The Effect of Continuous Auditing and Management Support as Moderator Toward Internal Audit Effectiveness in Malaysian Banking: A Conceptual Framework

Panjavarnam Venugopal[1*], Maisarah Mohamed Saat[2]

Azman Hashim International Business School, Universiti Teknologi Malaysia,

[2]Faculty of Management, Universiti Teknologi Malaysia

***Corresponding Author**

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ABSTRACT

The rapid growth of digital transactions, cyber enabled fraud and complex banking operations has increased the need for internal audit functions to provide timely and technology enabled assurance. Continuous auditing offers an alternative by using automated procedures, data analytics, and recurring or near real-time analysis to monitor transactions, controls and compliance activities. However, empirical research examining the contribution of continuous auditing to internal audit effectiveness remains limited, particularly in banking sectors. This conceptual paper examines how continuous auditing may enhance internal audit effectiveness in Malaysian banks. Based on agency theory, the paper argues that continuous auditing can reduce information asymmetry, strengthen monitoring, improve audit coverage, accelerate anomaly detection and support timely corrective action. The paper further proposes that management support moderate the relationship between continuous auditing and internal audit effectiveness. A conceptual model is developed in which continuous auditing represents the independent variable, internal audit effectiveness represents the dependent variable and management support represents the moderating variable. The paper contributes to the literature by connecting continuous auditing with internal audit effectiveness in the Malaysian banking context and by explaining the contingent role of management support. It also clarifies how the proposed relationships extend agency theory based internal audit research. This research is expected to use a quantitative analysis approach and survey strategy. The questionnaire results will be analysed using SPSS and SmartPLS software.

Keywords: Internal Audit Effectiveness, Management Support, Continuous auditing, Malaysian banking sector; Agency Theory

INTRODUCTION

The banking sector operates in an environment characterized by high transaction volumes, complex information systems, strict regulatory requirements, and rapidly changing fraud risks. In Malaysia, financial fraud affecting banks includes internal misappropriation by staff or management, as well as external fraud involving mule accounts, account takeovers, and authorized push payment (APP) scams that manipulate victims into transferring funds (Bank Negara Malaysia, 2023; Department of Statistics Malaysia, 2024; Royal Malaysia Police, 2023). These conditions require internal audit functions to provide assurance that is timely, reliable, and responsive to emerging threats. Unfortunately, traditional audit methods, which review historical data on a periodic basis, are insufficient in today's fast-paced, high-volume environment that demands immediate insights and rapid responses to financial issues. Therefore, internal audit should no longer be limited to periodic compliance reviews; its function must increasingly support the evaluation of risk management, internal controls, governance processes, fraud risk management, and operational performance. (Brown-Liburd & Vasarhelyi, 2015).

Although periodic audits remain useful, they can delay the identification of control failures and suspicious activities because they rely on samples and occur long after the underlying transactions. In contrast, continuous

auditing enables ongoing monitoring of financial transactions, controls, and compliance rather than only periodic reviews (Issa et al., 2016). Continuous auditing uses technology to support frequent or near real time assessment of transactions, controls, and risk indicators, allowing internal auditors to detect unusual patterns earlier, expand audit coverage, and communicate findings more rapidly to management and the audit committee (Chan & Vasarhelyi, 2011; Issa et al., 2016).

Continuous auditing involves conducting audits using technological tools for data extraction, mining, and analysis. Data mining, machine learning, and data analytics (collectively, data analytics) are commonly associated with continuous auditing and form the basis of its four-stage paradigm automation of audit procedures, data modelling and benchmark development, data analytics, and reporting (Chan & Vasarhelyi, 2011). The importance of continuous auditing is particularly evident in the banking sector, where large volumes of digital transactions coexist with risks from cybercrime, unauthorized transfers, identity theft, mule accounts, social engineering, and internal misconduct (Bank Negara Malaysia, 2024; Department of Statistics Malaysia, 2024; Gonzalez & Hoffman, 2018; Royal Malaysia Police, 2023). In such an environment, a control weakness may generate significant losses before a conventional audit cycle identifies it. Continuous auditing can therefore improve the timeliness and relevance of assurance by enabling the internal audit function to move from periodic inspection toward ongoing risk monitoring.

