
Business diversification and innovation as pathways to financial viability in pesantren

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Abstract

This study examines the role of business diversification and innovation in enhancing the financial sustainability of pesantren (Islamic boarding schools) in Indonesia. Using a qualitative case study approach, data were collected from Pondok Pesantren Ar-Risalah Cijantung IV in West Java through interviews, document analysis, and participant observation. The findings reveal that diversified business units, such as aquaculture, agriculture, retail services, and mineral resource partnerships, significantly contribute to financial viability. These initiatives help reduce dependency on tuition fees and philanthropic contributions, ensuring continued operation and educational quality. Challenges such as limited human resources, regulatory compliance, and market competition are identified, requiring strategic management to mitigate risks. The study emphasizes that innovation in business practices, combined with strategic partnerships and enhanced governance, is essential for long-term sustainability. This research provides valuable insights for pesantren leaders and policymakers on how to achieve financial independence while maintaining educational excellence.

Keywords

Business diversification, financial viability, Indonesia, innovation, pesantren

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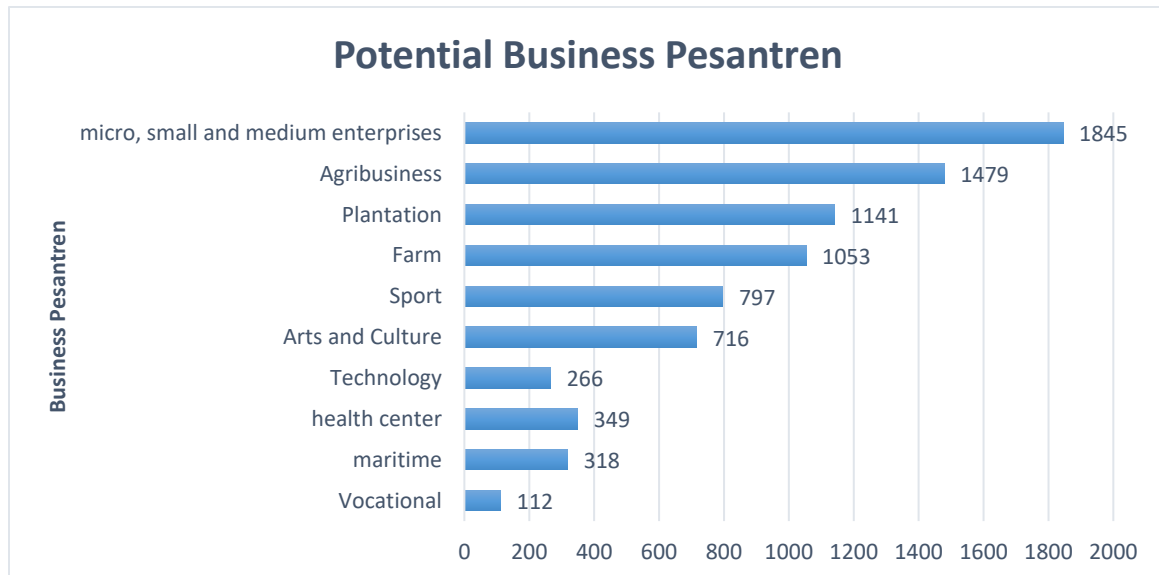
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Introduction

According to data from the Ministry of Religious Affairs of the Republic of Indonesia, the number of Islamic boarding schools (pesantren) in the country has risen markedly recently. In 2019, approximately 29,000 pesantren were recorded. Following the enactment of Law No. 18 of 2019 concerning Pesantren, the number of pesantren increased to 41,220 by 2024, reflecting the addition of roughly 11,000 institutions within that period (Antara News, 2024, source: <https://www.antaraneews.com>). Overall, by 2024, the total number of pesantren in Indonesia reached 41,599 institutions, serving 4,090,917 students (santri) and supported by 276,321 teachers (ustadz) (EMIS data, Ministry of Religious Affairs, 2023-2024). The substantial growth of the pesantren network is expected to have a significant impact on society, both in terms of education and economic development.

The business activities undertaken by pesantren play a crucial role in achieving the institution's economic self-reliance (Abebe & Kegne, 2023; Hafidh et al., 2024; Kurniady et al., 2024; Laila et al., 2023). Islamic boarding schools can strengthen their ties with the surrounding community by engaging in economic activities, creating a mutually supportive and sustainable environment (Esteves et al., 2021; Pocol et al., 2022). The overall business potential of pesantren in Indonesia is illustrated in Figure 1 below.

Figure 1. Potential business data for Islamic boarding schools in Indonesia



(Source: <https://databoks.katadata.co.id/>)

Islamic boarding schools (pesantren) play a strategic role in cultivating an integrity-based generation while simultaneously acting as economic drivers within their communities (Anggadwita et al., 2021; Darwanto et al., 2024; Qizam et al., 2024). However, the operational sustainability of pesantren frequently confronts substantial challenges, particularly regarding

financing (Irhas et al., 2023). Reliance on donations or charitable contributions is often insufficient to cover institutions' operational needs and the development of educational programs. Consequently, pursuing financial viability through the diversification and innovation of business units emerges as a strategic solution to achieve institutional self-reliance and to support the long-term sustainability of pesantren (Adeniran et al., 2024; Obeng et al., 2024; Xie et al., 2022). By establishing competitive business enterprises, pesantren can satisfy their internal resource requirements and contribute significantly to the empowerment of the surrounding community (Leal Filho et al., 2021; Zaki et al., 2022).

Innovation in managing pesantren business units has excellent potential to generate sustainable revenue streams (Hassan, 2024; Kaputa et al., 2022). Diversifying locally based enterprises—such as agribusiness, services, or creative products—can reinforce pesantren's financial stability while delivering positive impacts on the surrounding community's economy. This approach aligns with the principles of Islamic economics, which emphasize justice, welfare, and social benefit. Moreover, professional management founded on accountability is pivotal for ensuring the continuity and success of these ventures (Agustian et al., 2023; Behie et al., 2023). Consequently, pesantren can serve as models of educational institutions that are financially self-reliant and capable of fostering inclusive socio-economic development.

Although pesantren possess significant potential to become hubs of economic empowerment, many still face difficulties achieving financial sustainability (Setiawan & Ekaningsih, 2025). Dependence on donations frequently falls short of meeting operational needs and educational program development. Conversely, a lack of business diversification and innovation constitutes a primary obstacle to creating durable income sources (Lehoux et al., 2021; Tunio et al., 2021). Without a directed strategy, pesantren risk stagnation, which can impede their contribution to educational self-reliance and community development. Therefore, a diversification- and innovation-driven approach to business-unit management is essential to achieve financial stability that supports the holistic sustainability of educational programs.

Research on achieving the financial viability of Islamic boarding schools (pesantren) through diversification and innovation of business units faces several challenges, including limited capital, insufficient managerial expertise, and limited access to technology and markets. Moreover, the shortage of human resources capable of managing enterprises professionally often poses a constraint, compounded by regulatory hurdles and a lack of external support. Conflicts of priority between business-unit management and the focus on educational programs also frequently arise.

