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## **Enhancing The Excellence of Quality Management System Auditors: A Competency-Based Training Model with Instructional Design Strategic Approaches and Measurable Outcomes**

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### **ABSTRACT**

#### **KEYWORDS**

competency-based training, training strategies, auditor performance, quality improvement

The development and implementation of a competency-based training model for Quality Management System (QMS) auditors are crucial for enhancing audit quality and organizational performance. This study identifies and addresses gaps in current auditor training programs through a structured approach that includes clear instructional goals, effective assessment tools, and robust instructional strategies. The research utilizes Training Needs Analysis (TNA) data and aligns training objectives with industry expectations through Occupational Standards and Competency Standards. Learning outcomes are formulated using the ABCD method (Audience, Behaviour, Condition, Degree) to ensure clarity, measurability, and achievability. The training program employs Outcome-Based Learning and Teaching (OBLT) methodologies, ensuring that the focus remains on achieving specific competencies. Self-assessment based on competency standards encourages reflective learning and self-improvement, while competency-based assessments measure the effectiveness of the training and the skills acquired by participants. The program culminates in the awarding of Micro Credentials and Certificates of Competency, which are traceable to national and international standards, thereby validating the skills and knowledge gained. Through rigorous testing and evaluation involving experts, educators, and participants, the study refines the training model to ensure its effectiveness and relevance. The findings indicate that the competency-based training model significantly improves the skills and performance of QMS auditors, leading to more effective audits and continuous quality improvement within organizations. This research contributes to the field by providing a comprehensive, evidence-based approach to developing high-quality training programs for QMS auditors.

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### **INTRODUCTION**

Competent auditors of Quality Management Systems (QMS) are crucial for the integrity and reliability of QMS audits. Their skills and knowledge determine the accuracy and thoroughness of the audit process. (Gremyr et al., 2021) underscores the significance of auditor competence in maintaining the effectiveness and reliability of QMS. Similarly, (Bawuah, 2024) emphasizes that competent auditors are fundamental to ensuring accurate and thorough evaluation processes, which uphold the integrity and reliability of QMS audits. (Alsaedi & Kamyabi, 2023; Alsughayer, 2021) both support the assertion that the auditors' skills and

knowledge directly impact the accuracy and thoroughness of the audit process. Furthermore, (AB WAHID & TAN, 2021) highlights that the expertise of auditors is a key determinant of the accuracy and thoroughness of QMS audits, reinforcing the heavy dependence of audit integrity and reliability on auditor competence.

Quality Management System (QMS) is essential for maintaining and improving the efficiency and effectiveness of processes within an organization. It ensures that the organization consistently meets customer and regulatory requirements. (Brachnata & Wening, 2021) underline the importance of QMS in maintaining and improving organizational processes, ensuring compliance, and enhancing customer satisfaction. Similarly, (Gremyr et al., 2021) supports the assertion that a QMS is crucial for maintaining and improving process efficiency and effectiveness, ensuring that organizations consistently meet customer and regulatory requirements. (Akhtulov et al., 2019) further underscores that a well-implemented QMS is vital for continuous improvement and compliance. Additionally, (Bakhtiar et al., 2023) demonstrates that implementing a QMS, particularly ISO 9001, significantly enhances the efficiency and effectiveness of organizational processes.

The Competency-Based Training approach focuses on developing the specific skills and knowledge required for auditors to perform effectively. It ensures that training is targeted and relevant to the needs of the auditors. Wolor (Khairunnisa et al., 2023) asserts that competent auditors are fundamental to maintaining the integrity and reliability of Quality Management System audits. (Lorentzon et al., 2023) highlights that auditors' skills and knowledge significantly impact the accuracy and thoroughness of the audit process. (Thottoli et al., 2022) underscores the importance of competency-based training and effective training strategies in enhancing the performance and effectiveness of QMS auditors. Additionally, (Vitalis et al., 2024) discusses the importance of continuous professional development and training for auditors to ensure they remain up-to-date with the latest standards and practices, thereby enhancing the overall quality and effectiveness of QMS audits.