Therefore, continuous auditing is a powerful detection technique that increases the frequency and coverage of analysis of activities performed by the internal audit function (Gonzalez & Hoffman, 2018). Nevertheless, the mere existence of continuous auditing technology does not automatically ensure an effective internal audit function. Successful implementation depends on reliable data, suitable analytical tools, skilled auditors, management support, access to information, and the authority to investigate and report significant issues. The organizational context is therefore important when examining whether continuous auditing improves internal audit effectiveness.

This paper develops a conceptual explanation of the relationship between continuous auditing and internal audit effectiveness in Malaysian banks and proposes management support as a moderating variable. The central argument is that continuous auditing is more likely to improve internal audit effectiveness when senior management provides adequate resources, access, cooperation, authority, and support for implementing audit recommendations.

LITERATURE REVIEW

This research aims to enhance the internal audit function by identifying key drivers particularly continuous auditing capabilities that contribute to internal audit effectiveness. The study seeks to determine the extent to which these continuous auditing drivers (such as automation of audit procedures, data analytics, and near-real-time monitoring) contribute to internal audit effectiveness in organizations. Moreover, this research is expected to reveal the extent to which management support moderates the relationship between continuous auditing and internal audit effectiveness in the banking sector in Malaysia.

Continuous Auditing and Internal Audit Effectiveness

Continuous auditing is a powerful detection technique that increases the frequency and coverage of analysis of the activities performed by the internal audit function (Gonzalez & Hoffman, 2018). A continuous auditing system is supported by information technology applications, which allow auditors to access and analyse data gathered from several information systems within and outside the organisation (Hunton & Rose, 2010).

It is defined as “the combination of technology-enabled ongoing risk and control assessment” and described as a data analysis approach that operates in near real-time, guided by a predefined set of rules (Kuhn & Sutton, 2010; Rikhardsson & Dull, 2016). Thereby, continuous auditing involves conducting audits using technological tools for data extraction, mining, and analysis. Data mining, machine learning, and/or data analytics (collectively referred to as data analytics) are commonly associated with a continuous audit (Chan & Vasarhelyi, 2011; Vasarhelyi, Alles, & Kogan, 2004).

The existing literature suggests that continuous auditing functions as a complement to traditional audit methods, with both approaches working together to enhance the effectiveness and efficiency of the internal audit function (Gonzalez, 2012; Gonzalez et al., 2018). Compared to conventional audit approaches, continuous auditing is viewed as an innovative method that enhances the efficiency and scope of audit procedures and testing (Chan & Vasarhelyi, 2011; Huang & Vasarhelyi, 2019). Automation, cloud computing, and forensic analytics are among the technological advancements that are swiftly transforming the auditing profession (Azizi et al., 2024). Therefore, a similar finding as reported in the past studies is expected to occur regarding the effect of continuous auditing on internal audit effectiveness in the present research context. This study, therefore hypothesizes that: -

H1: There is an effect of continuous auditing on internal audit effectiveness.

The moderating Effect of Management Support on the Effect of Continuous Auditing on Internal Audit Effectiveness

Continuous auditing involves the real-time or near-real-time analysis of organizational data to provide ongoing assurance, allowing for prompt issue detection and improved decision making (Alles & Gray, 2020; Eulerich et al., 2022). Its adoption enhances internal audit effectiveness by increasing the timeliness, accuracy, and scope of audits, which supports better risk management and controls (Alles, 2020; Eulerich et 2024). Organizations leveraging continuous auditing technologies can detect anomalies, prevent fraud, and ensure compliance more effectively than with traditional periodic audit approaches (Mikesell et al., 2021; Wang, 2025). The automation and integration of continuous auditing tools enable continuous monitoring, transforming internal audits from retrospective checks into proactive, strategic activities (Zhang et al., 2022).

Management support plays a pivotal role in enabling the effective implementation of continuous auditing initiatives. Senior management endorsement signals to the organization that continuous auditing is a strategic priority, thereby facilitating cross-functional collaboration, data access, and the allocation of necessary resources (Alzeban & Gwilliam, 2014; Nordin, 2023). When senior management actively endorses and participates in continuous auditing initiatives, the positive effects on internal audit effectiveness are significantly amplified (Alzeban & Gwilliam, 2014; Abdelrahim & Al-Malkawi, 2025). Management support specifically enhances the effect of continuous auditing on internal audit effectiveness by ensuring adequate funding for technology acquisition and maintenance, facilitating access to real-time data across business units, promoting a culture of transparency and accountability that encourages timely remediation of identified issues, and integrating continuous auditing insights into strategic decision-making processes (Alqudah et al., 2023; Wang, 2025).

