

OPTIMISING THE SUPPLY CHAIN OF EDUCATIONAL MATERIALS IN TAHFIZ INSTITUTIONS TO SUPPORT ISLAMIC LEARNING

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Abstract. Educational supply chain is the structured network for the procurement, acquisition, storage and distribution of learning resources, textbooks, digital content, stationery and teaching aids to institutions of learning. Nevertheless, numerous tahfiz institutions are still confronted with various problems in terms of accessibility and distribution of teaching materials that directly affect the sustainability and standard of Islamic education. This review was purposed to explore strategies to enhance the supply chain of educational materials in tahfiz institutions, which would ensure resource availability and promote efficient learning of Islam. This paper investigates, using a narrative review approach, the optimisation of supply chain management for educational resources in tahfiz institutions. The results of the narrative review revealed several approaches to explore the optimisation of supply chain management for educational materials in tahfiz institutions, including: (a) implementing a structured inventory management system; (b) consolidating educational material suppliers; (c) introducing digital distribution of learning materials; and (d) establishing strategic partnerships for material delivery. In summary, the enhancement of the supply chain for educational inputs in tahfiz institutions proposed a unique alternative for operational optimisation and educational outcomes with the use of organised inventory systems, supply base rationalisation, digital dissemination, and strategic partnerships.

Keywords: *supply chain management, educational materials, tahfiz institutions, Islamic education, resource distribution*

Introduction

Educational supply chain is the structured network for the procurement, acquisition, storage and distribution of learning resources, textbooks, digital content, stationery and teaching aids to institutions of learning. There are multiple decision-making players in this supply chain, such as the suppliers, publishers, transport companies and institutional managers, who need to consider various efficiency targets, religious constraints and cultural values. Effective student and program administration in tahfiz institutions depends on customised resource planning and supply chain assistance as applied in the industrial sector (Oger et al., 2020) to improve discipline, self-reliance, and Islamic learning outcomes. Furthermore, the larger function of Islamic educational institutions is developing religious character and institutional resilience, whereby the integration of supply chain activities with spiritual and ethical instruction is necessary (Sapirin, 2022). In these situations, a good supply chain for educational resources guarantees not only logistical success but also helps to fulfil the purpose of comprehensive Islamic education. Nevertheless, numerous tahfiz institutions are still confronted with various problems in terms of accessibility and distribution of teaching

materials that directly affect the sustainability and standard of Islamic education. Restricted procurement options, varying supply chain dynamics, reliance on fragmented supply networks and poor digital products integration mean operational inefficiencies and poor product choice for students. The educational system in Islamic institutions nowadays suffers from their lack of digital integration and supply logistics complexity, representing serious limitations to support burgeoning educational demands (Syarif, 2020). Intermittent supply problems are experienced by rural tahfiz institutions in terms of stock (which can be an obstacle in regards to competitiveness and quality of education) and market/network distribution (Nazirwan et al., 2020). Peasant and less developed areas present logistical and financial problems, however, in addition to increased frustration. Tahfiz institutions continue to experience shortcomings that pose significant risk to the financial and academic sustainability of tahfiz institutions.

This review was purposed to explore strategies to enhance the supply chain of educational materials in tahfiz institutions, which would ensure resource availability and promote efficient learning of Islam. This review focuses on supply chain strategy that improves the procurement, handling and distribution of educational resources, contributing to knowledge that may be employed by tahfiz managers and stakeholders. According to previous research, the practices of supply chain management that realise logistics efficiency and/ spiritual goals lead to benefits in educational institutions (Marbun et al., 2020). The application of halal supply chain principles concept and organised storage system (Fadhilah and Syamsuri, 2023) is also considered to be able to improve resource consistency in an Islamic boarding school. In addition, the implementation of digital technology in the values-based Islamic education fosters students' engagement and resource usage (Mar, 2024). The study contributes to managing procurement delays and inventory mismanagement using low-cost disciplines as well as strategies like digital integration and supplier optimisation in supporting the operational sustainability of tahfiz institutions. It also ensures that students always have access to good quality learning resources, which serve the wider cause of maintaining and developing Islamic education.