Effective training strategies are necessary to ensure that training programs are designed and delivered in a way that maximizes learning and skill acquisition. (Almoslamani, 2022) emphasizes that effective training strategies are critical in ensuring that programs for internal auditors are structured to maximize learning and skill acquisition. Similarly, (Williams & Hodges, 2023) highlights the significance of competent auditors and effective training strategies in maintaining the integrity, reliability, and continuous improvement of Quality Management Systems. (Valenstein-Mah et al., 2020) further emphasizes that effective training strategies are crucial for maximizing learning and skill acquisition in training programs.

The performance of auditors directly impacts the quality of the audit process and outcomes. Improving auditor performance leads to more effective audits and better organizational performance. (Indrayati & Supanto, 2021) highlights that auditor performance is significantly influenced by their skills and knowledge, which in turn impacts the quality of the audit process. (Wiyantoro et al., 2023) identifies that the performance of auditors directly affects the quality of audit outcomes, and improving auditor performance leads to better organizational performance. (Deyganto, 2014) states that the competency of internal audit staff has a significant positive effect on organizational performance. (Kalembe et al., 2024; Kebede & Chufameo, 2019) emphasize the importance of competent QMS auditors in ensuring the integrity and reliability of QMS audits.

The ultimate goal of enhancing auditor competencies is to drive continuous quality improvement within the organization. Effective audits identify areas for improvement and ensure that corrective actions are implemented. (Thottoli et al., 2022) underscores that the quality of the audit process is highly dependent on the auditors' skills and knowledge, which directly impacts the reliability of the audit findings and the effectiveness of the Quality Management System. (Rumasukun, 2024) emphasizes that enhancing auditor competencies

through continuous training and education is crucial for driving continuous quality improvement within organizations. (Abdelrahim & Al-Malkawi, 2022) highlights the critical importance of competent auditors, effective training strategies, and a robust QMS for ensuring high-quality audits and continuous improvement within organizations.

However, Many organizations struggle with ensuring the competency of their QMS auditors. Traditional training methods may not adequately address the specific skills and knowledge required for effective auditing. This leads to inconsistent audit quality and missed opportunities for improvement. There is a need for a structured, competency-based training program that can systematically enhance the skills and performance of QMS auditors.

## RESEARCH METHOD

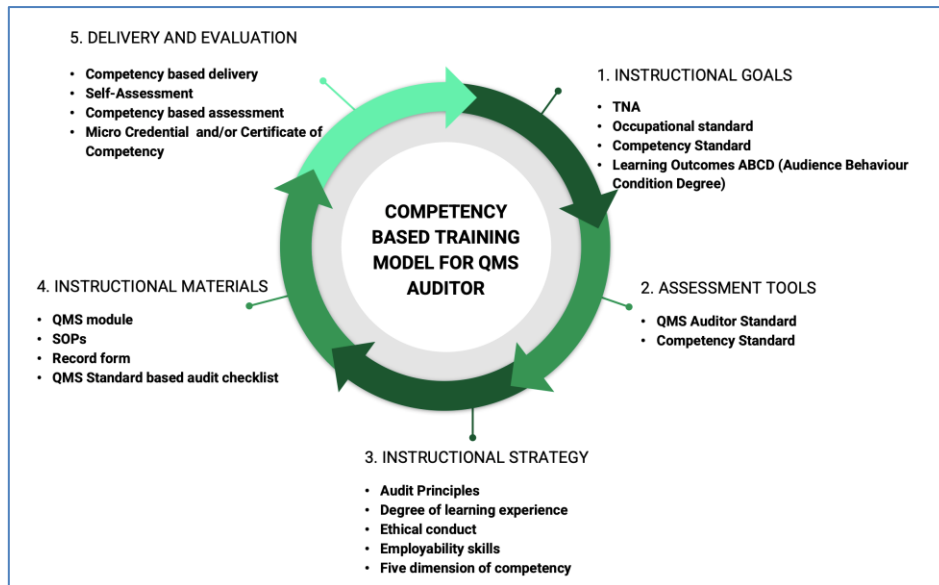
This research uses a research and development approach based on model (McKenney & Reeves, 2018). The R&D method involves a cyclical process of research, development, testing, evaluation, and refinement, ensuring the creation of effective and evidence-based learning models. By integrating comprehensive research design and leveraging established instructional design models, this approach aims to develop a robust and adaptable competency-based training program for QMS auditors. The literature provides a solid foundation and practical guidance for implementing R&D in educational settings, ensuring that the developed learning model is both theoretically sound and practically relevant.