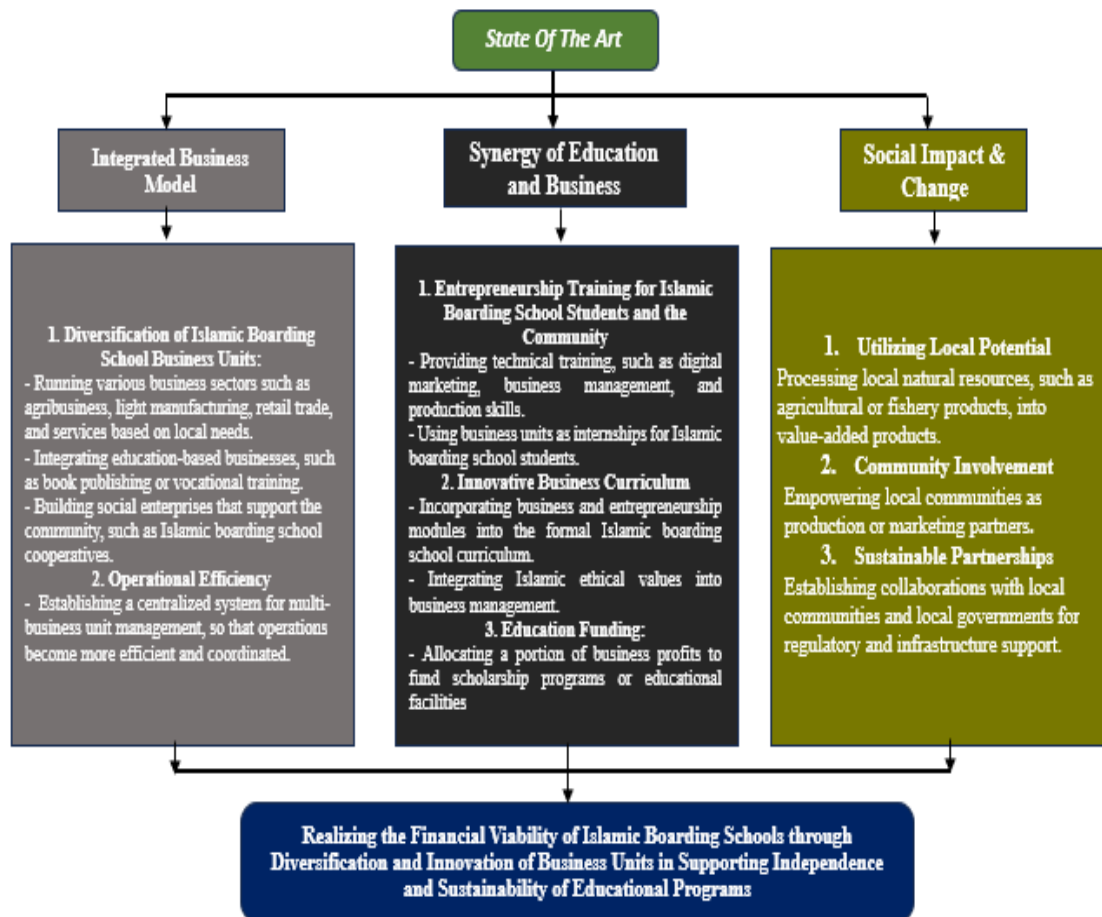
To address these issues, pesantren administrators must take a strategic approach and collaborate with pesantren partners to develop, train, and market independently produced business outputs. Additionally, implementing a business model that integrates the local economy with educational programs can enhance managerial efficiency. This approach enables pesantren to attain financial self-reliance and contribute to the economic development of the surrounding community.

While numerous studies have investigated the financial management of Islamic boarding schools (pesantren) (Ariatin et al., 2022; Riinawati, 2022; Shaturaev, 2021), their primary emphasis remains on conventional elements, such as fundraising and donation management. The paucity of in-depth research on business-unit diversification and innovation as strategies

for achieving financial viability represents a significant gap that warrants attention. Moreover, the considerable potential of pesantren to support educational self-reliance and to empower the surrounding community's economy is often under-exploited. Integrated models that combine business innovation with the sustainability of educational programs are lacking, which further widens the gap in the literature.

Research on achieving the financial viability of Islamic boarding schools (pesantren) focuses on education-institution-based economic management, a function that holds a strategic role within society. The existing literature typically examines traditional financial management, fundraising activities, or modest businesses that operate without technological innovation. While a handful of studies have begun to relate business management to Islamic economics, their approaches remain confined to rudimentary concepts and lack a systemic integration with the sustainability of educational programs and the empowerment of the surrounding community.

Figure 2. *State of the art financial viability of Islamic boarding schools in supporting the independence and sustainability of educational programs*



This study employs a qualitative research approach, utilizing a single-case study design. Qualitative research is particularly suited to understanding complex issues by exploring firsthand the perspectives of individuals or groups directly involved in the phenomenon under investigation (Nartin et al., 2024). This methodological framework is effective in uncovering nuanced insights into cultural contexts, underlying values, worldviews, behavioral patterns, and the broader social environments surrounding the research population.

The case study design is utilized with a meticulous, thorough, and expansive approach to analyze a current program, event, or activity involving individuals, organizations, or particular social groups (Holten et al., 2020; Pugu et al., 2024). The selected case reflects a real-world, contemporary phenomenon, ensuring the study's timeliness and relevance rather than focusing on a historical event.

Data collection

Data were collected through semi-structured interviews, document analysis, and participant observation. These methods allowed the researcher to gain an in-depth understanding of the case by engaging with key stakeholders and analyzing documents related to the institution's financial activities and diversification efforts. The semi-structured interviews allowed for flexible, open-ended questioning, encouraging participants to share their insights and experiences in their words and yielding rich, qualitative data. Document analysis involved reviewing internal records, financial reports, and strategic plans to triangulate data and provide a broader context. Participant observation enabled the researcher to engage directly with the activities of Pondok Pesantren Ar-Risalah, providing a more profound understanding of the pesantren's organizational dynamics and interactions.

Data analysis

Qualitative data analysis was performed using a systematic process that included initial coding (unitization), thematic categorization (axial coding), and interpretive synthesis (selective coding). This approach enabled the identification of recurring themes and patterns in the data, facilitating a deeper interpretation of the findings. To ensure data confirmability, the analysis process included member checking and triangulation to validate the results and minimize researcher bias. The analysis was supported by ATLAS.ti, a computer-assisted qualitative data analysis software (CAQDAS), which facilitated the organization, retrieval, and interpretation of the complex qualitative data collected from interviews, documents, and observations.

Research site

The study was conducted at Pondok Pesantren Ar-Risalah Cijantung IV, located in Ciamis, West Java, in 2025. The site was selected based on three key criteria:

1. Relevance: The institution is undergoing substantial expansion across various business sectors, including fisheries, livestock farming, mining, and plantation agriculture, making it an exemplary subject for examining diversification and financial sustainability strategies.

2. Representativeness: The site encompasses key stakeholders—internal management, external partners, and community members—providing rich opportunities for data triangulation. This diversity ensures a thorough understanding of the factors affecting financial sustainability and the challenges faced by the pesantren.
3. Accessibility: Formal authorization from the pesantren's leadership was obtained, and logistical support was provided to ensure the smooth execution of the fieldwork, enabling the researcher to effectively engage with participants and observe the institution's operations.

Institutional growth and diversification

Pondok Pesantren Ar-Risalah Cijantung IV has experienced significant institutional growth, driven by strategic efforts to diversify and professionalize its economic enterprises. Over the years, the pesantren has successfully established and managed several high-potential business ventures, including those in fisheries, animal husbandry, mining, and plantation agriculture. These initiatives have generated measurable economic benefits for the institution and the surrounding local communities, positioning the pesantren as an emerging socio-economic development actor in rural West Java.