Review of past research

Optimising the supply chain of educational resources in tahfiz institutions requires a varied approach involving sustainability concentration, effective procurement procedures, and technology application. Within the scope of educational institutions, especially those adhering to Islamic values like tahfiz institutions, the supply chain has to be both efficient and compliant with ethical rules. This asks for combining guarantees that all acquired products fulfil Islamic ethical standards with halal-compliant procurement methods. Furthermore, logistical preparations must be adaptable enough to match the usually rural and scattered nature of many tahfiz institutions, where access and delivery may cause significant challenges. Maintaining religious and cultural purity, working with trustworthy suppliers and applying community-based support networks can help to increase material availability. Particularly for tahfiz institutions, recent studies investigate ideal supply chain management in Islamic education. Research stresses the importance of student management in boosting tahfiz institutions' quality (Tanzeh et al., 2020) and mixing supply chain approaches with Islamic values to promote instructional results (Huda et al., 2020). Proposed for the halal education market is a lean supply chain model stressing waste reduction (Anggraini et al., 2022). Good tahfiz institutions' management means strategic learning development to generate

outstanding Muslim generations and careful planning involving annual and semester programs (Siregar and Diana, 2024). These approaches promote manners, use technology, and utilise efficient supply chains to help Islamic education. Through meticulous supply chain management, the study highlights the possibility of enhancing the availability of educational resources and the general quality of Islamic education, as well as the general state of the supply chains.

Adoption of the e-procurement solution results in a significant enhancement in accountability and availability in the procurement process. Nani and Ali (2020) emphasised the need for a good e-procurement system for coordinating complex supply chain operations. Incorporating digital instruments can also enhance teachers' ability to keep track of instructional resources and prevent getting slowed down by a rapidly changing instructional landscape. Further supported by Ya et al. (2021), sound procurement management guarantees the purchase of high-quality teaching and learning materials and which creates a system that graduates will be keen on. In addition to that, e-procurement reduces human errors and the percentage of potential fraud, hence empowering institutional control. And these tools also enable tahfiz institutions to forecast demand more effectively and track levels of inventory, ultimately allowing you to use resources more efficiently and save costs. Also, how MIS should facilitate educational quality and resource management. Ilham and Yuniarti (2022) add that good MIS can significantly enhance the purchasing of educational resources; they caution, however, that without strategy matching, the implementation of such can only result in underserving educational services. The findings of Jaffu and Changalima (2023) support this premise that effective procurement hinges on holistic strategies for human resource development, thereby linking the capability and training of procurers to effective management of educational resources. Additionally, when integrated with purchasing, MIS ensures purchases are tracked in real time, more decisions are based on data, and the supply chain is more transparent. This is in line with effective and economic use of resources for teaching and learning, which directly impacts the teaching and learning process at tahfiz institutions and discourages inefficiency and loss of time.

Green procurement becomes more critical as we simplify the supply chain of learning resources. Masudin et al. (2020) discuss the value of incorporating green supply chain management strategies that would help enhance the sustainability of educational organisations by reducing environmental impacts and, hence, stimulating the local economy. This emphasis on sustainability is well-aligned with the increasing recognition that academic institutions should be integrating global sustainability goals into their campus operations. Green purchasing does not just reduce waste and carbon emissions, but also motivates suppliers to adopt green policies. Green procurement or which integrates Management Information Systems (MIS), can enhance operational efficiencies, sustainable greening through optimisation of the use of resources, leading to the reduction of waste, and so it can promote the ethical stewardship according to Islamic values in tahfiz institutions. Such an approach is consistent with Islamic stewardship (khalifah) and environmental concern for tahfiz institutions, thus tapping the dimensions of educational and spiritual (Masoumik and Abdul-Rashid, 2021). It also improves the supply chain effectiveness when stakeholders are brought on board through cooperative procurement. As Sulistiani et al. (2024) stakeholder engagement in the adoption of green procurement can help in overcoming barriers faced by educational facilities in securing sustainability goods and services. This coordination coordinates the whole of the supply chain from suppliers to teaching assistants, all working towards

the same goals, such as increasing student achievement utilising green methods. Such alignment fosters long-term supply chain resilience, openness, responsibility and trust—all of which are crucial. Further, with the use of Capacity building and knowledge sharing, such of cooperative model can contribute to knowledge base creation, enabling institutions to make ethical and educationally aligned procurement choices (Bothra, 2024).