## RESULTS AND DISCUSSION

### Model/prototype Development

By **Needs Analysis** to identify the specific needs and gaps in the current learning process for Quality Management System (QMS) auditors, and **Literature Review** on competency-based training, QMS auditing standards, instructional design models (such as Dick and Carey), and successful implementations of similar educational programs. **Model Development is conducted to design** an initial learning model based on the findings from the needs analysis and literature review. It present the development of a competency-based training model for Quality Management System (QMS) auditors. This model is designed to enhance the effectiveness and quality of auditor training programs by aligning instructional goals, assessment tools, instructional strategies, instructional materials, and evaluation methods with recognized competency standards.

The model below outlines the key elements and criteria for developing a comprehensive training program for QMS auditors. Each component, from the identification of training needs to the final delivery and evaluation, is meticulously structured to ensure that the training is robust, relevant, and adheres to both national and international standards.



**Figure 1. Model of Competency Based Training with Instructional Design Strategic approaches and measurable outcomes**

1) **Develop Instructional Goals:** The first step in developing a comprehensive training program for QMS auditors is to establish clear instructional goals. This process begins with identifying Training Needs Analysis (TNA) data specific to the QMS to ensure that the training addresses particular gaps and requirements. Occupational Standards are then identified within the Quality Management System context to align the training objectives with industry expectations. Competency Standards further define the specific duties and responsibilities of QMS auditors. Finally, Learning Outcomes are formatted using the ABCD method (Audience, Behaviour, Condition, Degree) to ensure they are clear, measurable, and achievable. (Gremyr et al., 2021) emphasizes the importance of setting clear instructional goals as the foundational step in developing a comprehensive training program for QMS auditors. (Goffnett, 2020) also highlights that clear instructional goals, informed by TNA data and aligned with Occupational and Competency Standards, are essential for developing effective training programs for QMS auditors. Underscores the necessity of establishing clear instructional goals to ensure that the training is relevant, effective, and aligned with industry standards. Similarly, (Bouchetara et al., 2022) stresses the importance of a systematic approach in developing instructional goals, which includes identifying training needs, setting occupational and competency standards, and ensuring clear and measurable learning outcomes.

From the TNA analysis, the need for Quality Management System (QMS) auditors was identified as trained personnel with the competence to conduct quality assurance system audits for an organization according to national and international standards. The general instructional goal of the competency-based training is for participants to be capable of performing as QMS Auditors in accordance with QMS auditor standards and within the context of quality management systems across five dimensions of competency (task skills, task management skills, contingency management skills, job/role environment skills, transfer skills). The subordinate general instructional goals, based on competency standards (SKKNI 333-(2020)), are: first, participants should be able to Manage An Audit Program within the context of a quality management system with two learning experiences. Second, participants should be able to Conduct QMS Audits within the context of a quality management system with two learning experiences. Specific instructional objectives can be elaborated in the learning objectives map.