Previous research (Rezaee, Elam, & Sharbatoghlie, 2001; Skantze, 2017; Vasarhelyi, Alles, Kuenkaikaew, & Littley, 2012; Wu, Shao, & Ho, 2008) primarily concentrated on the technological architecture models of continuous auditing and continuous monitoring, while aspects such as management support and information quality (Alles et al., 2008) were not thoroughly or comprehensively examined. Furthermore, earlier studies (Vasarhelyi et al., 2012; Wu et al., 2008) have not explored the impact of management support and information quality on the implementation of continuous auditing and continuous monitoring, nor have they investigated how organizational context influences continuous auditing applications. This represents a significant gap in the literature, particularly given the increasing adoption of continuous auditing in diverse organizational settings and the recognized importance of management support as a critical success factor for technology driven audit initiatives (Kranacher et al., 2023; IIA, 2024). Given these benefits, management support becomes critical. Active endorsement, resource allocation, and facilitation by management can strengthen the impact of continuous auditing on internal audit effectiveness. Without such support, the potential of continuous auditing may be underutilized.

The applicability of this framework to Malaysian banks is supported by the sector's high transaction volumes, reliance on digital banking systems, stringent regulatory requirements, and exposure to cyber fraud. In this environment, continuous auditing may be particularly useful because it enables more frequent monitoring of transactions, controls, and risk indicators. However, its effectiveness is likely to depend on management support, including the allocation of resources, access to integrated data, cooperation between audit and

business units, and timely action on audit findings. These conditions are especially relevant in Malaysian banks, where internal audit functions operate within a regulated and rapidly digitising financial environment. Therefore, the present research attempts to investigate management support as a moderator in the effect of internal auditor's continuous auditing. Accordingly, the following hypotheses were articulated: -

H2: Management support moderates the effect of continuous auditing on internal audit effectiveness

THEORY

This study is grounded in agency theory as discussed below.

Agency Theory

This paper is grounded in agency theory, which explains the relationship between principals (such as shareholders and boards) and agents (such as managers) who are authorised to manage organizational resources. Agency problems may arise because principals and agents have different interests, because agents possess more information and principals may find it difficult to observe or verify managerial actions (Eisenhardt, 1989; Messier et al., 2014; Matinheikki et al., 2022). Within this framework, the separation of ownership and control creates conditions for information asymmetry and conflicting risk preferences, which in turn justify the use of monitoring and control mechanisms such as auditing to align agents' behaviour with principals' objectives (Eisenhardt, 1989; Messier et al., 2014; Matinheikki et al., 2022).

Internal audit can function as an internal monitoring mechanism that reduces information asymmetry and agency costs by providing principals with timely, independent assurance about agents' actions (Adams, 1994; Liu et al., 2024; Sarens & Abdolmohammadi, 2011). Through independent assurance, control evaluation, risk assessment and reporting, internal auditors help the board and audit committee assess whether management is acting in accordance with organizational objectives (Adams, 1994; Liu et al., 2024). Moreover, management support provides internal auditors with adequate resources, authority, cooperation, and access to relevant information. These factors enhance the capacity of internal audit to identify agency problems and provide reliable assurance to the board and audit committee (Abbott et al., 2004; Lenz et al., 2017; Oussii & Taktak, 2018).

Continuous auditing extends this monitoring role by increasing the frequency and coverage of assurance activities, thereby strengthening the internal audit function's capacity to mitigate information asymmetry between principals and agents (Sarens & Abdolmohammadi, 2011; Laflafl & Saidi, 2025). It enables internal auditors to analyze transactions and control information more regularly, which may reduce the delay between the occurrence of a control problem and its detection (Liu et al., 2024).

In this context, continuous auditing can strengthen the information flow between operational management and those charged with governance by improving financial information transparency and the timeliness of assurance (Liu et al., 2024; Laflafl & Saidi, 2025). Azzali and Mazza (2018) examine the effectiveness of internal auditing from an agency theory perspective, viewing internal audit as an agent acting on behalf of the board of directors and management to help achieve organizational objectives. This aligns with the broader understanding of internal auditing as a function that supports organizational goals (Arens, Elder, & Beasley, 2014).