Findings

Analysis of the current financial viability of the pesantren

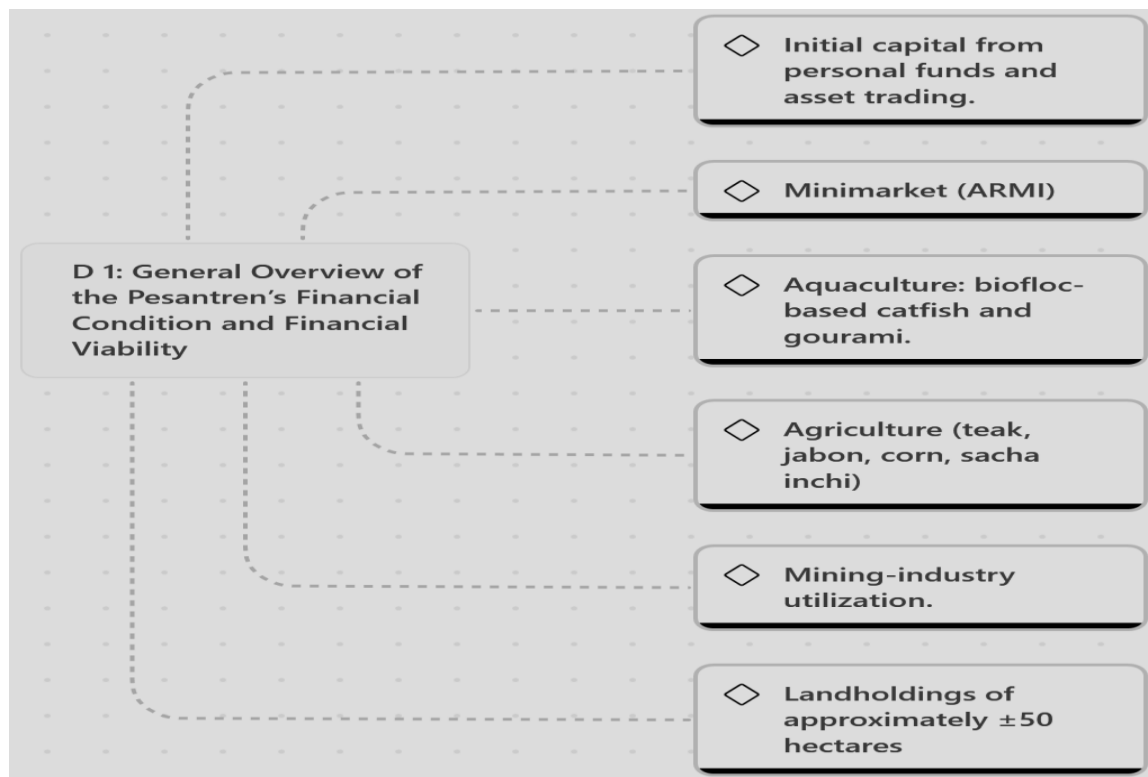
The analysis of the financial viability of pesantren highlights the importance of innovative business diversification to ensure sustainability, institutional autonomy, and the welfare of students. The pesantren's financial health is closely linked to its ability to generate revenue from various sources, manage costs effectively, and mitigate operational risks.

Figure 3 provides a general overview of the financial condition and viability of pesantren. The strategy for achieving financial sustainability involves leveraging existing assets, such as land, to establish profitable business ventures. These ventures provide steady income streams, which support both educational programs and community welfare.

A key element of diversification is the "ARMI" minimarket, which serves the daily needs of the pesantren community and generates a reliable revenue source. Another important initiative is aquaculture, particularly the use of biofloc technology, which enhances the efficiency and sustainability of fish farming, especially for catfish and gourami. Additionally, in agriculture, pesantren are growing commercially viable crops such as teak, jabon, and sacha inchi, contributing to both environmental sustainability and financial stability. These diversified ventures are supported by a significant landholding of around 50 hectares, providing ample space for further expansion into agribusiness and other economic activities.

This diversified business model—spanning retail, aquaculture, and agriculture—reduces the pesantren's dependency on traditional funding sources, such as donations. By securing multiple income streams, pesantren can better withstand financial pressures, ensuring the continuation of their educational missions.

Figure 3. *General overview of the pesantren's financial condition and financial viability*



Constraints on financial viability

While diversification presents substantial opportunities, several constraints impede the financial viability of pesantren. Figure 4 outlines the main issues and challenges that pesantren face in their pursuit of financial self-sufficiency. These include limited human resources, succession planning issues, environmental risks, regulatory barriers, and market competition.

Pesantren administrators often balance dual roles as both educators and business managers. This situation can lead to time constraints and a lack of expertise in business administration, which limits the efficiency of their operations. The issue of succession is also significant, as ensuring competent leadership over the long term remains a challenge.

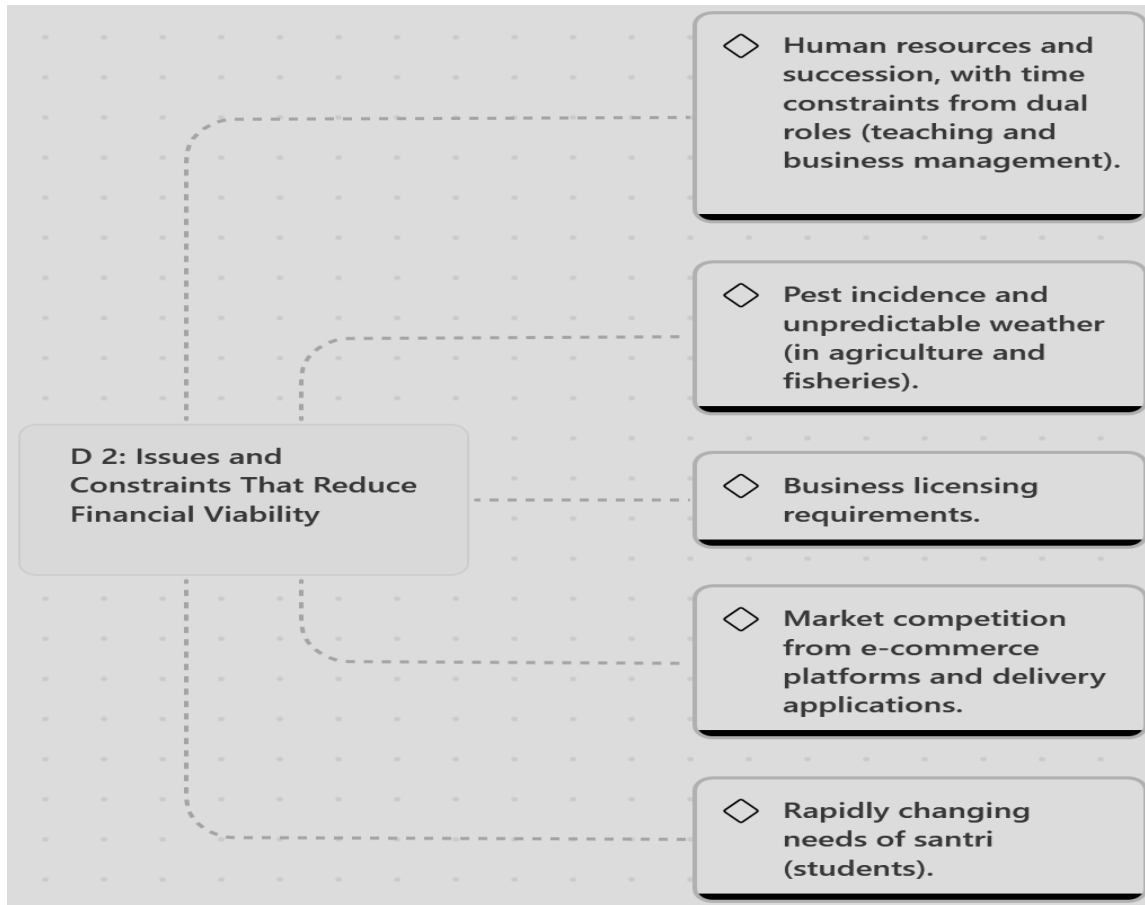
Agricultural and aquaculture operations are particularly vulnerable to risks such as pest infestations and unpredictable weather patterns. These factors can lead to crop failures or production delays, which disrupt revenue streams and hinder financial stability. Effective risk mitigation strategies—such as crop diversification and agricultural insurance, are essential for mitigating these environmental risks.