- 2) **Identify Assessment Tools:** Effective assessment tools are crucial for evaluating the competencies of QMS auditors. The QMS Auditor Standard serves as a primary assessment tool, ensuring that all evaluations align with recognized industry standards. Additionally, the Competency Standard is utilized to measure specific skills and knowledge areas, providing an objective assessment of the performance and progress of participants throughout the training program, i.e. standard competencies: manage an audit program, and conduct QMS audits. Thembekile (Sepeng et al., 2024) highlights that selecting and using appropriate assessment tools is vital in maintaining the integrity and effectiveness of the training program. (Huang et al., 2022) underscores the importance of using the QMS Auditor Standard as a primary assessment tool and the Competency Standard to measure specific skills and knowledge areas.
- 3) **Develop Instructional Strategy:** A well-structured instructional strategy is essential for the success of the training program. Audit principles are identified within the context of both general quality management and specifically Quality Management Systems to provide a comprehensive understanding. The degree of learning experience is defined according to the competency unit assessment guidelines, ensuring that the training is appropriately challenging and effective. Ethical conduct is emphasized according to the professional standards of the QMS auditor, highlighting the importance of integrity and professionalism. Employability skills are incorporated within units of competence to enhance the practical relevance of the training. Additionally, the five dimensions of competency are identified according to the competency unit assessment guidelines to ensure a holistic approach to skill development. (Kim et al., 2019) emphasizes that a well-structured instructional strategy is essential for the success of the training program. (Mishra & Alzoubi, 2023) underscores the importance of a well-structured instructional strategy for training success. (Bandgar, V., Shikshanshastra, U., Pandharpur, M. B. E., Bandgar, M., Bhanudas, V., & Bagwan, 2022) highlights the need for instructional strategies that promote active learning, critical thinking, and the development of employability skills in modern teaching and learning. (Özdoğan, 2022) emphasizes the need for effective instructional strategies that include clear definitions of instructional goals, alignment with occupational and competency standards, and ensuring that learning outcomes are specific and measurable.
- 4) **Develop Instructional Materials:** Developing high-quality instructional materials is a critical component of the training program. The QMS auditor module is created based on the competency unit, ensuring comprehensive coverage of all necessary topics. Standard Operating Procedures (SOPs) are developed according to competency standards to ensure consistency and clarity in training delivery. Record forms are designed based on competency standards to facilitate accurate documentation and tracking of progress. An audit checklist is also developed based on competency standards to guide auditors systematically through the evaluation process. (Akhund et al., 2018) and (Lebedynets et al., 2022) emphasize the importance of creating the QMS auditor module based on competency units for comprehensive topic coverage. (Lebedynets et al., 2022) highlights the critical role of developing high-quality instructional materials for effective training. (Bouchetara et al., 2022) underscores a systematic approach to developing instructional materials, including creating comprehensive modules, SOPs for consistency, record forms for documentation, and audit checklists for systematic guidance. This cohesive strategy ensures that instructional materials are thorough, clear, and aligned with competency standards, enhancing the overall effectiveness of the training program.
- 5) **Delivery and Evaluation:** The delivery and evaluation of the training program are conducted using a competency-based approach. Competency-based delivery is implemented

as Outcome-Based Learning and Teaching (OBLT), ensuring that the training focuses on achieving specific outcomes. Self-assessment is conducted based on competency standards to encourage reflective learning and self-improvement. Competency-based assessments are carried out to measure the effectiveness of the training and the competencies acquired by the participants. Finally, Micro Credentials and/or Certificates of Competency that are traceable to national and international standards are awarded to recognize and validate the skills and knowledge gained through the training program. (Elnasseh et al., 2024) supports this approach, highlighting its importance in ensuring that both delivery and evaluation are aligned with competency standards. (Betts et al., 2019) identifies that this approach ensures the training not only teaches theory but also models competency-based practice. (Lewis et al., 2022) illustrates how aligning the education process with defined competencies and rigorous assessments enhances the training's effectiveness. (Anggriani, 2024) emphasizes structured competency assessments, continuous feedback, and adapting training methods based on feedback. (Alharbi, 2024) underscores the importance of precise evaluation objectives, appropriate models and tools, effective communication of results, and continuous improvement based on evaluation findings. This cohesive strategy ensures the training program is outcome-focused, reflective, and continuously improving, with recognized validation of skills and knowledge.

In summary, the key elements and criteria for developing a comprehensive training program for **QMS** auditors involve setting clear instructional goals, identifying effective assessment tools, developing a structured instructional strategy, creating high-quality instructional materials, and implementing a robust delivery and evaluation process. These components work together to ensure that the training program is comprehensive, effective, and aligned with industry standards, ultimately enhancing the competencies of QMS auditors.

