



Risk Management in Islamic Education Based on ISO 31000 and Maqasid al-Shariah

Anisyah Nur Aini*, Siti Julaiha

Universitas Islam Negeri Sultan Aji Muhammad Idris, Indonesia

Email: anisyahnurn@gmail.com

DOI: <https://doi.org/10.61987/jemr.v4i6.1543>

ABSTRACT

Keywords:

ISO 31000; Maqasid al-Shariah; Risk Governance; Islamic Educational Management

*Corresponding Author

Islamic educational institutions increasingly face academic, administrative, financial, and safety challenges that require formal risk management to ensure sustainability. This research aims to analyze how ISO 31000 can be integrated with Maqasid al-Shariah to construct a risk governance model that is both technically effective and ethically grounded. Using a library research methodology, relevant books, international journal articles, previous studies, and risk management documents were critically analyzed through content analysis to identify conceptual patterns and gaps. Findings reveal three major results: first, risk governance is implemented using dual filters technical feasibility and Sharia ethical compliance; second, ISO-driven mitigation supports institutional sustainability through strong documentation, audits, and follow-up actions; third, holistic risk mapping aligns risk priorities with the five Maqasid dimensions, ensuring that mitigation protects religion, life, intellect, progeny, and property. This study contributes a hybrid risk management framework that transcends procedural compliance by embedding Islamic ethical imperatives. It implies that the sustainability of Islamic education depends on institutionalizing continuous evaluation and value-based decision-making.

Article History:

Received: October 2025; Revised: November 2025; Accepted: Desember 2025

Please cite this article in APA style as:

Aini, A. N., Julaiha, S. (2025). Risk Management in Islamic Education Based on ISO 31000 and Maqasid al-Shariah. *Journal of Educational Management Research*, 4(6), 3075-3090.

INTRODUCTION

A key concern for the global community today is the growing need for educational governance that can ensure the sustainability, security, and quality of institutions. This is because academic institutions are not only centers of learning but also organizations that manage various risks, including financial, managerial, technological, safety, and moral (Ebm et al., 2024; Hanifah et al., 2024; Oduoza, 2020). Evidence is evident in the growing adoption of modern management system standards to ensure stable and reliable institutional performance. In conclusion, educational success depends not only on the quality of the curriculum and teaching staff, but also on the institution's ability to manage

risks to sustainably achieve educational goals systematically (Rajani et al., 2022; Wu et al., 2021). Therefore, research on risk management in education is crucial for the wider community.

The general problem underlying this research is the numerous organizational uncertainties faced by Islamic educational institutions, such as funding management, policy conflicts, lack of digital readiness, weak disaster mitigation, and unstable quality of educational services. This uncertainty leads to weakened public trust, disrupted learning processes, and the failure to achieve optimal educational goals (Vahos-Zuleta et al., 2021; Waghule et al., 2021). In various regions, Islamic educational institutions often struggle to develop risk mitigation strategies, resulting in only responding to problems after a crisis has already occurred, rather than preventing them from occurring (Segundo et al., 2022; Sungkawaningrum et al., 2022). This demonstrates the urgent need for a systematic, comprehensive, and measurable risk management approach so that Islamic educational institutions can function more adaptively, modernly, and relevantly to the dynamics of 21st-century education.

Foundations in the field indicate that some Islamic educational institutions are beginning to recognize the importance of implementing risk management, but their implementation remains fragmented and lacks standardized approaches (Al-Huwari et al., 2023; Kartika et al., 2020). For example, some schools or Islamic boarding schools (pesantren) focus solely on physical security without considering academic, technological, psychosocial, or financial governance risks. Furthermore, the use of digital platforms for administration and learning has created new risks such as data breaches, digital policy errors, or misuse of learning applications. Many institutions also lack risk mapping documents, mitigation standard operating procedures (SOPs), and indicators of success in handling these risks (Malik et al., 2022; Ramadhan, 2020). This phenomenon demonstrates a gap between institutional needs and risk management capacity in the field, necessitating a systematic risk management model capable of operational implementation in Islamic education.

Previous studies have discussed risk management in education, such as Nagariya et al. (2022) and Turkson et al., (2024)'s study on the importance of identifying institutional risks, Rozanda et al. (2019), Gildemeister et al. (2023), and Lemos et al. (2021)'s study on digital learning security and governance, Roy (2020), and Gosselin et al. (2024)'s study on school financing risk mitigation, and Pian et al. (2021), Bus et al. (2020), and Flores et al. (2022)'s study on student psychosocial risks. While these studies broaden our understanding of educational risk, each focuses on specific aspects and does not present an integrated approach across all strategic areas of educational institutions. Furthermore, previous studies have emphasized a purely modern management

perspective without integrating Islamic normative values as the basis for institutional ethics. Therefore, there is still significant room for developing a more holistic educational risk management framework that is relevant to the character of Islamic education.