Regulatory challenges, especially the bureaucratic hurdles of obtaining necessary business licenses, further complicate the process of expanding business units. The often complicated and time-consuming licensing process delays operations and adds additional costs. Additionally, market competition from larger commercial entities, especially those in

retail and agricultural sectors, necessitates innovation in marketing and product differentiation to remain competitive.

Lastly, pesantren must adapt to the evolving needs of their students (santri), ensuring that business activities align with their preferences. Failure to adapt to these changing needs can result in a loss of potential revenue from within the pesantren community, impacting overall financial viability.

Figure 4. *Issues and constraints that reduce financial viability*



Potential and opportunities for business diversification

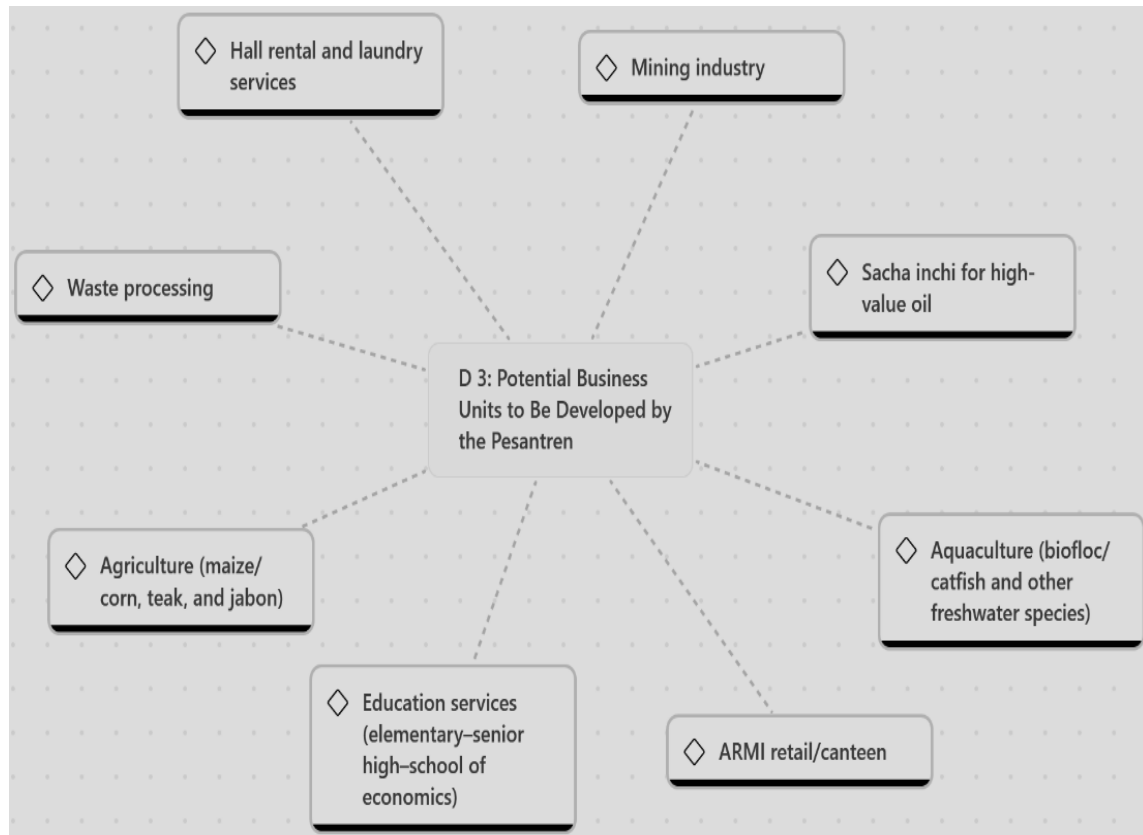
Despite the challenges, the research identifies significant opportunities for pesantren to achieve financial independence through business diversification. Figure 5 highlights various potential business units that pesantren can develop to enhance their financial sustainability.

Key opportunities include agricultural ventures such as maize, teak, and jabon cultivation, which can leverage the pesantren's available land. Sacha inchi, a plant renowned for its high-value oil production, represents an innovative agricultural diversification strategy targeting niche markets. Additionally, aquaculture operations utilizing biofloc technology can

offer sustainable and efficient fish farming, while mining and waste processing ventures can open new industrial and ecological opportunities.

Service-oriented businesses, such as hall rentals, laundry services, and the ARMI minimarket, also provide consistent income streams. These services capitalize on existing community interactions, supporting both the financial stability of the pesantren and the surrounding community. Educational services, from primary school to senior high school levels, further contribute to the pesantren's mission while generating income.

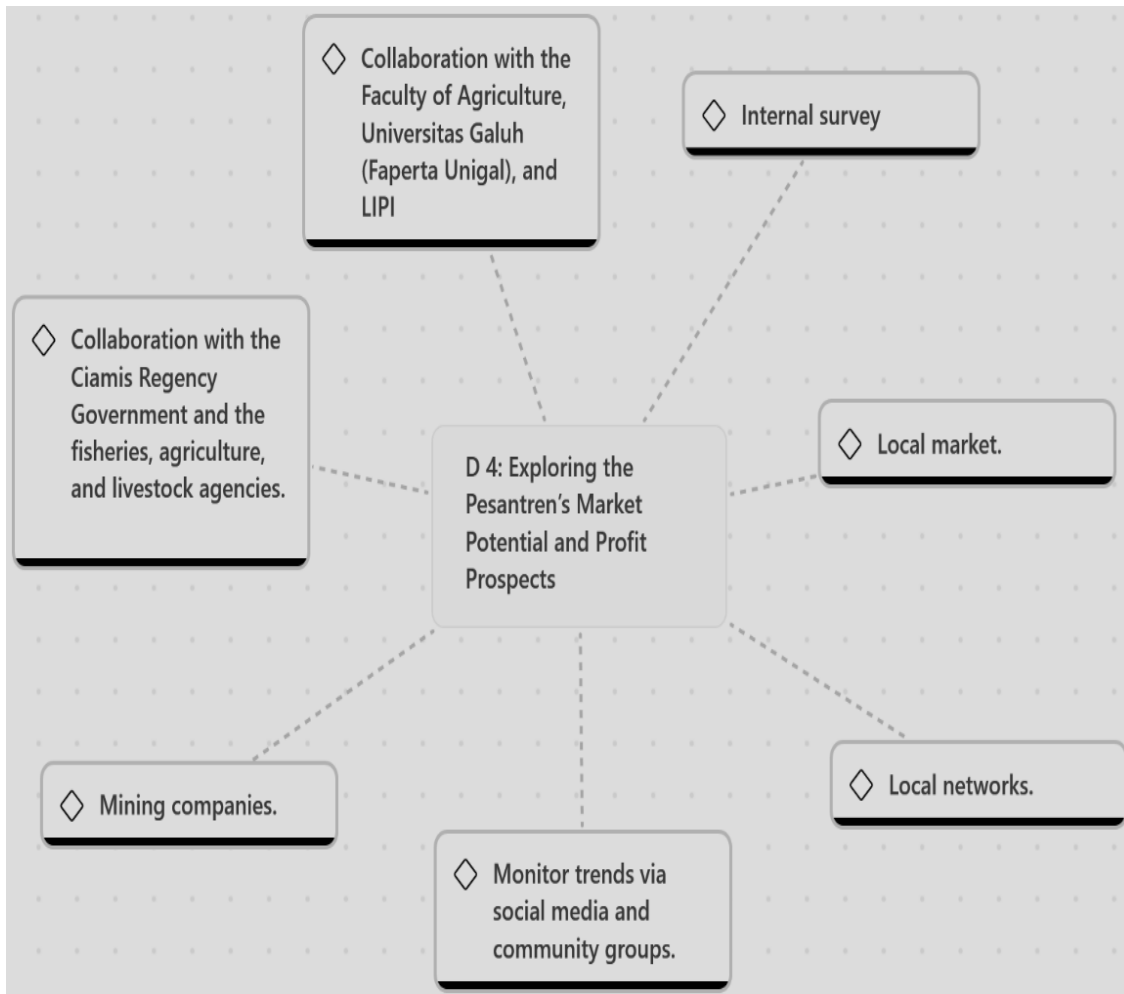
Figure 5. Potential business units to be developed by the pesantren