### **Evaluation and testing (expert, educators, and students)**

To ensure the effectiveness and quality of the developed competency-based training model, rigorous testing and evaluation must be conducted. This process involves engaging experts, educators, and students to provide comprehensive feedback on the prototype. The steps for conducting this evaluation are as follows:

**Expert Review,** To obtain professional insights and validation from subject matter experts in quality management and instructional design. The number of experts required for rigorous testing and evaluation of the competency-based training model for QMS auditors were 5-7 persons. The following is a table of review results by experts (educational technology, QMS experts, and certification bodies)

**Table 1. How Competency Standards Improve the Instructional design elements (Education Technology Expert)**

ELEMENTS	LIKERT SCALE
1. Competency standards ensure Alignment with Industry Needs	4.6
2. Competency standards ensure clear Learning Objectives	4.8
3. Competency standards contribute to the development of assessment instruments	4.7
4. Competency Standards in assessment guidelines contribute to the development of Instructional Strategies	4.6
5. Competency standards ensure Consistent Training Content	4.6
6. Competency standards (with their philosophy: criterion based, evidence based, participatory) facilitate Personalized Learning	4.5
7. Competency standards provide objective Assessment and Evaluation	4.7
EVERAGE	4.6

**Educator Evaluation,** To assess the usability and applicability of the training model from the perspective of educators who will implement it. The number of educator required for rigorous testing and evaluation of the competency-based training model for QMS auditors were 10 persons (Experienced QMS Trainers, Vocational Education Specialists, Academic Educators)

**Table 2. How Competency Standards Improve the Quality of Competency-Based Training (Education and Training Practicion)**

IMPACTS	LIKERT SCALE
1) <b>Clear Learning Objectives:</b> Competency standard ensures alignment with industry requirements, provides a clear roadmap for trainers and learners.	4.2
2) <b>Consistent Training Content:</b> Competency standard maintains uniform quality and relevance in training materials, ensures equal education for all learners.	4.9
3) <b>Alignment with Industry Needs:</b> Competency standard ensures training programs are relevant to current industry practices, prepares learners with applicable skills.	4.7
4) <b>Objective Assessment and Evaluation:</b> Competency standard enables objective measurement of progress, identifies areas for improvement, ensures fair and valid assessments.	4.9
5) <b>Continuous Improvement:</b> Competency standard keeps training programs current and relevant, encourages continuous improvement in training delivery and outcomes.	4.7
6) <b>Facilitation of Personalized Learning:</b> Competency standard enables tailored training content and methods, promotes effective and engaging learning experiences.	4.5
7) <b>Enhanced Employability:</b> Competency standard increases employability with recognized credentials, ensures learners have the required competencies.	4.5
8) <b>Quality Assurance:</b> Competency standard helps maintain high standards of training delivery, ensures programs are audited and evaluated against standards.	4.7
<b>EVERAGE</b>	<b>4.6</b>

This table outlines the ways in which competency standards enhance the quality of competency-based training by ensuring clear objectives, consistent content, industry alignment, objective assessment, continuous improvement, personalized learning, enhanced employability, and quality assurance.

**Training participation Testing,** To evaluate the model’s impact on learners’ engagement, understanding, and competency development. The number of participants for rigorous testing and evaluation of the competency-based training model for QMS auditors should be sufficient to provide meaningful data while remaining manageable for detailed observation and feedback collection. Here are some considerations and recommendations: Training Participants: 20-30 participants.

**Table 3. Results of Participant Evaluation**

Element	Score (Likert Scale)
Participants' satisfaction levels	4.9
Clarity of the instructional objectives	4.8
Effectiveness of the assessment tools	4.9
Engagement level and appeal of the instructional strategies	4.8
Usefulness and relevance of the instructional materials	4.9
Overall effectiveness of the training model	4.9

**Participants' satisfaction levels:** The majority of participants expressed high satisfaction with the training model. They appreciated the overall structure and content of the program. However, some participants suggested the inclusion of more real-world examples and practical applications to further enhance the relevance and applicability of the training.

**Clarity of the instructional objectives:** Most participants found the instructional objectives clear and easy to understand. This clarity helped them focus on the learning goals throughout the training. Nonetheless, a few participants felt that the objectives could be more explicitly stated at the beginning of each module to provide better guidance and context.

