, Manajemen, dan Akuntansi	1	Sinta 3
17	Exploring the Interaction Between Risk Management and Risk-Based Internal Auditing	2025	Satria Berbudi	COSTING: Journal of Economic, Business and Accounting	9	Sinta 4
18	The Role of Risk-Based Internal Audit in Addressing Fraud Risk and Operational Efficiency in the Sales Cycle	2025	Kiromaini Tafalina, Putri Amelia, Jumriah, dan Shofiyah Hafsary Sakri	Jurnal Ilmiah PGSD FKIP Universitas Mandiri	1	Sinta 4

No	Research Title	Publication Year	Researcher Name	Publication Name	Number of Citations	Index
19	The Effectiveness of Implementing Risk-Based Internal Auditing in Improving the Quality of Risk Management	2023	Bertuani Casella Simarmata, R.A. Supriyono	ABIS Accounting and Business Information Systems Journal	8	Sinta 5
20	Risk Based Internal Auditing and Implementation on Organization	2022	Judson Ng, Juwenni, Meliesa	Sinomics Journal - International Journal of Social Science, Education, Communication and Economics	6	Sinta 5

The selected literature was then analyzed and synthesized to identify key findings, research trends, and the relationship between the implementation of risk-based internal auditing and the effectiveness of risk management and fraud prevention. All search results and a summary of the characteristics of the articles analyzed in this study are presented systematically in a table as a basis for further analysis, as follows:

Table 2: Previous Research Matrix

No	Research Title	Research Methods	Research Variables	Theories Used	Research Results/ Conclusions
1	RBIA: Factors related to its implementation	Quantitative, using a questionnaire-based survey method.	Implementation of RBIA, The implementation of a structured risk management framework.	Agency Theory, COSO Framework, Corporate Governance	Enterprise Risk Management are fundamental factors that contribute to the effective implementation of RBIA practices.
2	Factors Affecting Risk-Based Audit	Quantitative with Structural	Competitive Ability of Auditor, Audited Entity's Risks, Risk-Based Audit.	Audit Quality, Risk-Based Auditing Theory,	The implementation of RBIA is influenced by the risk of the audited entity and the

	and Quality Audit	Equation Modelin g.	Audit Quality.	Enterprise Risk Managemen t.	auditor's competitiveness.
3	Factors Affecting the Impleme ntation of RBIA	Quantitat ive with an explanat ory research design.	Implementation of RBIA, Internal Auditor Role, Risk Management System, Internal Control System.	RBIA, Enterprise Risk Managemen t, Good Corporate Governance	Risk management systems have a positive and significant influence on RBIA.
4	The Effect of Internal Audit Planning on Risk Factors	Quantitat ive with a survey approach .	Internal Audit Planning. Inherent Risk Factors Control Risk Factors.	RBIA, Internal Control Framework, Audit Risk Model	Internal audit planning has a significant influence on risk identification in banks, control risk factors and inherent risk factors.
5	Internal Audit Governan ce Factors and Their Effect on the Risk-Based Auditing Adoption	Quantitat ive with a cross-sectional design. Number of responde nts: 460.	Internal Audit Attributes, Audit Committee Attributes, Risk Management System, Internal Control System, Audit Planning, Audit Execution, Audit Reporting.	Agency Theory, Internal Audit Governance Framework, Risk-Based Auditing Theory.	Internal audit attributes, risk management, internal control system have a positive and significant influence on the implementation of RBIA.
6	The Influence of Sustainable Risk Manage ment on the Impleme ntation of RBIA	Quantitat ive explanat ory with Partial Least Squares – Structural Equation Modelin g.	Role of Internal Auditors, Training in Risk Management, Risk Management Effectiveness, Auditing Implementation.	Risk Managemen t Theory, Risk-Based Internal Auditing Theory, Governance and Internal Control	Risk management serves as the primary mediator integrating the internal audit function with risk-based.