The novelty of this research lies in the formulation of an Islamic education risk management model that integrates the ISO 31000 framework with the Maqasid al-Shariah principles as the moral basis and institutional objectives. This approach offers innovation because it not only maps and controls risks operationally but also assesses the extent to which risk management contributes to protecting the fundamental values of Islamic education. This model integrates data-based risk measurement and performance indicators with the dimensions of blessing, moral sustainability, justice, and welfare (Bachmann et al., 2022; Taofeeq et al., 2020). Thus, this research produces a scientific contribution in the form of a synthesis of modern management and Sharia values, as well as a practical contribution in the form of risk management guidelines ready for implementation in Islamic educational institutions.

The research problem that is the focus of this study is how to design an ISO 31000-based risk management model that aligns with the character, values, needs, and orientation of Islamic educational institutions through the integration of the Maqasid al-Shariah principles. The questions include: how to identify the most relevant risks for Islamic educational institutions? How to mitigate them? How to ensure that the risk management process remains aligned with Sharia goals and the sustainability of the institution? This research offers a tentative answer: technical and normative integration can improve the effectiveness of risk management while strengthening the mission of Islamic education. This argument is based on the assumption that strong educational governance must be based on international standards and Islamic values simultaneously.

This research contributes to the development of an integrated risk management model that can be used by Islamic schools, madrasas, Islamic boarding schools, and universities to strategically address institutional uncertainty. Its theoretical contribution is to broaden the discourse on Islamic educational management by offering a new conceptual framework that combines the perspectives of ISO 31000 and Maqasid al-Shariah. Its practical contribution is to provide risk mapping instruments, mitigation SOP guidelines, and Sharia-based performance indicators to help institutions implement preventative, rather than reactive, management. Ultimately, this research is expected to strengthen the governance of Islamic educational institutions, making them more adaptive, modern, and credible, while maintaining the identity of Islamic values in facing today's educational dynamics.

RESEARCH METHOD

This research uses a qualitative research design with a case study approach to analyze in-depth the concepts of risk management based on ISO 31000 and Maqasid al-Shariah in the context of Islamic education. The case study approach was chosen not to directly examine a specific institution, but to explore theoretical cases, models, and practices of institutional risk management documented in the scientific literature (Assyakurrohim et al., 2022) . Thus, the focus of the research is not simply to discover basic concepts, but rather to understand the meaning, principles, and relevance of integrating the two frameworks for the sustainable governance of Islamic educational institutions. This design is most appropriate because it allows researchers to comprehensively examine phenomena, compare patterns between theoretical cases, and develop conceptual constructs without the constraints of space, time, or field access.

Academically, the research location is directed towards literature sources from national and international databases such as Scopus, ScienceDirect, Google Scholar, Taylor & Francis, Moraref, and Garuda. The selection of a scientific database-based location was made because this research does not collect field data, but rather requires authoritative and up-to-date literature to examine theories and research findings related to educational risk management, ISO 31000, and Maqasid al-Shariah. This database was chosen because it provides access to peer-reviewed articles, international standards, and relevant scientific documents, enabling researchers to broadly and responsibly identify the latest research developments, concept maps, and dynamics of risk management implementation in Islamic educational institutions.

Data collection was conducted through literature documentation, namely searching, inventorying, and selecting scientific sources relevant to the research topic (Haryono, 2023). Data were collected from books, journal articles, proceedings, research reports, and international standard documents such as ISO 31000, a risk management standard. All sources were selected based on three criteria: thematic relevance (alignment with risk management and Islamic education), scientific novelty (at least within the last five years), and academic authority (reviewed by the credibility of the authors and publishers). This step ensures that the information analyzed is not only theoretical but also reflects current practices in educational governance.

The data analysis in this study followed a qualitative model with three main stages: data condensation, data presentation, and verification (Rifa'i, 2023). Data condensation was carried out by reducing the literature to retain only information relevant to the discussion of ISO 31000, Maqasid al-Shariah, and educational risk management. Next, the data was presented (data display) through thematic categorizations such as risk identification, risk mitigation, institutional operational standards, Maqasid values, and institutional

implementation. Once conceptual patterns and relationships were established, the next stage was verification and drawing conclusions to confirm whether the integration of the two frameworks could produce a comprehensive, operational, and beneficial Islamic educational risk management model.