**Effectiveness of the assessment tools:** The assessment tools were generally found to be effective in measuring understanding and competency. Participants felt that the tools accurately reflected their grasp of the material. However, some participants suggested incorporating more diverse assessment methods, including practical evaluations, to better gauge their skills in real-world scenarios.

**Engagement level and appeal of the instructional strategies:** The instructional strategies were engaging, with a good mix of lectures, discussions, and practical exercises. Participants enjoyed the variety of teaching methods, which kept them interested and involved. A minority of participants suggested incorporating more interactive elements, such as group projects, to further enhance engagement and collaborative learning.

**Usefulness and relevance of the instructional materials:** The instructional materials were found to be useful and relevant to the training content. Participants appreciated the quality and applicability of the materials provided. However, some participants felt that additional supplementary materials could enhance their understanding and provide a more comprehensive learning experience.

**Overall effectiveness of the training model:** Overall, participants rated the training model as highly effective in improving their skills and knowledge. The training had a positive impact on their professional development. A few participants recommended extending the training duration to cover more advanced topics in greater depth, which could provide a more thorough understanding of complex concepts.

Participants highlighted the need for more real-world examples and practical applications to enhance learning. Additionally, incorporating more interactive elements and supplementary materials could further improve the training experience. Extending the training duration to cover advanced topics was also suggested to provide a more comprehensive learning experience.

The training program successfully improved participants' auditing skills and knowledge, preparing them effectively for their roles as QMS auditors. These insights provide valuable guidance for refining and enhancing future training programs.

Data analysis and model Refinement were conducted to synthesize the feedback and refine the training model based on comprehensive evaluation data, by: gather all feedback from experts, educators, and students; perform qualitative and quantitative analysis to identify key insights and areas for improvement; make necessary adjustments to the instructional goals, assessment tools, instructional strategies, materials, and evaluation methods based on the feedback; and update the documentation to reflect all changes and refinements made to the model.

By engaging experts, educators, and students in the evaluation process, the competency-based training model for QMS auditors can be rigorously tested and refined to ensure its effectiveness and relevance. This comprehensive approach ensures that the model is well-aligned with industry standards and educational best practices, ultimately enhancing the quality and impact of QMS auditor training programs.



## CONCLUSION

The development and implementation of a competency-based training model for Quality Management System (QMS) auditors significantly enhance audit quality and organizational performance. This study identified gaps in current auditor training programs and addressed them through a structured approach that includes clear instructional goals, effective assessment tools, and robust instructional strategies.

The use of Training Needs Analysis (TNA) data and alignment with Occupational and Competency Standards ensures that the training objectives meet industry expectations. Learning outcomes are formulated using the ABCD method (Audience, Behaviour, Condition, Degree) to ensure they are clear, measurable, and achievable.

The training program employs Outcome-Based Learning and Teaching (OBLT) methodologies, focusing on achieving specific competencies. Self-assessment encourages reflective learning and self-improvement, while competency-based assessments measure the effectiveness of the training and the skills acquired by participants. Micro Credentials and Certificates of Competency, traceable to national and international standards, validate the skills and knowledge gained.

Rigorous testing and evaluation involving experts, educators, and participants were conducted to refine the training model. The findings indicate that the competency-based training model significantly improves the skills and performance of QMS auditors. Participants reported high satisfaction levels, clarity in instructional objectives, effectiveness of assessment tools, and relevance of instructional materials.

In summary, the competency-based training model developed in this study offers a comprehensive, evidence-based approach to enhancing the competencies of QMS auditors. By aligning training with industry standards and incorporating continuous feedback and refinement, the model ensures that auditors are well-prepared to conduct thorough and reliable audits, driving continuous quality improvement within organizations. This research contributes valuable insights into the design and implementation of high-quality training programs for QMS auditors.