The prompting for accountability in procurement is also really important. As Obadia and Chole (2024) emphasise, the application of procurement requirements may, in itself, be a mechanism for institutions to manage the complexity of resource acquisition, save money and maintain quality. Procurement Strategic shifts and periodic reviews of the process will provide the opportunity for supply chain operations to be consistently improved to help tahfiz institutions meet evolving educational needs. In addition, teachers' moral and honest behaviour collectively leads to a costly trustworthiness in material procurement. Developing institutional capacity through seminars and institutional audits enhances compliance, as well as decreases management-related risks (Byomuhangi et al., 2021). These are all proactive measures that improve operational efficiency as well as trust between all stakeholders: donors, teachers and the general public, which in the long run would strengthen the credibility and sustainability of tahfiz institutions. Overall, a comprehensive technological solution is required for the tahfiz institutions to optimise the supply chain for education resources, underlining the sustainability perspective and inspiring stakeholder collaboration. By embedding these components, it would enable all tahfiz institutions to adopt a better buying practice to improve their operational efficiency, which will yield a ripple effect in their educational quality. This optimisation should also be compliant with Islamic values so that the procurement and supply of materials also adhere to the moral and religious requirements. The work of staff in digital infrastructure and capacity-building does even more to enable long-term wins and adaptation. Future studies should address regionally relevant issues and examine to what extent the integrated supply chain models contribute to institutional sustainability and student success.

Materials and Methods

This review employs a narrative review approach to synthesise a variety of views on supply chain management in religious and educational institutions, such as tahfiz schools, from both grey literature sources, such as reports and policy papers, and academic databases, including Semantic Scholar, Science Direct, and EBSCO archives, from 2020 to 2025 publications. Search terms such as "supply chain management", "educational materials", "tahfiz institutions", "Islamic education", and "resource distribution" facilitate an iterative search, with studies prioritised having a focus concerning tahfiz institutions or Islamic education, leading to 25-40 sources drawn from books, case studies, and peer-reviewed papers that are thematically analysed around procurement, logistics, technology adoption, and stakeholders. Themes such as the inefficient material delivery are examined, including the assumption that digitalisation via inventory systems and community collaboration are crucial to maintaining the sustainability of the institutions, woven together in a narrative synthesis grounded in the cultural and operational context of tahfiz institutions and with an emphasis on tensions such as managing the cost efficiency of practising tahfiz vis-à-vis quality. A plan is suggested to improve how tahfiz institutions manage their supply chains, which

includes using technology for inventory management and working together to buy supplies, based on a review of existing research and practices. Even though this narrative review is somewhat subjective, it ensures quality by using trustworthy sources and checking different viewpoints, while also acknowledging that there is limited literature on tahfiz institutions and that the review is restricted to English-language publications. This approach offers strategic insights on minimising the transportation of educational materials and enhancing the supply chain for Islamic education materials.

Results and Discussion

The results of the narrative review revealed several approaches to explore the optimisation of supply chain management for educational materials in tahfiz institutions, including: (a) implementing a structured inventory management system; (b) consolidating educational material suppliers; (c) introducing digital distribution of learning materials; and (d) establishing strategic partnerships for material delivery.

Implementing a structured inventory management system

A proper management of the inventory control system, which must include a system of tracking, reducing losses, timely replacement and so forth, if implemented in the tahfiz institutions system, might contribute towards a healthy supply chain of educational supplies. Immediate inventory synchronisation that is facilitated through an integrated digital system is seen as a way to avoid overstocking and understocking situations that are common with manual systems (Cheng, 2024). Additionally, optimised reinforcement learning methods are better at adapting inventory restocking to demand changes and are less cost-efficient (Park et al., 2023). With these technologies, better decisions can be made because a complete understanding exists for consumption patterns and inventory trends. In addition, freeing employees from dull inventory chores allows them to focus on essential instructional tasks, which in turn raises the overall level of institutional performance. Low in resources, tahfiz institutions benefit from inventory policies suitable for constrained environments. The position-based inventory policies reduce the bullwhip effect and increase fill rates in the supply chain based on the study below supplier capacity (Afifi et al., 2020). Further, the integration of supply chain management to a religious education setting can serve as a means of developing (a) both institutional quality and (b) character building of students, thus revealing that organised logistics can cater for both operational and educational objectives (Mutohar and Trisnantari, 2020). To adapt position-based inventory systems to tahfiz schools, such a policy ensures optimal resource releases and availability of required resources with limited funds. This tactic combines logistical economy with the schools' moral and pedagogical aims of motivating students to cultivate discipline and responsibility.