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| 7 | Designing Risk-Based Internal Audit Plan in the Internal Auditor Division | Descriptive qualitative with a case study approach at PT. XY. | RBIA Plan, Risk Register and Risk Maturity Level, Assurance Mapping, Audit Universe and Resource Allocation, Manday Calculation, and Budget Efficiency. | RBIA, Three Lines of Defense Model Enterprise Risk Management, and Good Governance | RBIA effectively increases the audit focus on strategic and operational risks that have a direct impact on achieving corporate objectives. |
| 8 | A Review on Risk-Based Audit Approach: Malaysian Public Sector's Perspective | Library research method. | Audit Methodology: An Analytical Examination of Risk-Based Audit in Contrast to Conventional Internal Audit (IA). | Risk Management Framework, Risk Management Standard. | RBIA can minimize the risk of audit errors and irregularities. RBA model to strengthen the internal audit function in the public sector. |
| 9 | The Role of Audit Risk in Improving Audit Quality | Quantitative with an explanatory research approach | Audit report value, client satisfaction, confidence in audit result, reliability improvement, suspension of judgment, Size and complexity, risk assessment, scope of audit, client business risk, material misstatement risk identification, response to risk, risk assessment reliability. | Agency Theory, Attribution Theory, Auditing Standards | Audit risk has been demonstrated to influence the correlation between professional skepticism and the quality of audits, indicating that an elevated level of risk awareness among auditors correlates with an enhancement in the overall quality of the audit process. |
| 10 | Moderating Effect of Implementation Risk-Based Auditing | Quantitative with a survey-based field research approach | Independent Variables (X): Auditor Competence (X ₁), Auditor Independence (X ₂).
Moderative Variable (M): Risk-Based Audit. | Attribution Theory, Agency Theory). | The implementation of risk-based auditing can be a strategy to increase the effectiveness and quality of internal supervision in government agencies. |

	on Audit Quality		Dependent Variable (Y): Audit Quality.		
11	The Factors Influencing the Risk-Based Internal Audit in Improving the Effectiveness of Internal Audit	Quantitative explanatory research using Structural Equation Modeling (SEM) with Partial Least Squares (PLS).	Audit coverage, audit techniques, information systems, Introduction to RBIA, risk-based audit, Top Management Commitment Policy, leadership, decision-making, Audit practices, quality assurance plan, resource effectiveness, compliance	Agency Theory, Attribution Theory, COSO Internal Control Framework), Risk-Based Internal Auditing Model.	The role of internal audit have a positive influence on the success of RBIA implementation. RBIA significantly improves the effectiveness of internal audit, particularly in the context of local government.
12	Evaluation of RBIA Implementation	Descriptive qualitative with a case study approach at PT ABC.	Implementation of Risk-Based Internal Audit (RBIA), Risk Management Effectiveness / Risk Maturity, ranging from "Risk Naïve" to "Risk Enabled."	Risk-Based Internal Audit Framework, Risk Maturity Model.	For Improving Risk Maturity includes: developing a risk management policy, developing a risk register and risk appetite, and periodically evaluating and reporting risks.
13	Evaluation of the Implementation of RBA to Detect Public Accountants' Non-Compliance with Professional Standards and	Qualitative descriptive with a case study approach at the Financial Professional Development Center.	Effectiveness of Risk-Based Audit Implementation Description: The ability of the Public Accountant (PPPK) to detect non-compliance with professional standards and regulations.	Lending Credibility Theory, Public Interest Theory, Risk-Based Audit Theory, Regulatory Compliance Framework.	The implementation of risk-based auditing is effective in detecting non-compliance by public accountants with professional standards and regulations. Reforms to the structure and use of risk data strengthen the objectivity and independence of the oversight function.

Regulations

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| 14 | The Impact of Risk-Based Internal Audit Implementation on Fraud Prevention | Qualitative Interpretive Phenomenological Approach. | Conceptual/qualitative, not statistical, related to Risk Based Internal Audit (RBIA), fraud prevention, Risk Maturity Organization, leadership role. | Risk-Oriented Internal Audit, Organizational Risk Management, | The implementation of RBIA supported by mature risk management and effective internal control has been proven to be able to prevent fraud in government agencies. |
| 15 | The Role of RBIA and Risk Management in the Prevention and Detection of Fraud in Auction Companies | Descriptive qualitative with a case study approach. | This qualitative investigation analyzes the subsequent conceptual frameworks: Risk-Based Internal Audit (RBIA), Risk Management Fraud Prevention, and Detection. | Fraud Theory, Risk-Based Internal Audit Theory, Risk Management Theory, Internal Audit Theory. | The synergy between RBIA and Risk Management have been proven to reduce the probability and impact of fraud, increase transparency, and strengthen an anti-fraud culture. |
| 16 | Risk-Based Audit as a Strategic Approach in Assessing Material Misstatement Risk | Descriptive qualitative with a literature study approach. | Assessment of inherent risk, control risk, detection risk, and risk response, Material Misstatement Risk, Risk of fraud, reporting errors, and effectiveness of internal controls, Auditor professionalism, | Audit Risk Model, Agency Theory, Fraud Triangle Theory, COSO Enterprise Risk Management, Risk & Audit | The effectiveness of Risk-Based Auditing depends on: the competence and independence of the auditor, the quality of the audit quality control system, and integration with enterprise risk management (ERM). |