Overall, this study extends existing internal audit research in three ways. First, it links continuous auditing directly to internal audit effectiveness rather than treating technology adoption as an isolated implementation process. Second, it positions management support as a moderator, recognising that the value of continuous auditing depends not only on its technical capability but also on management's provision of resources, data access, cooperation, and authority. Third, it applies agency theory to the Malaysian banking context, where continuous auditing may reduce information asymmetry and strengthen the internal audit function's monitoring and assurance role.

A Proposed Conceptual Model/Framework

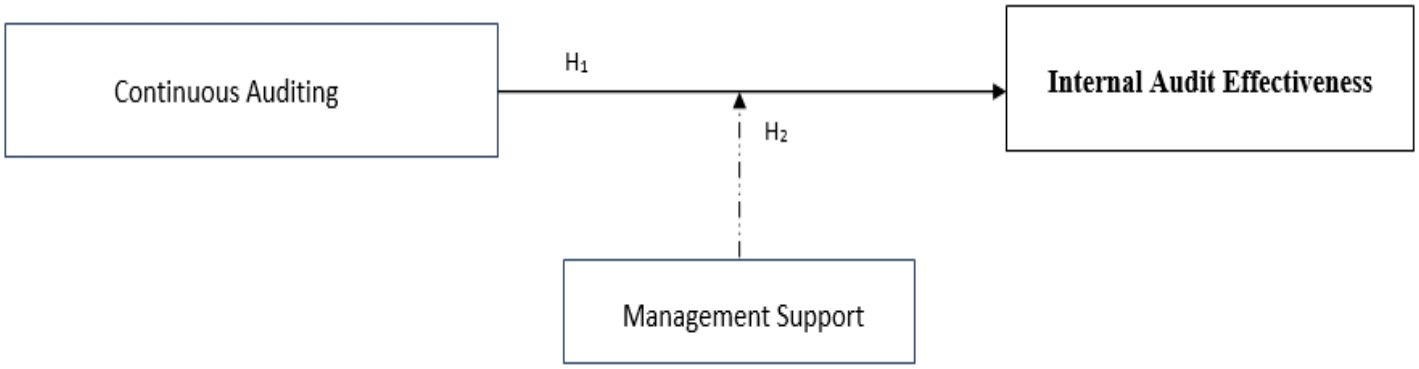

Figure 1. The Proposed Conceptual Model/Framework

METHODOLOGY

This conceptual paper is to examine the proposition that internal audit effectiveness is associated with continuous auditing, with management support as a moderator. The literature review was conducted through a structured search of peer-reviewed journal articles, conference proceedings, books, and authoritative professional publications. The databases used consists of Scopus, Web of Science, ScienceDirect, Emerald Insight, and Google Scholar.

The search terms included combinations of "continuous auditing", "continuous monitoring", "internal audit effectiveness", "internal audit quality", "management support", "audit technology", "data analytics", and "banking sector". The initial search covered studies published between 2018 and 2024, although foundational and highly relevant earlier studies were retained where they remained central to the development of continuous auditing and internal audit effectiveness. Studies were included if they addressed continuous auditing, internal audit effectiveness, audit technology, management support, or internal audit in financial institutions. Studies outside auditing, accounting, governance, or information systems research were excluded.

The survey instruments measurement of this study will be constructed and adopted from the reliable and validated instruments from past studies with modifications in terms of sentence structures and wording for appropriateness and suitable fit with the research context. All constructs will be assessed using multiple item scales adapted from prior research. The use of multiple item scales will be adopted because it allows the evaluation of internal consistency, which is essential in ensuring the psychometric robustness of the measurements (Kline, 2000; Robinson, 2018). The length of the questions or statements will be kept as short as possible without affecting their meanings to facilitate the respondents' comprehension (Sekaran & Bougie, 2020). Thus, all the questions will comply with the recommendation by Oppenheim (1992) of not to exceed 20 words per sentence.