Other than just technical support, effective implementation will also require strategic and capacity-building planning. Organised inventory systems contribute to the transparency of procurement, the accuracy of records and the efficiency of service delivery (Nsawah et al., 2025) are evident in healthcare and education sectors. Similarly, the adoption of scalable, modular inventory management systems encourages flexibility and future developments-aspects that are essential for the emerging needs of tahfiz institutions-places where future developments are encouraged. Effective implementation of stock and inventory systems in tahfiz institutions also depends on

extensive training for the staff to ensure that they are skilled in operating new technologies. Fostering an environment where continuous learning is valued will drive system adoption and help maintain long-term operational excellence.

Consolidating educational material suppliers

Cost and logistics would be significantly reduced to maximise the supply chain of education resources vendors for tahfiz institutions. Among the benefits, for instance, of supplier consolidation is that by banding together, tahfiz institutions can bargain for group price deals on Quranic books. Institutions may leverage the advantages of preferred pricing, economies of scale, and better service contracts (Ochonogor et al., 2022) by working with a limited number of pre-vetted vendors. Additionally, this simplicity eliminates supply interruptions and ensures a consistent material quality by optimising the inventory planning. Restructuring the supplier is believed to enhance overall procurement efficiency in manufacturing, education, etc., (Chauhan et al., 2022), areas such as control over operating cost etc. What is more, a simpler supply chain enables closer relationships and this means customised solutions can be more easily negotiated for clients whose learning needs are a little different. This method reduces the time and cost of administration, so staff can focus on the primary objective of teaching rather than dealing with multiple supplier connections. Centralisation improves traceability and ethical provenance, thus applicable for halal supply chain systems in tahfiz institutions that could operate under Islamic values as well as deficient resources. Study of Muhammadiyah Islamic boarding schools emphasises that the construction of sustainable faith-based (schools) does not necessarily rely on the choice of suppliers and found materials (for procuring) in meeting the halal needs. Also, evidence of potential impact for institutional sustainability is found in the hybrid financial models, such as integrated supply chain combined with profitable waqf (Ladewi et al., 2020). Tahfiz institutions may even accommodate reducing costs and promoting an Islamic ethic by practising routine purchases. This approach reinforces the role of the institutions as Islamic education centres and builds trust within the communities. Moreover, digital technology utilisation to improve supply chain transparency and efficiency also contributes towards compliance with Islamic principles.

From a systems perspective, a more unified and interconnected network of suppliers also enhances supply chain resilience and coordination. A more agile and responsive supply chain model with capabilities to achieve institutional objectives as a result of cooperative supplier relationships is also evidenced due to the consolidation (Mitrovič and Mitrovic, 2021). This implies that tahfiz institutions will experience reduced waiting time for books and other teaching aids to be delivered, improved quality control, as well as a clearer path towards long-term planning (Ben Mahmoud et al., 2024). Similarly, such connectedness facilitates the exchange of real-time information, allowing the tahfiz institutions to predict and mitigate potential disruptions. The lowered overhead clears the way for companies to put their money where it matters when it comes to education.

Introducing digital distribution of learning material

By improving access, lowering delivery times, and strengthening curriculum standardisation, introducing digital distribution in tahfiz institutions can greatly maximise the supply chain of educational materials (Mulatillo Ruiz et al., 2024). Many

institutions fight with conventional material delivery inefficiencies as Islamic religious education uses digital means more and more. When used correctly, digital educational tools can guarantee constant access to learning materials throughout geographically scattered tahfiz institutions (Irawan, 2024). Crucially, in faith-based education, these methods also support the truth and validity of religious material. Moreover, digital media provide real-time upgrades to instructional materials, therefore guaranteeing that students always have access to the most current and pertinent resources. This strategy also helps organisations to better allocate resources by lowering the expenses related to transportation and actual manufacturing. Using digital distribution models also changes the supply chain for educational resources, employing platforms that cleverly link teachers and students. Customised learning routes and enhanced access to lifelong learning resources are generated by digital ecosystems like knowledge graphs and open educational libraries to organise educational content to facilitate access for tahfiz students (Otto and Kerres, 2022). Therefore, boosting access to digital distribution minimises duplication and content sharing for tahfiz institutions, where resources may be limited and diverse, so lowering overheads and waste related to printed materials. These systems also provide real-time updates and cooperative content development, therefore ensuring that instructional resources remain current and relevant. Tahfiz institutions can improve resource access and enable individualised learning experiences for students by encouraging a scalable and inclusive digital infrastructure.