			skepticism, and audit quality control policies.	Universe Framework.	
17	Exploring the Interaction Between Risk Management and Risk-Based Internal Auditing	Literature review with a qualitative-descriptive approach and bibliometric analysis.	Risk-Based Internal Audit (RBIA), Risk Management, Internal Audit Effectiveness, Support from Senior Management, Competence of Internal Auditors, and the Deployment of Audit Technology.	Risk-Based Internal Audit Theory, Enterprise Risk Management, Good Corporate Governance	Integrating RBIA with the risk management system can improve audit efficiency, strengthen governance, and help organizations address risk uncertainty more proactively.
18	The Role of RBIA in Addressing Fraud Risk and Operational Efficiency in the Sales Cycle	Descriptive qualitative with a case study approach on companies operating in the sales cycle.	Risk identification, risk management, strengthening internal controls, and risk-based audit planning, Fraud Risk.	Agency Theory, Fraud Triangle Theory, Risk Management Framework, Good Corporate Governance	RBIA plays a strategic role in identifying and managing fraud risks and improving operational efficiency in the sales cycle.
19	The Effectiveness of Implementing Risk-Based Internal Auditing in Improving the	Qualitative with a case study approach. Data were collected through interviews.	The application of Risk Based Internal Auditing (RBIA) as the main focus, the quality of Risk Management as a result or implication of the application of RBIA.	Role Theory, Agency Theory, ISO 31000 Risk Management Framework.	RBIA effectively improves the quality of risk management. RBIA's effectiveness will be optimal if the organization is able to integrate qualitative risk assessments into quantitative measurements.

Quality of Risk Management					
20	Risk Based Internal Auditing and Implementation on Organization	Descriptive qualitative.	Risk-Based Internal Auditing (RBIA), Organizational Risk, Risk Management, Internal Audit, Internal Control, Organizational Governance.	RBIA Theory, Risk Management Theory, Enterprise Risk Management, Good Corporate Governance, Audit Risk Theory.	Risk-Based Internal Auditing enables internal auditors to focus on the most significant risks, improve the effectiveness of internal controls, and provide greater added value to management.

Implementation of Risk-Based Internal Audit on the Effectiveness of Risk Management

The effectiveness of risk management is chiefly determined by an entity's ability to recognize, assess, and mitigate risks in a manner that is simultaneously suitable and sustainable. In practice, the domain of risk management is contingent not solely upon formalized policies and procedures, but also upon oversight mechanisms that furnish assurance that risks are managed within the parameters deemed acceptable by the organization. Risk-based internal auditing assumes a pivotal role as an independent evaluative tool for assessing the effectiveness of risk management practices.

Internal auditors can prioritize high-risk areas and allocate audit resources more appropriately. Moreover, the governance of internal audits contributes significantly to the establishment of a culture that is cognizant of risk by underscoring the criticality of risk management and fostering the dedication of senior management. This fosters an organizational environment that views risk-based auditing as a critical tool in identifying and managing risks, with active support from senior management (Mohammad et al., 2025). Research by (Lois et al., n.d., 2021), indicates that risk-based internal auditing is a structured, value-added audit methodology that supports the internal audit function in providing assurance and consulting services related to risk management effectiveness.

According to the scholarly work conducted by (Mujalli, 2024), the establishment of a rigorous and formalized risk management framework has been empirically demonstrated to substantially facilitate the execution of Risk-Based Internal Audits (RBIA). The existence of a well-defined risk management paradigm enhances risk consciousness and cultivates a risk-centric organizational ethos, thus establishing a robust basis for the strategic planning and execution of risk-based audits. The significant correlation observed between risk management practices and the enactment of risk-based internal audits substantiates the assertion that the maturity of risk management is an essential precondition for the efficacious implementation of RBIA. A well-established risk management system provides an effective infrastructure to enhance management's understanding of risk, and support more appropriate and informed decision-making (Almgrashi & Mujalli, 2024).