CONCLUSION

This conceptual paper proposes that continuous auditing is positively associated with internal audit effectiveness, particularly when management provides adequate support for its implementation. By enabling technology driven controls, continuous auditing strengthens the internal audit function's capacity to detect control failures and irregularities in a timelier manner, thereby improving overall internal audit effectiveness. Agency theory is used in this study primarily to comprehend the fundamental motives underlying ongoing challenges encountered by internal auditors, particularly where agents (management) may pursue personal interests that diverge from organisational objectives.

This study is expected to inform policy makers, regulators, and banking organisations in Malaysia by highlighting the potential role of continuous auditing and management support in strengthening internal audit effectiveness.

REFERENCES

1. Abbott, L. J., Parker, S., & Peters, G. F. (2004). Audit committee characteristics and restatements. Auditing: A Journal of Practice & Theory, 23(1), 69–87. https://doi.org/10.2308/aud.2004.23.1.69
2. Abdelrahim, A., & Al-Malkawi, H.-A. N. (2025). Examining the moderating role of senior management support in internal audit effectiveness: Evidence from GCC region. International Journal of Disclosure and Governance, 22(3), 722–744. https://doi.org/10.1057/s41310-024-00264-1
3. Abdelrahim, A., & Al-Malkawi, N. (2025). Internal audit and risk management effectiveness: Evidence from emerging markets. Journal of Business Management and Accounting, 15(2), 187–208.
4. Adams, M. B. (1994). Agency theory as a framework for internal audit research. Managerial Auditing Journal, 9(3), 23–29.
5. Alles, M. G. (2020). Continuous auditing: Past, present, and future. International Journal of Accounting Information Systems, 38, 100468. https://doi.org/10.1016/j.accinf.2020.100468
6. Alles, M. G., & Gray, G. L. (2020). Audit evidence, technology, and judgement: A review of the literature and directions for future research. Journal of Information Systems, 34(3), 1–22. https://doi.org/10.2308/isys-50678
7. Alqudah, H., Amran, N. A., Hassan, H., Lutfi, A., Alessa, N., Alrawad, M., & Almaiah, M. A. (2023). Examining the critical factors of internal audit effectiveness from internal auditors' perspective: Moderating role of extrinsic rewards. Heliyon, 9(10), Article e20497. https://doi.org/10.1016/j.heliyon.2023.e20497
8. Alzeban, A. (2019). The relationship between internal control and internal audit recommendations. Journal of Accounting and Organizational Change, 15(3), 456–473. https://doi.org/10.1108/JAOC-01-2019-0007
9. Alzeban, A., & Gwilliam, D. (2014). Factors affecting the internal audit effectiveness: A survey of the Saudi public sector. Journal of International Accounting, Auditing and Taxation, 23(2), 74–86. https://doi.org/10.1016/j.intaccaudtax.2014.06.001
10. Arens, A. A., Elder, R. J., & Beasley, M. S. (2014). Auditing and assurance services: An integrated approach (15th ed.). Pearson.
11. Azizi, M., et al. (2024). Digital transformation in auditing: Automation, cloud computing and forensic analytics. Journal of Accounting and Organizational Change, 20(3), 412–430. https://doi.org/10.1108/JAOC-09-2023-0156
12. Azzali, S., & Mazza, T. (2018). The internal audit effectiveness evaluated with an organizational, process and relationship perspective. International Journal of Business and Management, 13(6), 238–254. https://doi.org/10.5539/ijbm.v13n6p238
13. Bank Negara Malaysia. (2013). Risk governance. https://www.bnm.gov.my/documents/20124/938039/gl_013_5.pdf
14. Bank Negara Malaysia. (2024). Annual Report 2024. https://www.bnm.gov.my/publications/ar2024/home
15. Brown-Liburd, H., & Vasarhelyi, M. A. (2015). Big data and audit evidence. Journal of Information Systems, 29(1), 1–16. https://doi.org/10.2308/isys-50497
16. Chan, D. Y., & Vasarhelyi, M. A. (2011). Innovation and practice of continuous auditing. International Journal of Accounting Information Systems, 12(2), 152–160. https://doi.org/10.1016/j.accinf.2011.02.001
17. Dawes, J. (2008). Does data collection change the type of data being collected? Survey Research Methods, 2(1), 3–12.
18. Department of Statistics Malaysia. (2024). Crime statistics, Malaysia, 2024. https://www.dosm.gov.my/portal-main/release-content/crime-statistics-malaysia
19. Eisenhardt, K. M. (1989). Agency theory: An assessment and review. Academy of Management Review, 14(1), 57–74. https://doi.org/10.5465/amr.1989.4279003
20. Eulerich, M., Fligge, B., López-Kasper, V., & Wood, D. A. (2024). Patience is key: The time it takes to see benefits from continuous auditing. Journal of Information Systems, 38(1), 1–21. https://doi.org/10.2308/isys-2023-034