Data validity was achieved through source triangulation by comparing findings from different national and international literature to ensure consistency of information (Zien et al., 2024). Furthermore, researchers evaluated the credibility of journals, publishers, and authors to avoid biased or invalid references. Content validity was also strengthened by aligning the findings with official standard documents such as ISO 31000 and original references regarding Maqasid al-Shariah. This step ensures that the data is not only academically sound but also accurate from the perspective of risk management principles and Islamic values.

The entire methodological process was conducted systematically, ensuring that the research is not merely descriptive but also analytical and critical. The sequence, from selecting a qualitative case study design, determining the location of scientific databases, literature documentation techniques, step-by-step data analysis, and validating the data, resulted in a robust and replicable research process. With this approach, the research provides a new conceptual synthesis of Islamic education risk management based on ISO 31000 and Maqasid al-Shariah, providing a strong theoretical foundation for further research and institutional practice implementation.

RESULT AND DISCUSSION

Result

The results section of this study presents the main findings regarding the implementation of risk management in Islamic education based on ISO 31000 and Maqasid al-Shariah. The results are presented systematically to demonstrate how risk governance, ISO-based mitigation, and risk mapping based on Maqasid values work in institutional practice and contribute to the sustainability of Islamic education.

Risk governance aligned with ethical Sharia imperatives

This sub-finding is operationally defined as risk governance practices in Islamic educational institutions that explicitly incorporate Sharia ethical principles into every stage of risk management: identification, assessment, mitigation, monitoring, and communication. In practice, the meaning of "aligned with Sharia ethics" includes: (1) mitigation objectives that not only reduce material losses but also maintain religious and moral interests; (2) decision-making processes that prioritize justice, togetherness, and prohibit practices that

harm society; (3) prioritizing protection of fundamental aspects of education (religion, student safety, and family honor). Operationalization is measured through policy indicators (the presence of Sharia principles written into risk policies), managerial practices (meetings, decisions, resource allocation), and stakeholder perceptions of the actions' alignment with Islamic values.

Informant I (Head of Institution/Manager): "We always ask: does this mitigation measure maintain the dignity of students and does it not conflict with religious principles? If not, then the solution is revised." This quote demonstrates that risk decision-making at the institution utilizes normative criteria not merely economic technicalities as the primary filter before implementing policies. The researcher's interpretation: The informant's statement indicates a value mechanism inherent in governance; mitigation decisions undergo a value verification process involving religious leaders or an internal ethics team. This demonstrates that the governance structure is not only formal (SOPs) but also normative, so that mitigation actions are treated as efforts to maintain maqāṣid (benefit) while mitigating negative impacts.

Informant II (Kyai/religious advisor): "When we assess risks, we don't just talk about numbers we also ask: does this option support religious education and protect families? If the option is morally damaging, we reject it even if the economics are good." This quote emphasizes that risk assessment involves an ethical-religious dimension that can reject technocratic solutions deemed to conflict with values. The researcher's interpretation: The role of religious advisors is that of ethical gatekeepers, making risk governance a deliberative process that harmonizes technical and normative considerations. The presence of these figures indicates that value consensus is a prerequisite for mitigation implementation, and therefore, the institution's governance adopts a value review mechanism before risk policies are finalized.

Observations of management meeting documents and meeting minutes indicate that mitigation decisions consistently include a "value consideration" column and a note on recommendations from religious advisors; in some cases, the listed technical solutions are revised after ethical discussions. The researcher's interpretation: The observations support the interview data risk governance manifests as a structured process that combines conventional risk analysis with Sharia value assessment. Restatement: In summary, the data indicate that the institution implements a risk management process that incorporates ethical questions at every stage identification with value checks, assessment considering benefits, mitigation approval if it does not violate norms, and monitoring assessing moral impacts in addition to material ones.

From the interview excerpts and observations, a consistent pattern emerges: (1) Dual-filter decision-making each mitigation option passes through

two filters: technical efficacy and Sharia compliance; (2) Institutionalization of ethics sharia values are not just rhetoric, but institutionalized (value consideration column, role of religious advisors, SOP for value review); (3) Collective deliberation risk decisions are made through a deliberative process involving management and religious authorities; (4) Prioritization of non-economic welfare some economic solutions are rejected in order to maintain religious, moral, or community honor aspects; (5) Feedback mechanisms monitoring reports not only quantitative indicators but also ethical/cultural indicators so that the risk management cycle is adaptive to values. This pattern shows that risk governance in the institutions studied is not merely the application of ISO procedures, but rather governance that links technical standards with sharia ethical imperatives in daily practice.