RBIA can strengthen an organization's capacity to identify and manage risks more effectively by focusing on the highest-risk areas. The successful implementation of RBIA not only enhances the effectiveness of the internal audit function but also contributes significantly to achieving strategic goals and organizational sustainability. To achieve optimal risk management, organizations need to comprehensively integrate RBIA into the risk management process, while also accounting for the dynamics of external factors, such as regulatory developments and technological advances, which are constantly changing (Berbudi, n.d., 2025).

Research (Casella Simarmata & Supriyono, 2023) shows that the risk management and RBIA guidelines align with current principles, definitions, and roles of internal auditors. In the execution of risk management practices, it is imperative to transform qualitative risks into quantifiable metrics to ensure that all risk management activities are conducted in a systematic and numerical fashion.

Implementation of Risk-Based Internal Audit for Fraud Prevention

Risk-based internal auditing is a relevant and strategic approach to supporting fraud prevention. Risk-based internal auditing (RBIA) situates risk as the fundamental element throughout the comprehensive audit process, encompassing phases of planning, execution, and reporting. By focusing on the highest-risk areas, RBIA enables internal audit to identify potential fraud early and to evaluate the adequacy and effectiveness of controls designed to prevent it.

The implementation of risk-based audits is considered highly effective in assessing the level of compliance of Public Accounting Firms (KAPs) with professional standards and applicable regulations. However, challenges remain in determining the variables used to

measure KAP risk levels, particularly given the critical role qualitative factors play in setting audit objectives. Therefore, refining of the guidelines for preparing KAP risk profiles is necessary to ensure that risk-based oversight mechanisms can be implemented more optimally and effectively (Mahendra & Soediby, 2023).

Research (Astuti & Riyanti, 2025) shows that adequate internal control procedures serve as a preventive measure against fraud. The execution of risk-oriented internal audits significantly enhances these initiatives by empowering organizations to discern and foresee potential fraud risks at an early stage. The execution of risk-oriented internal audits alongside risk management is essential for the prevention and identification of fraudulent activities. The synergy of these two components has been shown to help organizations identify early indicators of fraud (Zahra, 2025).

According to research (Tafalina et al., 2025), risk-based internal audit plays a crucial role in identifying and controlling fraud risks and while doing so, contributing to increased operational efficiency. By prioritizing the highest-risk areas, the internal audit function can conduct more comprehensive oversight, uncover indications of fraud at an early stage, support business process improvements, and optimizing resource utilization, thereby sustainably increasing the company's operational efficiency.

5. CONCLUSIONS AND SUGGESTIONS

Based on the discussion and synthesis of various previous studies, it can be concluded that risk-based internal audit (RBIA) plays a strategic and significant role in improving the effectiveness of risk management and supporting fraud prevention within an organization. RBIA functions as an autonomous evaluative framework that facilitates organizations in the identification, assessment, and response to risks with enhanced efficacy and sustainability.

In the context of risk management effectiveness, the implementation of RBIA has been proven to strengthen an organization's capacity to prioritize high-risk areas and allocate audit resources more appropriately. The existence of a structured and formalized risk management system is a crucial prerequisite for effective RBIA implementation, as it provides the infrastructure that supports increased risk awareness, the formation of a risk-aware culture, and more informed managerial decision-making. Thus, risk management maturity and RBIA mutually reinforce each other in supporting the achievement of strategic objectives and organizational sustainability.

Furthermore, RBIA also contributes significantly to fraud prevention. By placing risk as the primary focus throughout the audit cycle, RBIA enables internal audit to identify potential

fraud early, evaluate the adequacy and effectiveness of internal controls, and close gaps that could potentially be exploited for fraud. The collaborative interaction among risk-oriented internal auditing, risk governance, and internal regulatory mechanisms has demonstrated efficacy in the early detection of fraudulent activities, enhancing adherence to established standards and regulations, and fortifying an organization's commitment to a culture of integrity.

However, the discussion also revealed that challenges remain in implementing RBIA, particularly regarding qualitative risk measurement. Insufficiently quantified qualitative risks have the potential to undermine the precision of audit prioritization and diminish the efficacy of risk-based supervision. Therefore, improving risk management and RBIA guidelines, particularly in integrating qualitative and quantitative aspects, is crucial to optimizing RBIA's benefits.

Overall, this paper confirms that RBIA functions as a supervisory tool and a strategic instrument that adds value to organizations by strengthening risk management, preventing fraud, increasing operational efficiency, and fostering effective sustainable organizational governance.