## REFERENCES

- AB WAHID, R., & TAN, P. L. (2021). Improving Qms External Auditors' audit Performance Through Further Education, Evaluation And Calibration. *Quantum Journal of Social Sciences and Humanities*, 2(6), 14–27.
- Abdelrahim, A., & Al-Malkawi, H.-A. N. (2022). The influential factors of internal audit effectiveness: a conceptual model. *International Journal of Financial Studies*, 10(3), 71.
- Akhtulov, A. L., Ivanova, L. A., & Charushina, E. B. (2019). Measuring the effectiveness of the quality management system as a tool for improving the organization's activities. *IOP Conference Series: Materials Science and Engineering*, 537(4), 42059.
- Akhund, M. A., Khahro, S. H., Siddiqui, F. H., & Khoso, A. R. (2018). *Adaptability of ISO quality standards in construction industry*.
- Alharbi, N. S. (2024). Evaluating competency-based medical education: a systematized review of current practices. *BMC Medical Education*, 24(1), 612.
- Almoslamani, Y. (2022). The impact of learning strategies on the academic achievement of university students in Saudi Arabia. *Learning and Teaching in Higher Education: Gulf Perspectives*, 18(1), 4–18.
- Alsaeedi, A. M. A., & Kamyabi, Y. (2023). The Impact Of Auditor Experience And Competence On Audit Quality With Moderating Role Of Auditors Ethics: Evidence From Iraq. *Russian Law Journal*, 11(11S), 112–128.
- Alsughayer, S. A. (2021). Impact of auditor competence, integrity, and ethics on audit quality in Saudi Arabia. *open Journal of Accounting*, 10(4), 125–140.
- Anggriani, M. D. (2024). *Pengaruh Profitabilitas, Solvabilitas, Likuiditas, Aktivitas Dan Kebijakan Dividen Terhadap Nilai Perusahaan (Studi pada Perusahaan Sub Sektor Makanan dan Minuman yang Terdaftar di Bursa Efek Indonesia Periode 2017-2021)*. Universitas Islam Sultan Agung Semarang.
- Bakhtiar, A., Nugraha, A., Suliantoro, H., & Pujotomo, D. (2023). The effect of quality management system (ISO 9001) on operational performance of various organizations in Indonesia. *Cogent Business & Management*, 10(2), 2203304.
- Bandgar, V., Shikshanshastra, U., Pandharpur, M. B. E., Bandgar, M., Bhanudas, V., & Bagwan, M. (2022). *Teaching And Learning..... Indian Journal Of Lifelong Learning And Development Teaching And Learning Strategies In 21 St Century*. <https://www.researchgate.net/publication/370954521>.
- Bawuah, I. (2024). Audit committee effectiveness, audit quality and earnings management: evidence from Ghana. *Cogent Business & Management*, 11(1), 2315318.
- Betts, L. R., Huntington, B., Iao, L., Dillon, G. V, Baguley, T., & Banyard, P. (2019). Developing a competency-based education training programme for university tutors. *The Journal of Competency-Based Education*, 4(4), e01200.
- Bouchetara, M., Amrani, A. F. Z., & Bedaida, I. E. (2022). The Implementation of a Quality Management System in Accordance with ISO 9001: 2015 Standard: A Case Study. *International Journal of Economics & Business Administration (IJEBA)*, 10(1), 261–286.
- Brachnata, T., & Wening, N. (2021). The Impact of the Implementation of ISO 9001: 2015 on the Quality Management System in Various Company Sectors. *Journal of Research in Business and Management*, 9(11), 17–22.
- Deyganto, K. O. (2014). Internal audit quality and its impact on public sector organizational performance: Evidence from sector Bureaus of Southern Ethiopia. *International Journal of Economy, Energy and Environment*, 1, 28.
- Elnasseh, A., Mehta, V. S., Manolova, G., Pedersen, G. A., Golden, S., Eloul, L., Gebrekristos, F., Collins, P. Y., Mutavi, T., & Mwayo, A. W. (2024). Perspectives on competency-based feedback for training non-specialists to deliver psychological interventions: multi-