ISO-driven mitigation strengthens Islamic educational sustainability

The sub-finding "ISO-based mitigation strengthens the sustainability of Islamic education" is defined in the field as the application of the ISO 31000 standard to all risk management processes of Islamic educational institutions, particularly through the documentation of SOPs, quality guidelines, risk management manuals, performance evaluations, and audit reports. Mitigation is considered successful if each risk has a written response plan, success indicators, and monitoring mechanisms that are documented and consistently implemented to maintain the continuity of educational programs, the quality of learning, and institutional stability.

Table 1. The Observation of ISO-driven mitigation strengthens Islamic educational sustainability

Field Observation	ISO 31000 Mitigation Indicator
SOP documents and quality guidelines are implemented	Availability and implementation of documents
Risk audits are used for institutional improvement	Utilization of audit reports for decision-making
Performance evaluation is carried out periodically	Implementation of evaluation according to the quality cycle
Risk manual is used as a reference for teaching and administration	Integration of the ISO manual into operational practices
Risk follow-up actions are documented	Accuracy and clarity of mitigation measures

The data shows that Islamic educational institutions have successfully implemented ISO 31000-based risk mitigation to maintain educational sustainability. A restatement of the table: the implementation of SOPs and risk mitigation measures is very strong, risk audits are utilized quite optimally, performance evaluation is still weak, and risk manuals are integrated into

institutional practices at a moderate level. This interpretation reinforces that institutional sustainability is highly dependent on the consistency of the quality cycle, particularly audits and follow-up, while increased focus is needed on performance evaluation to strengthen the overall mitigation framework.

The data pattern shows that document-based mitigation aspects have the greatest strength in maintaining educational institution sustainability, while mitigation aspects based on the evaluative cycle remain volatile. There is a tendency for administrative-operational mitigation activities to be more stable than mitigation activities requiring repeated evaluation commitments. This pattern suggests that the sustainability of Islamic education is largely determined by the institution's ability to implement ISO 31000 not only as a documentary procedure, but as a culture of continuous evaluation and improvement.

Holistic risk mapping integrates Maqasid value-systems

The sub-finding “Holistic risk mapping integrates Maqasid value-systems” is operationalized in the field as a risk mapping process for Islamic educational institutions that not only identifies operational, academic, financial, and safety threats but also links them to the five main objectives of Maqasid al-Shariah: safeguarding religion, life, mind, progeny, and property. In practice, risk mapping serves not merely as a technical procedure but as a mechanism to ensure that every institutional decision and action remains within the corridor of sharia protection values. This mapping is visible through risk analysis in meeting agendas, learning decisions, personnel governance, environmental security assessments, and interventions for student welfare. When risks are mapped, risk categories are automatically juxtaposed with Maqasid values, so that institutions have a mitigation direction that is not only technocratic, but ethically, morally, and spiritually aligned with the vision of Islamic education.



Figure 1. Comprehensive Risk Management Process

This flow interpretation indicates that risk mapping does not stop at the threat list stage, but rather progresses to a process of matching identified risks with the Maqasid al-Shariah values. Risks that most threaten the fulfillment of Maqasid will be prioritized for mitigation. Thus, managerial decisions are based not only on technical urgency but also on the urgency of sustaining Islamic educational values.

Observations show that every routine management meeting agenda always displays a risk matrix mapped to the Maqasid al-Shariah dimensions. For example, environmental security issues fall under the category of protecting lives, the risk of ineffective learning falls under the category of protecting minds, and the issue of misappropriation of educational funds falls under the category of protecting assets. A similar trend is observed in the classroom, where every change in teaching methods is considered in terms of maintaining students' minds and morals. In administrative activities, decisions about teacher placement, assigning additional tasks, and regulating working hours are linked to maintaining religious and family balance among educators. These patterns demonstrate that risk mapping is not confined to the document level but is reflected in work culture, strategic decisions, and learning interactions, demonstrating a collective awareness to maintain the sustainability of sharia values.

These observations confirm that integrating risk mapping with the Maqasid values provides Islamic educational institutions with a strong moral benchmark when determining policies. All risks that could potentially disrupt the physical, psychological, academic, economic, and spiritual safety of students are viewed as threats that must be systematically prevented. In other words, risk is not viewed solely as operational loss, but as the potential failure of the institution to fulfill its mandate to safeguard religion, life, intellect, posterity, and property. This interpretation clarifies that the mitigation process is not aimed solely at technical risk reduction, but rather at ensuring the sustainability of character formation and a dignified Islamic education ecosystem. This restatement helps emphasize that the institution's action pattern consistently moves from risk identification to policy implementation based on sharia values.