In Figure 6, the diagram explores the market potential and profit prospects available to pesantren. The analysis emphasizes that strategic partnerships with academic institutions, such as the Faculty of Agriculture at Universitas Galuh, and government agencies can provide valuable technical expertise, market access, and regulatory support. Collaborating with these entities offers opportunities to strengthen existing business units and develop new ventures.

Furthermore, engaging with local communities and markets allows pesantren to build long-term customer relationships and sustain market relevance. Social media and community groups offer insights into evolving consumer preferences, helping pesantren to stay adaptive and responsive to market demands.

Figure 6. *Exploring the pesantren's market potential and profit prospects*



Innovation in managing pesantren business units

Innovation is crucial for the sustainability and growth of pesantren business units. Figure 7 presents the strategies that can drive innovation within pesantren. These include engagement in plastic-waste processing through third-party arrangements, which generates revenue and supports environmental sustainability. Partnerships with external entities, including businesses, academic institutions, and government bodies, are also vital for unlocking new resources and market access. These partnerships foster mutual learning and shared value creation, enhancing the operational capacity of pesantren.

The research further emphasizes the importance of daily leadership monitoring and oversight. By ensuring that business operations align with the pesantren's mission and proactively managing risks, leaders can effectively guide business units towards success. Figure

8 illustrates how the adoption of biofloc technology in aquaculture enhances productivity and reduces environmental impact, demonstrating how modern practices can improve efficiency.

Succession planning and the development of future managers are essential for the long-term sustainability of pesantren businesses. Training programs for both students (santri) and faculty (ustadz) equip them with critical skills in financial literacy, marketing, and operational management. Regular business training empowers the community to engage in entrepreneurial activities and contributes to the growth of the pesantren's business units.

Figure 7. *Innovative Strategies Applicable to Business Unit Development*

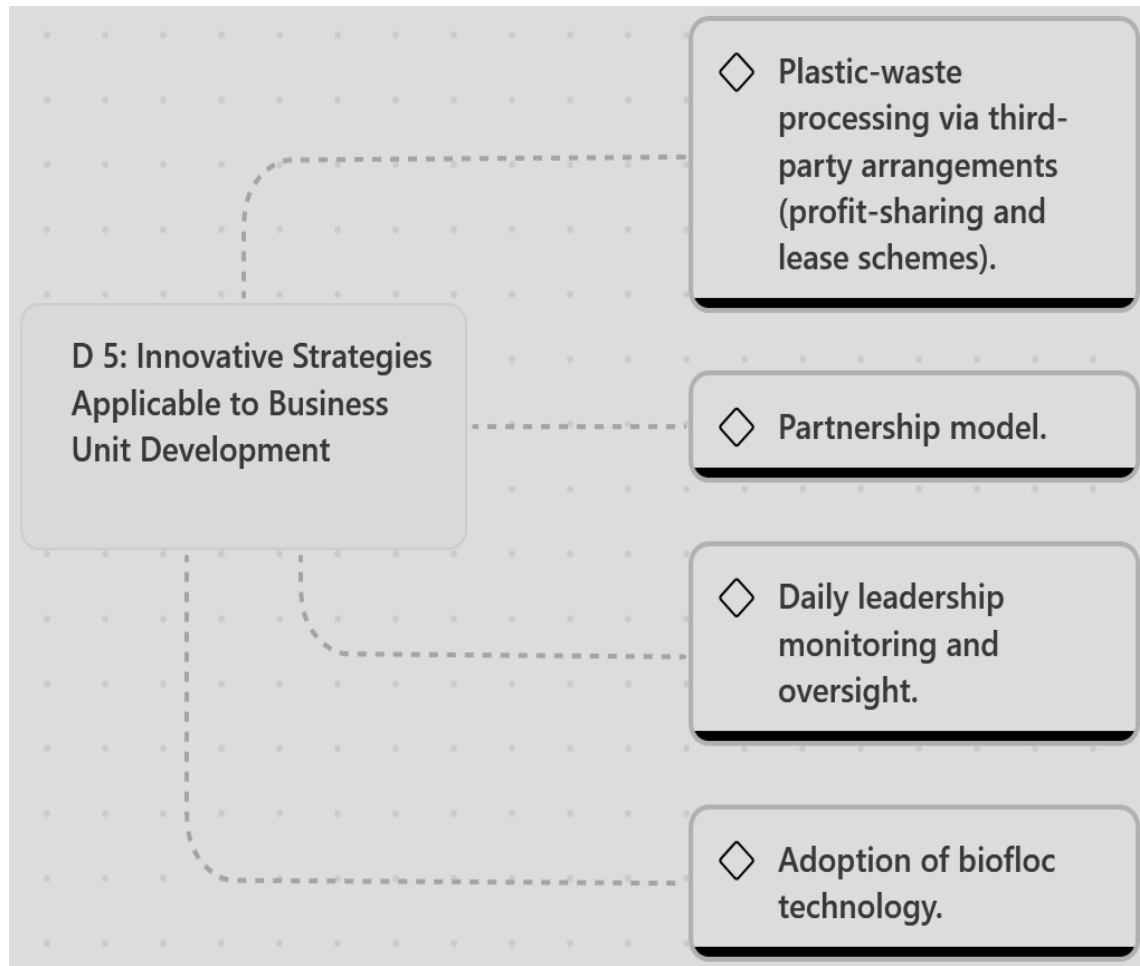
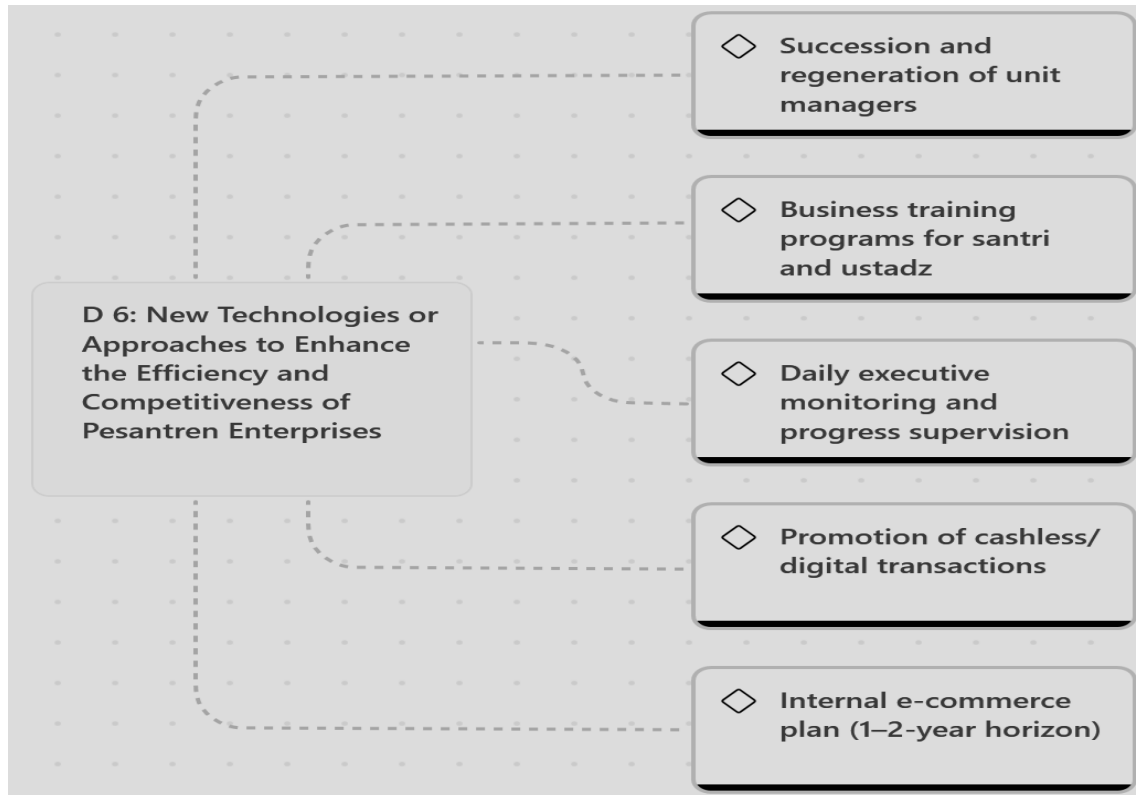