- site qualitative study of the EQUIP competency-based approach. *BJPsych Open*, 10(4), e125.
- Goffnett, S. P. (2020). Leadership, goal acceptance, and QMS conformance readiness: exploring the mediating effects of audit team cohesion. *Total Quality Management & Business Excellence*, 31(1–2), 43–67.
- Gremyr, I., Lenning, J., Elg, M., & Martin, J. (2021). Increasing the value of quality management systems. *International Journal of Quality and Service Sciences*, 13(3), 381–394.
- Huang, S.-M., Fang, S.-C., Hung, C.-T., & Chen, Y.-H. (2022). Psychometric evaluation of a nursing competence assessment tool among nursing students: a development and validation study. *BMC Medical Education*, 22(1), 372.
- Indrayati, G. C., & Supanto, F. (2021). The Influence of Audit Quality on Auditor Performance with Mediating Organizational Commitment and Organization Culture. *Journal of Southwest Jiaotong University*, 56(2).
- Kalembe, D., Nkundabanyanga, S. K., Kaawaase, T. K., & Kayongo, I. N. (2024). The relationship between internal audit function quality and earnings quality: the moderating effect of CEO power. *Cogent Business & Management*, 11(1), 2311159.
- Kebede, T. N., & Chufameo, A. (2019). The effect of internal audit quality on organizational performance: The case of selected bureaus in south nation nationality people regional state, Ethiopia. *International Journal of Current Research*, 11(11), 8230–8237.
- Khairunnisa, H., Musyaffi, A. M., Wolor, C. W., & Nasution, H. (2023). Auditors' Competence, Audit Fee, Quality Control, and Audit Quality. *SCMS Journal of Indian Management*, 20(1).
- Kim, S. H., Weaver, S. J., Yang, T., & Rosen, M. A. (2019). Managing creativity and compliance in the pursuit of patient safety. *BMC health services research*, 19, 1–9.
- Lebedynets, V., Prokhorenko, O., Brin, P., & Nehme, M. (2022). On the way to QMS implementation: the main milestones and issues in emerging economy. *Torun International Studies*, 1(15), 113–131.
- Lewis, L. S., Rebesch, L. M., & Hunt, E. (2022). Nursing education practice update 2022: competency-based education in nursing. *SAGE Open Nursing*, 8, 23779608221140776.
- Lorentzon, J. I., Fotoh, L. E., & Mugwira, T. (2023). Remote auditing and its impacts on auditors' work and work-life balance: auditors' perceptions and implications. *Accounting Research Journal*, ahead-of-print.
- McKenney, S., & Reeves, T. (2018). *Conducting educational design research*. Routledge.
- Mishra, A., & Alzoubi, Y. I. (2023). Structured software development versus agile software development: a comparative analysis. *International Journal of System Assurance Engineering and Management*, 14(4), 1504–1522.
- Özdoğan, A. A. (2022). Revisiting Effective Instructional Strategies for Twenty-First-Century Learners. In *Educational Theory in the 21st Century: Science, Technology, Society and Education* (175–195). Springer Nature Singapore Singapore.
- Rumasukun, M. R. (2024). Developing Auditor Competencies through Continuous Training and Education. *Golden Ratio of Auditing Research*, 4(1), 14–23.
- Sepeng, T. D., Lourens, A., Van der Merwe, K., & Gerber, R. (2024). Certification bodies' interpretation and application of the ISO 19011 audit process guidelines. *International Journal of Quality & Reliability Management*.
- Thottoli, M. M., Ahmed, E. R., & Thomas, K. V. (2022). Emerging technology and auditing practice: analysis for future directions. *European Journal of Management Studies*, 27(1), 99–119.
- Valenstein-Mah, H., Greer, N., McKenzie, L., Hansen, L., Strom, T. Q., Wiltsey Stirman, S., Wilt, T. J., & Kehle-Forbes, S. M. (2020). Effectiveness of training methods for delivery

of evidence-based psychotherapies: A systematic review. *Implementation Science*, 15, 1–17.

Vitalis, A., Boritz, J. E., & Simeoni, L. (2024). Enhancing CPA competencies for internal audit roles. *International Journal of Auditing*, 28(3), 458–484.

Williams, A. M., & Hodges, N. J. (2023). Effective practice and instruction: A skill acquisition framework for excellence. *Journal of Sports Sciences*, 41(9), 833–849.

Wiyantoro, L. S., Yan, C., & Yuanyuan, L. (2023). Evaluating the performance of external auditor during COVID-19: The case of dysfunctional audit behaviour in Indonesia. *Cogent Business & Management*, 10(2), 1–58.



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