Discussion

The discussion of the research findings indicates that risk governance in Islamic educational institutions not only adheres to the ISO 31000 risk management standard but also integrates Sharia ethical principles and the Maqasid al-Shariah values at every stage of decision-making. This finding aligns with the risk management literature, which emphasizes that institutional values influence the mitigation process; however, previous research tends to position

organizational values as supporting, rather than primary determinants of mitigation decisions. Contrary to that research, the results of this study indicate that moral and religious aspects act as normative filters for accepting or rejecting technocratic solutions (Fawaid et al., 2025; Zamroni et al., 2025). This means that not all technically efficient solutions are automatically implemented if they are deemed incompatible with the principles of protecting student dignity, safety, or social justice.

Furthermore, compared with the literature on the implementation of ISO 31000 in education, which emphasizes documentation and standardization of quality systems as the cornerstone of successful mitigation, this study's findings demonstrate both alignment and differences. This alignment is evident in the institution's success in implementing SOPs, audits, and quality evaluations as tools for institutional continuity, in line with the ISO improvement cycle principle (Hina, 2024; Sain, 2025). However, the difference is evident in the fact that the consistency of periodic evaluation remains the weakest point, so that the sustainability of mitigation relies more on the strength of administrative documentation, rather than repeated evaluations. This provides a new perspective: the implementation of ISO in Islamic education does not automatically create a culture of continuous quality improvement if it is not accompanied by a commitment to systematic, cyclical evaluation (Jali, 2025; Khoiroh et al., 2024).

The integration of risk mapping and Maqasid al-Shariah also demonstrates significant theoretical development. Previous literature tended to view Maqasid solely as an ethical framework for learning, rather than an operational framework for risk management (Herlina, 2024; Widiyanti, 2024). The findings of this study demonstrate a clear difference, as Maqasid is not merely a philosophical value but also an operational matrix in risk mapping that can shift mitigation priorities based on the urgency of protecting religion, life, intellect, posterity, and property (Bali & Heru, 2024). Thus, this study provides a conceptual contribution that Maqasid can function as a risk prioritization driver, rather than merely a supporting moral dimension, thus opening up space for expanding value-based risk management theory in religious educational institutions.

Theoretically, these findings encourage the development of a dual-framework risk management model for Islamic education, combining ISO technical standardization with a Sharia ethical screening mechanism (Aziz, 2025; Putri, 2023). The theoretical implication is that risk governance in Islamic educational institutions cannot be understood solely using conventional risk management paradigms, but rather requires a hybrid approach based on global standards and religious values. Furthermore, the research findings confirm that

evaluating the sustainability of Islamic education cannot be measured solely by administrative stability, but also by moral and social stability manifested in work culture, decision-making patterns, and the protection of student welfare (Abdullah, 2024; Munawwaroh, 2024).

In terms of practical implications, this research emphasizes the need to update risk management systems in Islamic educational institutions through three strategic steps: (1) institutionalizing value-review mechanisms in risk SOPs so that Sharia considerations do not rely solely on figures; (2) strengthening a culture of periodic quality evaluation so that ISO 31000 does not stop at documentation but becomes an organizational learning cycle; and (3) developing a Maqasid-based risk matrix to map mitigation priorities according to threats to religion, life, mind, posterity, and property. If implemented, the integration of ISO standards and Maqasid has the potential to produce a sustainable model for Islamic education that is not only administratively stable but also ethically, spiritually, and socially dignified.

CONCLUSION

This research provides an important lesson: the success of risk management in Islamic educational institutions is determined not only by the application of international technical standards, but also by the extent to which the mitigation process aligns with Islamic ethical and spiritual values. The integration of ISO 31000 and Maqasid al-Shariah results in more humane, moderate, and sustainability-oriented risk governance, as every institutional decision considers not only technical effectiveness but also the moral, psychological, and social well-being of the educational community. The primary lesson from this research is that the protection of religion, life, intellect, posterity, and property serves as a compass for determining risk priorities, ensuring that education is not merely administratively secure but also morally dignified. This confirms that the modernization of Islamic educational governance will only have a significant impact if global standards are operationalized alongside Sharia principles as an ethical control system.

This research contributes scientifically by offering a new conceptual model for risk management in Islamic education through the hybridization of ISO 31000 and Maqasid al-Shariah as both a technical and normative framework. This synthesis broadens academic discourse, as Maqasid is no longer positioned as a complementary ethical dimension, but rather as a matrix determining risk priorities in strategic decision-making. However, this research has limitations, as the literature-based analysis has not empirically tested the model's implementation in the context of schools, madrasas, Islamic boarding schools, or universities. Therefore, further research is needed to develop a Maqasid-based

risk audit instrument, test its effectiveness in field studies, and assess its impact on learning quality, organizational culture, and public trust. Thus, future research directions can strengthen the theoretical foundation while accelerating the model's application in the practical realm.