Based on the conclusions and limitations of the study above, several suggestions for further research are as follows:

1. Future research should utilize qualitative risk measurements and develop qualitative risk quantification models or indicators to make risk assessments within the RBIA more objective, consistent, and comparable.
2. A study of the RBIA's role in the context of digital transformation and regulatory developments is needed, as increasingly complex external environmental dynamics can affect risk profiles and internal audit strategies.

REFERENCES

- ACFE. (2024). Association of Certified Fraud Examiners The Nations Occupational Fraud 2024: A Report To The Nations. Association of Certified Fraud Examiners, 1–106.
- Albrecht, W. S., Albrecht, C. O., Albrecht, C. C., & Zimbelman, M. F. (2012). *Fraud examination* (4th ed.). Mason, OH: Cengage Learning.
- Alhebr, A., Alkebsee, R.H., Al-Matari, E.M., Al-bukhrani, M.A. & Omer, A.M. (2024). The Effect of Internal Audit Planning on Risk Factors: Evidence from Yemen's Banks. *Banks and Bank Systems*, 19(3), 45-57. [https://doi.org/10.21511/bbs.19\(3\).2024.05](https://doi.org/10.21511/bbs.19(3).2024.05)
- Almgrashi, A., & Mujalli, A. (2024). The Influence of Sustainable Risk Management on the Implementation of Risk-Based Internal Auditing. *Sustainability MDPI*, 16(19), 1-22. <https://doi.org/10.3390/su16198455>
- Amelia, F., Jumriah, Tafalina, K., & Sakri, S.H. (2025). Peran Audit Internal Berbasis Risiko dalam Mengangkat Risiko Kecurangan dan Efisiensi Operasional dalam Siklus Penjualan.

- Jurnal Ilmiah PGSD FKIP Universitas Mandiri, 11(04), 310-322. <https://doi.org/10.36989/didaktik.v11i04.8443>
- Amran, N.A., Malek, M., Ismail, M.S. & Nor, M.N.M. (2023). A Review on Risk Based Audit Approach: Malaysian Public Sector's Perspective. *IPN Journal of Research and Practice in Public Sector Accounting and Management*, 13(2). <https://doi.org/10.58458/ipnj.v13.02.05.0096>
- Astuti, S., & Riyanti, A. (2025). Pengaruh Pelaksanaan Risk Based Internal Audit Terhadap Pencegahan Fraud. *Riset & Jurnal Akuntansi*, 9(2), 1284-1294. <https://doi.org/10.33395/owner.v9i2.2621>
- Aulia, N., & Julian, L. (2024). Evaluasi Implementasi Risk Based Internal Audit. *Riset & Jurnal Akuntansi*, 8(3), 2018-2027. <https://doi.org/10.33395/owner.v8i3.2203>
- Berbudi, S. (2025). Exploring the Interaction Between Risk Management and Risk-Based Internal Auditing. *COSTING: Journal of Economic, Business and Accounting*, 8(4), 840-854. <https://doi.org/10.31539/f1qy3e05>
- Booth, A., Sutton, A., & Papaioannau, D. (2016). *Systematic Approaches to a Successful Literature Review*.
- COSO. (2017). *Enterprise Risk Management, Integrating with Strategy and Performance*. New York: COSO.
- Cressey, D.R. (1953). *Other People's Money: A Study In The Social Psychology Of Embezzlement*. The Free Press.
- Doloksaribu, T.A., & Firdaus, R. (2023). The Role of Audit Risk in Improving Audit Quality. *International Journal of Environmental, Sustainability, and Social Science*, 4(5), 1606-1618. <https://doi.org/10.38142/ijesss.v4i5.704>
- Dung, N.N.K. (2024). Factors Affecting Risk-Based Audit and Quality Audit. *Emerging Science Journal*, 8(3), 957-971. <http://dx.doi.org/10.28991/ESJ-2024-08-03-010>
- Griffiths, D. (2020). *Risk-Based Internal Auditing: An Introduction*. John Wiley & Sons.
- ICW. (2024). *Laporan Hasil Pemantauan Tren Korupsi Tahun 2024*. Indonesia Corruption Watch, 1-50.
- IIA. (2017). *International Professional Practices Framework (IPPF)*. Altamonte Springs.
- International Organization for Standardization. (2018). *ISO 31000:2018 – Risk Management: Guidelines*. Geneva: ISO.
- Jakfar, A., & Supranata, M. (2025). Hubungan Independensi Auditor , Kompetensi Auditor dan Pengalaman Auditor terhadap Kemampuan Auditor dalam Mendeteksi Kecurangan di KAP Jakarta. *KINERJA Jurnal Manajemen Organisasi Dan Industri*, 4(2), 153–159.
- Kurniawan, T., Bukit, R.B., & Erwin, K. (2023). The Factors Influencing the Risk-Based Internal Audit in Improving the Effectiveness of Internal Audit. *International Journal of Social Science and Business (IJSSB)*, 7(4), 1030-1041. <https://doi.org/10.23887/ijssb.v7i4.51371>
- Lois, P., Drogalas, G., Nerantzidis, M., Georgiou, I., & Gkampeta, E. (2021). Risk-Based Internal Audit: Factors Related To Its Implementation. *Managerial Auditing Journal*, 21(4), 645–662. <https://doi.org/10.1108/CG-08-2020-0316>
- Mahendra, D., & Soedibyo, A.N. (2023). Evaluasi Penerapan Risk-Based Audit untuk Mendeteksi Ketidapatuhan Akuntan Publik terhadap Standar Profesi dan Regulasi. *Riset & Jurnal Akuntansi*, 7(2), 1707-1719. <https://10.33395/owner.v7i2.1387>
- Mohammad, A., Shelash, S., Saber, I.T., Vasudevan, A., Darwazeh, R.N., Almajali, R. & Fei, Z. (2025). Internal Audit Governance Factors and Their Effect on the Risk-Based Auditing Adoption of Commercial Banks in Jordan. *Data and Metadata*, 4, 464-464. <https://doi.org/10.56294/dm2025464>
- Mujalli, A. (2024). Factors Affecting the Implementation of Risk-Based Internal Auditing.