21. Eulerich, M., Masli, A., Pickerd, J., & Wood, D. A. (2022). The impact of audit technology on audit task outcomes: Evidence for technology-based audit techniques. Contemporary Accounting Research, 40(2), 981–1012. https://doi.org/10.1111/1911-3846.12759
22. Gonzalez, G. C. (2012). Continuous auditing: Current applications and future directions. CPA Journal, 82(6), 54–59.
23. Gonzalez, G. C., & Hoffman, H. (2018). Continuous auditing: The natural complement to continuous controls monitoring. CPA Journal, 88(6), 54–59. https://www.cpajournal.com
24. Gonzalez, G. C., & Hoffman, V. B. (2018). Continuous auditing's effectiveness as a fraud deterrent. Auditing: A Journal of Practice & Theory, 37(2), 225–247. https://doi.org/10.2308/ajpt-51828
25. Gonzalez, G. C., Hoffman, H., & Neumann, S. (2018). Continuous auditing and continuous controls monitoring: A practical guide. Internal Auditor, 75(3), 44–51.
26. Huang, K., & Vasarhelyi, M. A. (2019). Applying cognitive technology theory to audit judgment: The case of continuous auditing. Journal of Information Systems, 33(3), 123–142. https://doi.org/10.2308/isys-50689
27. Hunton, J. E., & Rose, J. M. (2010). The impact of continuous auditing on auditor judgment and decision making. Auditing: A Journal of Practice & Theory, 29(1), 169–188. https://doi.org/10.2308/aud.2010.29.1.169
28. Institute of Internal Auditors. (2017). The three lines of defense in effective risk management and control [Position paper]. https://www.theiia.org
29. Institute of Internal Auditors. (2024). Global Internal Audit Standards. https://www.theiia.org
30. Issa, H., Sun, T., & Vasarhelyi, M. A. (2016). The impact of continuous auditing on internal audit effectiveness. Journal of Information Systems, 30(3), 1–21. https://doi.org/10.2308/isys-50477
31. Kline, P. (2000). Principles and practice of structural equation modeling (2nd ed.). Guilford Press.
32. Kranacher, M.-J., & Riley, R. (2023). Forensic accounting and fraud examination (3rd ed.). John Wiley & Sons.
33. Kuhn, J. R., Jr., & Sutton, S. G. (2010). Continuous auditing in today's enterprise systems environment. International Journal of Accounting Information Systems, 11(2), 102–113. https://doi.org/10.1016/j.accinf.2010.02.001
34. Laflafl, S., & Saidi, C. (2025). The contribution of internal audit to the enhancement of corporate governance. Revue Internationale des Sciences de Gestion, 8(3), 1087–1109. https://revue-isg.com/index.php/home/article/download/2085/1618
35. Lenz, R., Sarens, G., & Hoos, F. (2017). Internal audit effectiveness: Multiple case study research involving chief audit executives and senior management. EDPACS, 55(1), 1–17. https://doi.org/10.1080/07366981.2017.1278980
36. Liu, G., Wang, J., Sun, Y., Guo, J., & Zhao, Y. (2024). Internal audit quality and accounting information comparability: Evidence from China. PLOS ONE, 19(10), e0310959. https://doi.org/10.1371/journal.pone.0310959
37. Matinheikki, J., Kauppi, K., Brandon-Jones, A., & van Raaij, E. M. (2022). Making agency theory work for supply chain relationships: A systematic review across four disciplines. International Journal of Operations & Production Management, 42(13), 299–334. https://doi.org/10.1108/IJOPM-12-2021-0757
38. Messier, W. F., Jr., Reynolds, J. K., Simon, C. A., & Wood, D. A. (2014). The effect of using the internal audit function as a management training ground on the external auditor's reliance decision. The Accounting Review, 86(6), 2131–2154. https://doi.org/10.2308/accr-10136
39. Mikesell, L., et al. (2021). Continuous auditing and fraud detection: Evidence from field deployments. Journal of Forensic & Investigative Accounting, 13(2), 210–235.
40. Nordin, I. G. (2023). An internal auditor's commitment to independence: The effect of professional scepticism, self-efficacy and job satisfaction. Asian Finance Review, 7(2), 1–14. https://www.sciedupress.com/journal/index.php/afr/article/view/23422
41. Nurarifah, N., & Kuntadi, K. (2024). Determinants of internal audit effectiveness: Competence, independence, and communication. Journal of Accounting and Finance, 14(2), 88–102.