Furthermore, including digital technologies in religious instruction improves student involvement and instructional effectiveness. Platforms meant for supply chain optimisation in educational environments can help measure consumption, adjust content to fit student demands, and guarantee always available, current materials (Lin, 2023). This kind of feedback-driven supply chain not only enhances learning results but also fits more general educational reforms aiming at digital inclusion and fair access. These systems also help teachers to collaborate in real time, therefore enabling the exchange of resources and best practices between institutions. By the use of data analytics, these systems can also identify areas of student knowledge gaps, therefore facilitating targeted interventions that further individualise the learning process.

Establishing strategic partnership for material delivery

First, it is based on establishing strategic relationships for material delivery, to optimise the supply chain of scholastic resources in tahfiz institutions with frequently limited logistical, financial and infrastructure capacity. Strategic partnership can help fill the gap by providing a timely and sustainable supply of materials, sharing resources and facilitating cooperation with creditworthy suppliers. A study related to strategic supplier relationships in Rwanda investigated how much better public institution performance was (Nzeyimana and Gitahi, 2022) when more resources were available and when coordinating more. Studies on China also show that well-organised strategic alliances improved supply chain efficiency and customer satisfaction, thereby underscoring the advantages of mutual trust and cooperation in reaching operational excellence (Zhao and Lee, 2023). Effective execution of these alliances in tahfiz institutions depends on partner selection and alignment, utilising predictive and structured models becoming quite important. For example, by matching supplier capabilities with institutional needs (Eftychiou, 2025), the Predictive Strategic-Fit Model (PSFM) presents an evidence-based method to evaluate likely partners. This approach evaluates the demand (institutional goals) and supply (partner capabilities)

sides of the connection, therefore ensuring long-term, mutually beneficial cooperation. Apart from transactional advantages, another study underlined that such alliances should concentrate on creating a value-driven ecosystem that improves service quality, delivery efficiency, and responsiveness to changing needs (Bothra, 2024). Regular performance reviews and feedback loops help these coalitions to be dynamic and adaptable enough to satisfy the changing needs of tahfiz institutions. Moreover, building trust and similar ideals among partners improves cooperation and helps the whole student growth in tahfiz institutions.

At the end, the mix of digital tools and a strict supply chain management strategy will greatly improve the success of these partnerships. In the case of digital solutions in particular, for remote businesses such as tahfiz institutions, they can monitor in real-time, enhance transparency and provide opportunities for agility in response to supply disruptions. An abstract investigation on digital strategic partnerships has further explained that alignment of common goals via digital infrastructure leads to enhanced resource allocation and decision-making efficiency (Goloborodko, 2021). Additionally, other research has also asserted that applying supply chain practices resulting in efficiency and cooperation synergy could reduce costs and improve overall service delivery in the learning sector (Juhara, 2024).

Conclusion

In summary, the enhancement of the supply chain for educational inputs in tahfiz institutions proposed a unique alternative for operational optimisation and educational outcomes with the use of organised inventory systems, supply base rationalisation, digital dissemination, and strategic partnerships. The strategies fulfil the moral and spiritual requirements, which serve as the foundation of Islamic education, and also provide relief from financial and logistical limitations. The integration of predictive models within technology offers great potential to ensure sustainability and adaptability in tahfiz institutions. Future research in this area could consider empirical assessment of various tahfiz institutions, study the lasting impact of religious pedagogy digital learning platforms and explore the ethically-modified supply chains through Islamic philanthropy models such as waqf, for the sake of achieving educational sustainability. Waqf might also be applied to support the purchase of teaching materials, thereby reducing the financial burden. Comparative studies of tahfiz institutions to Christian seminaries or secular rural schools might yield a useful study illustrated on a broader scale, the possibilities of scalable, context-dependent supply chain optimisation.

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Conflict of interest

The author confirms that there is no conflict of interest involved with any parties in this research study.