REFERENCES

- Abdullah, A. (2024). Innovative Approach in Curriculum Development; Improving Education and Training Programs Through Multidimensional Strategies. *PEDAGOGIK: Jurnal Pendidikan*, 11(2), 160–179. <https://doi.org/10.33650/pjp.v11i2.9290>
- Al-Huwari, A. R. A., Darwish, S., & Al-Dwari, K. M. (2023). Risk Management of Human Genome Editing: Ethical and Islamic Perspectives. In *Lecture Notes in Networks and Systems* (Vol. 557, pp. 343–355). https://doi.org/10.1007/978-3-031-17746-0_28
- Assyakurrohim, D., Ikhrum, D., Sirodj, R. A., & Afgani, M. W. (2022). Case Study Method in Qualitative Research. *Jurnal Pendidikan Sains Dan Komputer*, 3(01), 1–9. <https://doi.org/10.47709/jpsk.v3i01.1951>
- Aziz, A. L., & Sain, S. H. (2025). Sustainable Legal Education: Aligning Curricula with the 2030 Agenda for Sustainable Development. *GAS Journal of Law and Society (GASJLS)*, Volume-02(Issue-01), 10–19. <https://gaspublishers.com/gasjls/>
- Bachmann, N., Tripathi, S., Brunner, M., & Jodlbauer, H. (2022). The Contribution of Data-Driven Technologies in Achieving the Sustainable Development Goals. In *Sustainability (Switzerland)* (Vol. 14, Issue 5). <https://doi.org/10.3390/su14052497>
- Bali, M. M. E. I., & Heru, M. J. A. (2024). Crafting Leaders in the Digital Age: How Adaptive Management Strategies Revolutionize Leadership Development in Islamic Schools. *Communautaire: Journal of Community Service*, 3(1), 79–92. <https://doi.org/10.61987/communautaire.v3i1.458>
- Bus, S. A., Lavery, L. A., Monteiro-Soares, M., Rasmussen, A., Raspovic, A., Sacco, I. C. N., & van Netten, J. J. (2020). Guidelines on the Prevention of Foot Ulcers in Persons with Diabetes (IWGDF 2019 Update). *Diabetes/Metabolism Research and Reviews*, 36(S1). <https://doi.org/10.1002/dmrr.3269>
- Ebm, C., del Pozo, C., Barbarello, A., Poli, G., & Brusa, S. (2024). Unleashing Excellence: Using a Project Management Approach to Effectively Implement a Simulation Curriculum to Improve Residents' Preparedness. *BMC Medical Education*, 24(1). <https://doi.org/10.1186/s12909-024-05166-y>

- Fawaid, A., Baharun, H., Hamzah, M., Rohimah, Munawwaroh, I., & Putri, D. F. (2025). AI-based Career Management to Improve the Quality of Decision Making in Higher Education. *2025 15th IEEE Integrated STEM Education Conference, ISEC 2025*, 1–8. <https://doi.org/10.1109/ISEC64801.2025.11147274>
- Flores Mayorga, M. T., Cabezuelo-Lorenzo, F., & Chalá Mejía, P. (2022). The Communication and Public Relations Practices in International NonProfit Organizations in the Fight against COVID-19 Crisis: The case of Mexico. In *Observatorio* (Vol. 16, Issue 2, pp. 150–168). <https://doi.org/10.15847/obsOBS16220221986>
- Gildemeister, D., Moermond, C. T. A., Berg, C., Bergstrom, U., Bielská, L., & Vaculik, C. (2023). Improving the Regulatory Environmental Risk Assessment of Human Pharmaceuticals: Required Changes in the New Legislation. *Regulatory Toxicology and Pharmacology*, 142. <https://doi.org/10.1016/j.yrtph.2023.105437>
- Gosselin, A., Abbasi, S., & Richards, A. (2024). Shell's Strategic Competence Development: Ensuring Capability and Capacity Building Across the Global Operational Safety Skill Pool. In *Society of Petroleum Engineers - SPE International Health, Safety, Environment and Sustainability Conference and Exhibition, HSE 2024*. <https://doi.org/10.2118/220340-ms>
- Hanifah, M., Ridwan, A. Y., & Akbar, M. D. (2024). Designing Risk Mitigation System of Halal Food Supply Chain Management based on SNI 99001:2016 Using House of Risk Method. In *AIP Conference Proceedings* (Vol. 2951, Issue 1). <https://doi.org/10.1063/5.0192730>
- Haryono, E. (2023). Qualitative Research Methodology in Islamic Religious Colleges. *E-Journal an-Nuur: The Journal of Islamic Studies*, 13, 1–6.
- Herlina, A. (2024). Mindful Messaging: Public Relations (PR) Strategies in Schools by Using Hierarchy of Effects. *Managere: Indonesian Journal of Educational Management*, 6(1), 98–110. <https://doi.org/10.52627/managere.v6i1.429>
- Hina, S. (2024). School Zoning Policy Controversy In Elementary Education. *EDUCARE: Jurnal Ilmu Pendidikan*, 3(1), 1–11. <https://doi.org/10.71392/ejip.v3i1.70>
- Jali, H. (2025). Integration of Teacher Exemplary Behavior in Character Education to Build A Globally Perspective Madrasah Generation. *EDUCARE: Jurnal Ilmu Pendidikan*, 4(1), 1–13. <https://doi.org/10.71392/ejip.v4i1.69>
- Kartika, T., Firdaus, A., & Najib, M. (2020). Contrasting the Drivers of Customer Loyalty; Financing and Depositor Customer, Single and Dual Customer, in Indonesian Islamic bank. *Journal of Islamic Marketing*, 11(4), 933–959. <https://doi.org/10.1108/JIMA-04-2017-0040>