Figure 8. *New technologies or approaches to enhance the efficiency and competitiveness of pesantren enterprises*



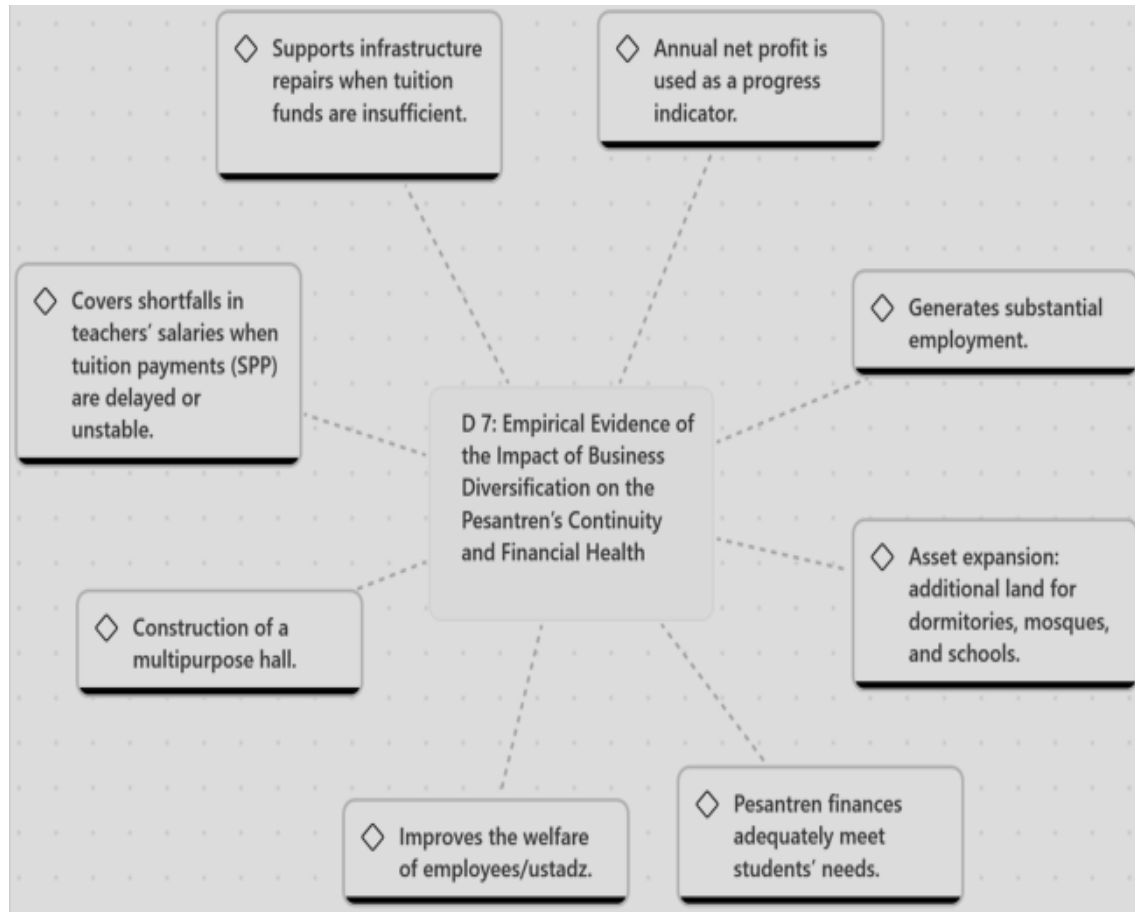
Effects of diversification and innovation on financial viability

Diversification and innovation have profound impacts on the financial viability of pesantren. Figure 9 illustrates the empirical evidence supporting the positive effects of business diversification on the continuity and financial health of pesantren.

The model demonstrates that diversified business units provide not only financial stability but also tangible benefits to the pesantren. These ventures can cover shortfalls in tuition payments, ensure that teacher salaries are met, and support infrastructure improvements when funding from traditional sources is insufficient. Diversification also creates employment opportunities within the pesantren, fostering economic empowerment among students and staff.

Additionally, the financial stability provided by diversified income streams allows pesantren to meet students' educational and living needs. The construction of multipurpose halls and other facilities, funded through diversified business income, underscores the ability of these ventures to generate assets that serve the broader community.

Figure 9. *Empirical evidence of the impact of business diversification on the pesantren's continuity and financial health*