REFERENCES

- [1] Afifi, H., El-Kharbotly, A., Shedid, G. (2020): Inventory policy for improved supply chain performance under constrained supply. – *Journal of Al-Azhar University Engineering Sector* 15(54): 48-56.
- [2] Anggraini, W., Fatimah, P.L.R., Lestari, F. (2022): Lean supply chain operational model applied to halal education industry. – In M. S. Islam, A. Islam (Eds.) 3rd Asia Pacific International Conference on Industrial Engineering and Operations Management, IEOM Society International 13p.
- [3] Ben Mahmoud, B., Lehoux, N., Blanchet, P. (2024): Integration mechanisms for material suppliers in the construction supply chain: A systematic literature review. – *Construction Management and Economics* 42(1): 70-107.
- [4] Bothra, L. (2024): Review paper: Supplier relationship management. – *International Journal of Scientific Research in Engineering and Management* 8(5): 5p.
- [5] Byomuhangi, E., Kayumba, P.C., Umuhoza, S.M. (2021): The use of public-private partnerships in health supply chain management in Rwanda. – *Rwanda Journal of Medicine and Health Sciences* 4(2): 237-256.
- [6] Chauhan, V., Alomari, M., Arney, J., Parlikad, A., Brintrup, A. (2022): Exploitation of material consolidation trade-offs in a multi-tier complex supply networks. – *Supply Chain Analytics* 4: 11p.
- [7] Cheng, X. (2024): Research on the inventory management in the modern business. – *Advances in Economics, Management and Political Sciences* 60: 1-8.
- [8] Eftychiou, G. (2025): Enhancing strategic partnerships in higher education: Developing and implementing a predictive model. – *Journal of Innovation in Polytechnic Education* 6(2): 30-40.
- [9] Fadhilah, L.N., Syamsuri, S. (2023): Economic empowerment of Islamic boarding schools through optimization of halal value chain: A conceptual offer. – In N. Mansour, L. M. Bujosa Vadell (Eds.): *Islamic Sustainable Finance, Law and Innovation: Contributions to Management Science*, Springer 10p.
- [10] Goloborodko, A. (2021): Conceptual approach to digital strategic enterprise partnerships. – *Economic Sciences* 1(6): 235-240.
- [11] Huda, S., Muawanah, M., Munifah, M., Syazali, M., Palupi, E.K., Umam, R., Tortop, H.S. (2020): Islamic education in supply chain system by prioritizing manners as a success factor of millennial generation on socializing. – *International Journal of Supply Chain Management* 9(2): 853-863.
- [12] Ilham, M., Yuniarti, Y. (2022): Implementation of management information systems to enhance educational quality (Case study at SMP Negeri 11 Lhokseumawe). – *Idarah: Jurnal Pendidikan dan Kependidikan* 6(1): 15-26.
- [13] Irawan, R. (2024): Analysis of student needs for digital-based teaching materials. – *Peel: Journal English Education and Linguistic* 5(1): 66-72.
- [14] Jaffu, R., Changalima, I.A. (2023): Human resource development practices and procurement effectiveness: implications from public procurement professionals in Tanzania. – *European Journal of Management Studies* 28(2): 149-169.
- [15] Juhara, S. (2024): Optimizing supply chain management: Strategies for enhancing efficiency and reducing costs in manufacturing industries. – *The Journal of Academic Science* 1(1): 37-44.
- [16] Ladewi, Y., Antoni, A., Mizan, M., Melati, R. (2020): Analysis of Islamic finance as a support function in supply chain management in Palembang. – *International Journal of Supply Chain Management* 9: 1636-1640.
- [17] Lin, W.D. (2023): Digital supply chain curriculum development to support the talent needs of supply chain 4.0. – In M. D. Islam (Ed.) *Proceedings of the International Conference on Industrial Engineering and Operations Management*, IEOM Society International 7p.