42. Oussii, A. A., & Taktak, N. B. (2018). The impact of internal audit function characteristics on internal control quality. Managerial Auditing Journal, 33(5), 450–469. https://doi.org/10.1108/MAJ-06-2017-1579
43. Petreanu, C. (2020). The role of internal audit in corporate governance and risk management. Annals of the University of Oradea: Economic Science, 29(1), 345–352.
44. Qader, S., et al. (2024). Technology-enabled internal auditing: AI, blockchain and data analytics. Journal of Accounting and Finance, 14(3), 45–62.
45. Rahmayanti, R., & Utomo, H. (2019). Internal audit effectiveness: The role of competence, independence, and communication. Journal of Accounting and Management, 8(1), 23–34.
46. Rezaee, Z., Elam, R., & Sharbatoghlie, A. (2001). Continuous auditing: The audit of the future. Managerial Auditing Journal, 16(3), 150–158. https://doi.org/10.1108/02686900110385605
47. Rikhardsson, P., & Dull, R. B. (2016). Continuous auditing: Past, present and future. Journal of Emerging Technologies in Accounting, 13(1), 1–18. https://doi.org/10.2308/jeta-51384
48. Robinson, M. A. (2018). Using multi-item psychometric scales in research and practice in human resource management. Human Resource Management.
49. Royal Malaysia Police. (2023). Laporan jenayah 2023 [Crime report 2023]. https://www.rmp.gov.my
50. Sarens, G., & Abdolmohammadi, M. (2011). Determinants of internal audit function effectiveness: An international study. International Journal of Auditing, 15(3), 221–240. https://doi.org/10.1111/j.1099-1123.2011.00434.x
51. Sekaran, U., & Bougie, R. (2020). Research methods for business: A skill-building approach (8th ed.). Wiley.
52. Skantze, J. A. (2017). Continuous auditing: Internal audit at a crossroads? [Master's thesis, Stockholm University]. http://urn.kb.se/resolve?urn=urn:nbn:se:su:diva-145066
53. Vasarhelyi, M. A., Alles, M. G., & Kogan, A. (2004). Principles of analytic monitoring for continuous assurance. Journal of Information Systems, 18(Supplement), 1–21. https://doi.org/10.2308/jis.2004.18.s-1.1
54. Vasarhelyi, M. A., Alles, M., Kuenkaikaew, S., & Littley, J. (2012). The acceptance and adoption of continuous auditing by internal auditors: A micro analysis. International Journal of Accounting Information Systems, 13(3), 267–281. https://doi.org/10.1016/j.accinf.2012.09.001
55. Wang, Y. (2025). Continuous auditing and compliance monitoring in digital banking. Journal of Financial Regulation and Compliance, 33(1), 45–62. https://doi.org/10.1108/JFRC-05-2024-0078
56. Wu, C. H., Shao, Y. E., & Ho, B. Y. (2008, April). On an agent-based architecture for continuous collaborative auditing. In Proceedings of the 12th International Conference on Computer Supported Cooperative Work in Design (pp. 355–360). IEEE. https://doi.org/10.1109/CSCWD.2008.4537099
57. Zhang, Y., Chen, X., & Liu, J. (2022). From retrospective to proactive: How continuous auditing transforms internal audit functions. International Journal of Accounting Information Systems, 45, 100556. https://doi.org/10.1016/j.accinf.2022.100556
58. Zhang, Y., et al. (2023). Digital transformation in internal audit: AI, blockchain, and data analytics. International Journal of Accounting Information Systems, 48, 100601. https://doi.org/10.1016/j.accinf.2023.100601