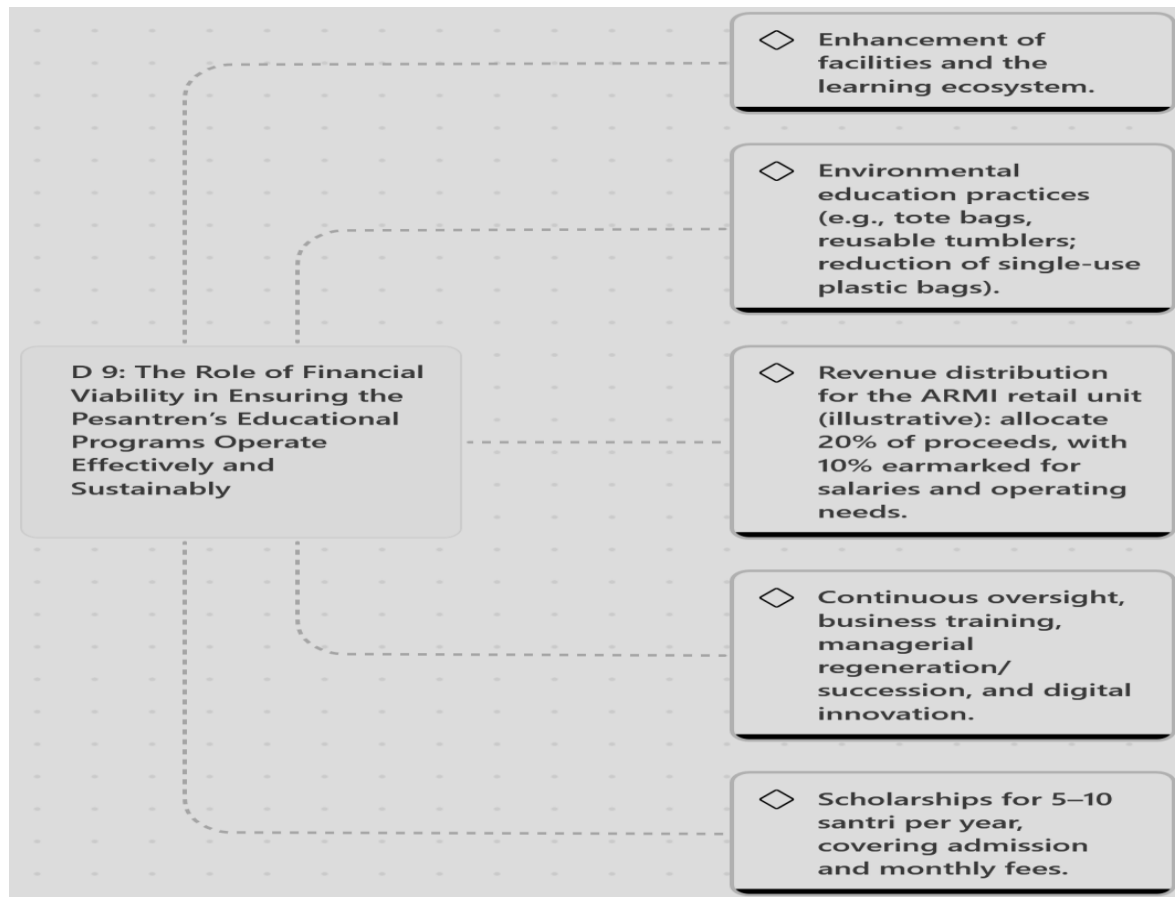


The role of financial viability in sustaining educational programs

Financial viability plays a central role in the continued success of pesantren's educational programs. Figure 10 illustrates how stable finances enable pesantren to enhance facilities and ensure that teaching and mentoring occur in safe, well-equipped environments. Moreover, financial independence allows pesantren to embed environmental education into their daily routines, promoting sustainability while reducing waste management costs.

By maintaining a transparent revenue distribution policy, such as allocating a portion of profits for salaries and operating costs, pesantren can ensure predictable funding streams that protect staff welfare and service quality. Furthermore, financial viability enables the pesantren to make credible social commitments, such as offering scholarships to low-income students, which expands access to education and aligns economic discipline with social responsibility.

Figure 10. *The role of financial viability in ensuring the pesantren's educational programs operate effectively and sustainably*



The role of financial viability in sustaining educational programs

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Discussion

The financial sustainability of Islamic boarding schools (pesantren) is increasingly crucial, given their vital role in Indonesia's educational system. While the number of pesantren has increased dramatically in recent years, the reliance on donations and tuition fees as primary sources of income leaves them vulnerable to economic fluctuations. Consequently, pesantren have turned to business diversification and innovation to achieve financial independence and ensure long-term viability. This discussion explores how diversification and innovation contribute to the financial stability of pesantren, the challenges they face, and the growth opportunities, drawing on existing theories and relevant literature.

Business diversification as a key strategy for financial sustainability

Diversification is a well-documented strategy for enhancing organizational resilience in the face of financial uncertainty. [Dhir and Dhir \(2015\)](#) suggested that diversification helps businesses spread risk across different activities, allowing them to rely on a steady stream of income that is not dependent on a single source. In the case of pesantren, diversifying into agricultural, aquaculture, and service-oriented businesses not only mitigates financial risks but also creates a more sustainable and autonomous financial model.

The findings indicate that pesantren has adopted several innovative business models to support their educational programs. For instance, Pondok Pesantren Ar-Risalah in West Java has successfully incorporated a mix of retail (e.g., ARMI minimarket), aquaculture (using biofloc technology for fish farming), and agriculture (e.g., teak, jabon, and sacha inchi) as part of their diversification strategy. According to [Kurniady et al. \(2024\)](#), these ventures can generate reliable income streams, reducing pesantren's dependence on external donations, which are often unreliable and fluctuate based on economic conditions.

Business diversification provides pesantren with a financial cushion, enabling them to weather fluctuations in student enrollment and donation patterns. As noted by [Xie et al. \(2022\)](#), creating multiple revenue-generating activities is essential for long-term organizational sustainability, particularly in educational institutions that face cyclical financial challenges. In the context of pesantren, the agricultural activities, such as maize and teak cultivation, leverage their vast landholdings, allowing them to tap into markets for commercial crops. The application of biofloc technology in aquaculture aligns with principles of sustainable development by reducing environmental impact and ensuring efficient use of resources ([Hassan, 2024](#)). These strategies contribute to the pesantren's financial viability by ensuring consistent income while promoting social responsibility through environmentally sustainable practices.

Additionally, integrating service-oriented businesses, such as the ARMI minimarket and hall rentals, enables pesantren to generate a steady income by catering to both internal and external customers. This model not only enhances the economic independence of pesantren but also helps foster stronger ties with local communities, which can be mutually beneficial for educational outreach and social integration ([Esteves et al., 2021](#)).

Challenges to achieving financial self-sufficiency

Despite the promising potential of business diversification, pesantren face several challenges that undermine their efforts to achieve financial self-sufficiency. The findings highlighted key obstacles, including human resource limitations, regulatory hurdles, environmental risks, and market competition. These challenges align with existing research that highlights the difficulties nonprofit institutions face in balancing educational missions with financial imperatives.

One of the primary challenges identified is the lack of specialized business management expertise among pesantren administrators. As noted in the findings, many administrators juggle their responsibilities as educators and business managers, which can lead to time constraints and inefficiencies in business operations. This situation aligns with the theory of resource-based view (RBV), which posits that organizational success depends on the possession and effective utilization of resources, including human capital (Barney, 1991). The dual roles of pesantren administrators hinder the effective allocation of time and effort to both teaching and business management. To overcome this, pesantren must invest in professional development programs for their leaders and administrators, equipping them with the necessary business management and financial literacy skills (Behie et al., 2023).

Succession planning is another critical challenge. As organizations grow and diversify, ensuring leadership continuity becomes essential for maintaining operational stability and institutional memory (Adeniran et al., 2024). The findings indicate that succession planning remains an unresolved issue for many pesantren, potentially affecting the long-term success of their business ventures. Developing a formal succession plan and leadership training programs for future administrators is crucial for ensuring that the pesantren can maintain its financial and educational missions as it expands.

Environmental risks also pose a significant threat to the sustainability of pesantren's agricultural and aquaculture ventures. The unpredictability of weather patterns, pest infestations, and natural disasters can lead to crop failures and reduced production, undermining the income generated from these ventures. Leal Filho et al. (2021) suggest that effective risk management strategies, such as crop diversification and insurance, can help mitigate these risks. By adopting these strategies, pesantren can better safeguard their income streams against environmental shocks.

Regulatory issues, such as the complicated process of obtaining business licenses, make it even harder for pesantren to diversify. The bureaucratic hurdles identified in the findings hinder the timely expansion of business ventures and add unnecessary costs. According to Lehoux et al. (2021), understanding and navigating the regulatory environment is critical for the success of any business venture. Pesantren must invest in understanding local regulations and, if necessary, advocate for more supportive policies that streamline the licensing process for nonprofit educational institutions.

Market competition also remains a significant challenge for pesantren's business units, particularly those in retail and agriculture. With the rise of e-commerce platforms and delivery services, pesantren must contend with larger commercial players that benefit from economies of scale and broader market reach. To remain competitive, pesantren must focus on

differentiation strategies, such as offering unique products or services that align with their educational and social missions. Moreover, integrating digital platforms for marketing and sales, as discussed in the findings, can help pesantren expand their market reach and enhance competitiveness.