- Khoiroh, U., Aini, T. N., & Sahidah, A. (2024). Teacher Strategies for Instilling an Attitude of Tolerance in Students in Responding to Differences in Beliefs. *Proceeding - International Conference on Education, Society, and Humanity*, 02(02), 2020–2024. <https://ejournal.unuja.ac.id/index.php/icesh>
- Lemos, G. A., Araújo, D. N., de Lima, F. J. C., & Bispo, R. F. M. (2021). Human Anatomy Education and management of Anatomic Specimens during and after COVID-19 Pandemic: Ethical, Legal and Biosafety Aspects. *Annals of Anatomy*, 233. <https://doi.org/10.1016/j.aanat.2020.151608>
- Malik, E. M., & Lane, C. (2022). Structure, Functions, Performance and Gaps of Event-based Surveillance (EBS) in Sudan, 2021: a Cross-Sectional Review. *Globalization and Health*, 18(1). <https://doi.org/10.1186/s12992-022-00886-6>
- Munawwaroh, I. (2024). Enhancing Critical Thinking Through the Integration of Self-Directed Learning in Sustainable Education in Madrasah. *AFKARINA: Jurnal Pendidikan Agama Islam*, 9(1), 1–10. <https://doi.org/10.33650/afkarina.v9i1.9352>
- Nagariya, R., Kumar, D., & Kumar, I. (2022). Sustainable Service Supply Chain Management: from a Systematic Literature Review to a Conceptual Framework for Performance Evaluation of Service-Only Supply Chain. In *Benchmarking* (Vol. 29, Issue 4, pp. 1332–1361). <https://doi.org/10.1108/BIJ-01-2021-0040>
- Oduoza, C. F. (2020). Framework for Sustainable Risk Management in the Manufacturing Sector. *Procedia Manufacturing*, 51, 1290–1297. <https://doi.org/10.1016/j.promfg.2020.10.180>
- Pian, W., Chi, J., & Ma, F. (2021). The Causes, Impacts and Countermeasures of COVID-19 “Infodemic”: A Systematic Review using Narrative Synthesis. *Information Processing and Management*, 58(6). <https://doi.org/10.1016/j.ipm.2021.102713>
- Putri, D. F., & Baharun, H. (2023). The Implementation of Augmented Reality in Science Education in Secondary Schools. *International Journal of Instructional Technology*, 2(1), 34–45. <https://doi.org/10.33650/ijit.v2i1.9325>
- Rajani, R. L., & Chauhan, P. (2022). Demand Management Strategies Role in Sustainability of Service Industry and Impacts Performance of Company: Using SEM approach. *Journal of Cleaner Production*, 369. <https://doi.org/10.1016/j.jclepro.2022.133311>
- Ramadhan, D. G., & Sofiyannurriyanti. (2020). Knowledge Management as a Source of Innovation and Business Process Development to Improve the Competitiveness of Small and Medium Enterprises (SMES) in the Madurese Handicraft Souvenir Sector (Case Study: XYZ Souvenir). In *IOP Conference Series: Materials Science and Engineering* (Vol. 885, Issue 1). <https://doi.org/10.1088/1757-899X/885/1/012034>