- Journal of Risk and Financial Management (JRFM), 17(5), 1-20. <https://doi.org/10.3390/jrfm17050196>
- Ng., J., & Meliesa, J. (2022). Risk Based Internal Auditing and Implementation on Organization. *Riset & Jurnal Akuntansi. Sinomics Journal - International Journal of Social Science, Education, Communication and Economics*, 1(5), 653-660. <https://doi.org/10.54443/sj.v1i5.73>
- Permatasari, S.S., & Nugrahanti, T.P. (2024). Literatur Review: Suatu Tinjauan Fungsi Audit Internal Terhadap Tata Kelola Perusahaan. *Jurnal Nusa Akuntansi*, 1(3), 1-12. <https://doi.org/10.62237/jna.v1i3.162>
- Setyowati, A., Risma, C.A., & Nugrahanti, T.P. (2025). Studi Literatur: Determinan Kecurangan Laporan Keuangan. *Jurnal Akuntansi (JA) Fakultas Ekonomi Universitas Sarjanawiyata Tamansiswa*, 13(1), 1-10. <https://doi.org/10.30738/ja.v13i1.4564>
- Simarmata, B.C., & Supriyono, R.A. (2023). Efektivitas Penerapan Risk Based Internal Auditing Dalam Meningkatkan Kualitas Manajemen Risiko (Studi Kasus PT PLN UIKL Kalimantan). *Riset & Jurnal Akuntansi. ABIS Accounting and Business Information Systems Journal*, 11(4), 466-479. <https://doi.org/10.22146/abis.v11i4.90309>
- Sudarmono, & Tobing, A.N.L. (2022). Designing Risk-Based Internal Audit Plan in the Internal Auditor Division. *Budapest International Research and Critics Institute Journal*, 5(1), 1528-1542. <https://doi.org/10.33258/birci.v5i1.3755>
- Sugiyono. (2013). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Bandung: Alfabeta.
- Sutisman, E., Ermawati, Y., Mariani, S., Kartim, & Putra, A.H.P.K. (2021). Moderating Effect of Implementation Risk-Based Auditing on Audit Quality. *Jurnal Akuntansi*, 25(2), 276-293. <https://doi.org/10.24912/ja.v25i2.809>
- Thahirah, A.Y., Rahmatillah, A.A., Ombe, I.T., Amalia, N.R., & Triadi, N.H. (2025). Risk-Based Audit sebagai Pendekatan Strategis dalam Penilaian Risiko Material Misstatement. *PERMANA: Jurnal Perpajakan, Manajemen, dan Akuntansi*, 17(3), 1967–1974. <https://doi.org/10.24905/permana.v17i3.1216>
- Zahra, S.A. (2025). The Role of Risk Based Internal Audit and Risk Management in the Prevention and Detection of Fraud in Auction Companies. *Indonesian Journal of Economics, Social, and Humanities*, 8(1), 63-71. <https://doi.org/10.31258/ijesh.7.2.187-199>