- [18] Mar, N.A. (2024): Integration of technology and Islamic Education in the digital era: Challenges, opportunities and strategies. – *Journal of Scientific Insights* 1(1): 1-8.
- [19] Marbun, D.S., Effendi, S., Lubis, H.Z., Pratama, I. (2020): Role of education management to expedite supply chain management: A case of Indonesian higher educational institutions. – *International Journal of Supply Chain Management* 9(1): 89-96.
- [20] Masoumik, S.M., Abdul-Rashid, S.H. (2021): The role of green strategy adoption in driving green supply chain management practices. – In T. J. Andersen (Ed.) *Strategic Responses for A Sustainable Future: New Research in International Management*, Emerald Publishing Limited 27p.
- [21] Masudin, I., Summah, B., Zulfikarjiah, F., Restuputri, D.P. (2020): Factors affecting the implementation of green procurement: empirical evidence from Indonesian educational institution. – *Jurnal Ilmiah Teknik Industri* 19(2): 186-197.
- [22] Mitrović, V., Mitrovic, J. (2021): Defining the notions of management of supply chains, value chains and clusters in agriculture. – *EMC Review-Economy and Market Communication Review* 22(2): 479-496.
- [23] Mulatillo Ruiz, C., Manjarrés-Zambrano, N.V., Jurado Fernández, C.A. (2024): Digital educational resources and teaching capacity in the area of religious education. – *Universidad Ciencia y Tecnología* 28(125): 7-16.
- [24] Mutohar, P.M., Trisnantari, H.E. (2020): The involvement of supply chain management in religious culture development in shaping the character of elementary school students in the era of industrial revolution 4.0. – *Talent Development & Excellence* 12(1): 1452-1465.
- [25] Nani, D.A., Ali, S. (2020): Determinants of effective e-procurement system: Empirical evidence from Indonesian local governments. *Jurnal Dinamika Akuntansi dan Bisnis* 7(1): 33-50.
- [26] Nazirwan, N., Cahaya, N., Junaidi, J., Nofriyanti, N. (2020): Boarding management development in Islamic Religious Education. – *International Journal of Southeast Asia* 1(2): 41-58.
- [27] Nsowah, J., Agyenim-Boateng, G., Anane, A. (2025): Effect of inventory management practices on healthcare delivery and operational performance of Sunyani Regional Hospital. – *Operations Research Forum* 6(1): 21p.
- [28] Nzeyimana, A., Gitahi, N. (2022): Supply chain management practices and performance of public institutions in Rwanda: A case of Rwanda Biomedical Center. – *Journal of Procurement & Supply Chain* 6(1): 37-57.
- [29] Obadia, S., Chole, G. (2024): The impact of employee proficiency on Tanzanian procurement contract management; evidence from higher learning institutions. – *Journal of Economics Management and Trade* 30(4): 1-12.
- [30] Ochonogor, K.N., Osho, G., Anoka, C., Dieli, O.J. (2022): The impact of supplier base consolidation on procurement, delivery, and production costs: Supply chain operations optimization and vendor consolidation. – *International Research in Economics and Finance* 6(4): 10-16.
- [31] Oger, R., Lauras, M., Montreuil, B., Benaben, F. (2020): A decision support system for strategic supply chain capacity planning under uncertainty: Conceptual framework and experiment. – *Enterprise Information Systems* 16(5): 45p.
- [32] Otto, D., Kerres, M. (2022): Increasing sustainability in open learning: Prospects of a distributed learning ecosystem for open educational resources. – *Frontiers in Education* 7: 11p.
- [33] Park, H., Choi, D., Min, D. (2023): Adaptive inventory replenishment using structured reinforcement learning by exploiting a policy structure. – *International Journal of Production Economics* 266: 11p.

- [34] Sapirin, S. (2022): Islamic Education institutions based on local wisdom (study of Mustafawiyah Madina Islamic Boarding School). – *Journal of Education and Teaching Learning* 4(3): 202-219.
- [35] Siregar, A.S., Diana, D. (2024): Tahfidz al-Qur'an learning management. *Journal of Education and Technology* 8(1): 186-194.
- [36] Sulistiani, D., Hasanah, S.M.R., Cholifah, N., Sholihah, I.H. (2024): Implementation of green public procurement in higher education institutions. – *Journal of Law and Sustainable Development* 12(4): 26p.
- [37] Syarif, S. (2020): The mediating effect of supply chain integration on inculcation of Islamic ethical values among Muslim students through the e-learning platform. – *International Journal of Supply Chain Management* 9(2): 872-880.
- [38] Tanzeh, A., Sofingatun, S., Patoni, A., Sukur, M., Aziz, A. (2020): The student management based on participants in improving quality of tahfidz program with supply chain practices. – *International Journal of Supply Chain Management* 9(2): 889- 896.
- [39] Ya, K.Z., Rizal, F., Ramadhan, A.A. (2021): The systematic procurement: Educational supply chain management system. – *International Journal of Human Capital Management* 5(1): 115-120.
- [40] Zhao, Y., Lee, C. (2023): Effect of strategic partnership on corporate performance in supply chain management. – *Journal of Global Management* 20(2): 107-129.