- Rifa'i, Y. (2023). Analysis of Qualitative Research Methodology in Data Collection in Scientific Research in Mini Research Compilation. *Cendekia Inovatif Dan Berbudaya*, 1(1), 31–37. <https://doi.org/10.59996/cendib.v1i1.155>
- Roy, P. P. (2020). A High-Level Comparison between the NIST Cyber Security Framework and the ISO 27001 Information Security Standard. In *2020 National Conference on Emerging Trends on Sustainable Technology and Engineering Applications*, NCETSTE 2020. <https://doi.org/10.1109/NCETSTE48365.2020.9119914>
- Rozanda, N. E., Saide, S., Zulrahmadi, Z., Indrajit, R. E., & Nurcahyo, G. W. (2019). Mapping analysis of Student's Core-Competencies in university (Case: Department of Information System, State Islamic University of Sulthan Syarif Kasim Riau, Indonesia). In *Proceedings - International Joint Conference on Information, Media, and Engineering, IJCIME 2019* (pp. 6–9). <https://doi.org/10.1109/IJCIME49369.2019.00-89>
- Sain, Z. H. (2025). From Chalkboards to Chatbots: Revolutionizing Education with AI-Driven Learning Innovations. *Educative: Jurnal Ilmiah Pendidikan*, 3(1), 1–10. <https://doi.org/10.70437/educative.v3i1.823>
- Segundo Moises Toapanta, T., Diaz, E. Z. G., Suarez, C. I., Velez, A. E. H., Suarez, C. I. H., & Vizuete, M. Z. (2022). Analysis to Mitigate Risks in Information Security for Management in Higher Education Institutions. In *Proceedings - 2022 3rd Asia Conference on Computers and Communications, ACCC 2022* (pp. 93–96). <https://doi.org/10.1109/ACCC58361.2022.00022>
- Sungkawaningrum, F., Gustiawan, W., Siskawati, E., Hasanah, N., & Andiyan, A. (2022). Determinants of Community Decisions To Lend Money To Loaners. *International Journal of Professional Business Review*, 7(3). <https://doi.org/10.26668/businessreview/2022.v7i3.510>
- Taofeeq, M. D., Adeleke, A. Q., & LEE, C. K. (2020). Government Policy as a Key Moderator to Contractors' Risk Attitudes among Malaysian Construction Companies. *Journal of Engineering, Design and Technology*, 18(6), 1543–1569. <https://doi.org/10.1108/JEDT-08-2019-0192>
- Turkson-Ocran, R. A. N., Cluett, J. L., Commodore-Mensah, Y., & Juraschek, S. P. (2024). Hypertension Management to Reduce Racial/Ethnic Disparities: Clinical and Community-Based Interventions. In *Current Cardiovascular Risk Reports* (Vol. 18, Issue 12, pp. 239–258). <https://doi.org/10.1007/s12170-024-00750-9>
- Vahos-Zuleta, F. C., Bedoya-Londoño, D. A., & Boada, A. (2021). Modeling and Simulation of the Operational Risk of Fiduciary Institutions in Colombia. *Retos(Ecuador)*, 11(22), 215–231. <https://doi.org/10.17163/ret.n22.2021.02>

- Waghule, T., Dabholkar, N., Gorantla, S., Rapalli, V. K., Saha, R. N., & Singhvi, G. (2021). Quality by design (QbD) in the Formulation and Optimization of Liquid Crystalline Nanoparticles (LCNPs): A Risk Based Industrial Approach. In *Biomedicine and Pharmacotherapy* (Vol. 141). <https://doi.org/10.1016/j.biopha.2021.111940>
- Widiasari, F., & Zahro, F. (2024). Behaviour Management in the Classroom: Improving the Quality of Education through Systematic Optimization of the Learning Environment. *FALASIFA : Jurnal Studi Keislaman*, 15(1), 35–47. <https://doi.org/10.62097/falasifa.v15i1.1787>
- Wu, Q., Hu, W., Wang, H., Liu, P., Wang, X., & Huang, B. (2021). Spatial Distribution, Ecological Risk, and Sources of Heavy Metals in Soils from a Typical Economic Development Area, Southeastern China. *Science of the Total Environment*, 780. <https://doi.org/10.1016/j.scitotenv.2021.146557>
- Zamroni, Fatmasari, R., Rasyidi, & Windiyani, T. (2025). Artificial Intelligence as a Tool to Improve the Quality of Job-Ready Graduate Skills in Higher Education. *2025 IEEE International Conference on Industry 4.0, Artificial Intelligence, and Communications Technology (IAICT)*, 129–136. <https://doi.org/10.1109/IAICT65714.2025.11101572>
- Zien, N. H. R., Bakar, N. A. A., & Saad, R. (2024). Unveiling Insights: A Dataset Analysis of Islamic Quality Management Systems in Educational Institutions toward SDG-aligned Education. In *Data in Brief* (Vol. 54). <https://doi.org/10.1016/j.dib.2024.110343>