Opportunities for growth and market expansion

Despite these challenges, pesantren possess significant opportunities for growth and market expansion. As identified in the findings, pesantren can capitalize on their unique resources—such as land, human capital, and religious values—to develop innovative business units that contribute to both financial sustainability and community development.

Strategic partnerships with academic institutions, government agencies, and private-sector organizations offer valuable opportunities for pesantren to enhance their capacity and market reach. The findings highlight potential collaborations with universities, such as the Faculty of Agriculture at Universitas Galuh, as well as government agencies focused on agriculture, livestock, and fisheries. These partnerships can provide technical expertise, market access, and regulatory support, which are critical for expanding existing ventures and exploring new opportunities (Ariatin et al., 2022). Adding these partnerships to the pesantren's business model will make it more financially stable and encourage new ideas in the agricultural and other business units.

In addition to formal collaborations, pesantren can leverage internal resources, such as their student workforce, to support business operations. As noted by Anggadwita et al. (2021), pesantren can provide students with hands-on business training and entrepreneurial experience, benefiting both the institution and the students. This method helps create a future workforce that knows how to run a business, manage finances, and market products.

The use of digital platforms for marketing and e-commerce offers a promising avenue for expanding the pesantren's market reach. As discussed in the findings, embracing digital technologies such as cashless payment systems and e-commerce platforms can enhance the efficiency of financial operations and improve customer engagement. This shift towards digitalization aligns with the broader trend of digital transformation in business and education, providing pesantren with the tools to compete in an increasingly digital economy (Kaputa et al., 2022).

Innovation in managing pesantren business units

Innovation is at the heart of developing sustainable and competitive business units within pesantren. The findings highlight several innovative strategies, including plastic waste processing, biofloc aquaculture, and digital transactions, that contribute to both financial sustainability and environmental responsibility. The adoption of these strategies aligns with the principles of sustainable entrepreneurship, which emphasize the balance of economic goals with environmental and social considerations (Hassan, 2024).

Strategic partnerships with external entities are also critical for fostering innovation. Collaborating with businesses, universities, and government agencies allows pesantren to access new technologies, business models, and market insights, which are essential for

improving efficiency and expanding their operations. As highlighted by [Agustian et al. \(2023\)](#), these partnerships can lead to the development of new products and services that cater to the evolving needs of the pesantren community and the broader market.

Leadership plays a crucial role in driving innovation within pesantren business units. Effective leadership ensures that business operations remain aligned with the pesantren's mission and that resources are allocated efficiently. Daily monitoring and oversight, as discussed in the findings, are essential for ensuring that business units remain on track and that potential issues are identified and addressed promptly. By maintaining a strong focus on innovation and continuous improvement, pesantren can enhance the competitiveness and sustainability of their business ventures.

Impact of diversification on financial viability

Diversification and innovation have a profound impact on the financial viability of Islamic boarding schools. As the findings demonstrate, diversified business units offer a stable source of income that can help cover operational shortfalls and fund educational programs. The ability to generate revenue from multiple sources allows Islamic boarding schools to navigate financial uncertainties, such as fluctuations in tuition fees or donations.

Furthermore, diversification contributes to the broader socio-economic development of the Islamic boarding school community. By creating employment opportunities and supporting local businesses, diversified revenue streams provide economic empowerment to students, staff, and community members. This approach aligns with social entrepreneurship theory, which emphasizes the creation of social value alongside financial returns ([Leal Filho et al., 2021](#)).

Infrastructure expansion, such as dormitories, mosques, and classrooms, is another benefit of diversified revenue. These physical assets enhance educational quality and ensure the Islamic boarding school can accommodate future growth. As highlighted in the findings, the construction of a multi-purpose hall, funded by revenue diversification, illustrates the tangible benefits of business diversification for the Islamic boarding school and its surrounding community.

Conclusion

Diversification and innovation in contextually selected business units can significantly enhance the financial viability of pesantren and sustain educational programs. Leveraging existing assets, including about 50 hectares of land, aquaculture and agricultural activities, retail and service enterprises, and mineral resource utilization, while adopting technologies such as biofloc and third-party plastic waste processing, enables diversified and resilient revenue streams. Success requires strengthening human resources, governance, licensing compliance, market research, and entrepreneurship through training, succession planning, and executive monitoring. Strategic partnerships with government agencies, universities, private sector actors, and local communities will improve market access and technical capacity. Transparent revenue allocation to operations, scholarships, reinvestment, digital transactions, and a phased internal e-commerce platform will increase efficiency and accountability. Although risks from pests, competition, and changing student needs persist, an integrated model centered on

innovation, participatory management, and prudent financial oversight offers a pathway to institutional autonomy and long-term sustainability.

Disclosure Statement

No potential conflict of interest was reported by the authors.

References

- Abebe, A., & Kegne, M. (2023). The role of microfinance institutions on women's entrepreneurship development. *Journal of Innovation and Entrepreneurship*, 12(1), 17.
- Adeniran, I. A., Abhulimen, A. O., Obiki-Osafiele, A. N., Osundare, O. S., Agu, E. E., & Efunniyi, C. P. (2024). Strategic risk management in financial institutions: Ensuring robust regulatory compliance. *Finance & Accounting Research Journal*, 6(8), 1582–1596.
- Agustian, K., Pohan, A., Zen, A., Wiwin, W., & Malik, A. J. (2023). Human resource management strategies in achieving competitive advantage in business administration. *Journal of Contemporary Administration and Management (ADMAN)*, 1(2), 108–117.
- Ariatin, E., Irianto, T., & Suryadi, S. (2022). Social entrepreneurial initiatives for strengthening pesantren's economic sustainability: Case studies and strategic outlook. *Asian Journal of Social Sciences & Humanities*, 15(1), 80-94.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Behie, S. W., Pasman, H. J., Khan, F. I., Shell, K., Alarfaj, A., El-Kady, A. H., & Hernandez, M. (2023). Leadership 4.0: The changing landscape of industry management in the smart digital era. *Process Safety and Environmental Protection*, 172, 317–328.
- Darwanto, A., Prahmana, R. C. I., Susanti, A., & Khalil, I. A. (2024). Transformation of boarding school management models in enhancing student accessibility and educational quality. *Jurnal Pendidikan Agama Islam*, 21(1), 145–164.
- Dhir, S., & Dhir, S. (2015). Diversification: Literature review and issues. *Strategic Change*, 24(6), 569-588.
- Esteves, R., Da Silva, F., & Farinha, C. (2021). Empowering local communities through educational and business collaboration. *Social Business*, 10(2), 203–217.
- Hafidh, Z., Sururi, S., Nurdin, N., Adinata, A. R., & Ramadhan, R. A. (2024). Innovative revenue models for Islamic boarding schools: Achieving economic autonomy. *Indonesian Research Journal in Education*, 8(2), 556–573.
- Hassan, N. A. (2024). University business incubators as a tool for accelerating entrepreneurship: Theoretical perspective. *Review of Economics and Political Science*, 9(5), 434–453.
- Holten, C. S., van Hoof, M., & Sommer, T. (2020). The role of qualitative case study research in understanding business models in non-profit institutions. *Nonprofit Management and Leadership*, 31(1), 23-45.
- Irhas, A., Dwi, A., & Utami, S. (2023). Integrating sustainability into Islamic boarding schools: A focus on diversification of business activities. *Journal of Islamic Economics*, 14(3), 143-160.

- Kaputa, A., Kim, B., & Li, X. (2022). Business strategies and the role of technological innovation in Islamic entrepreneurship. *International Journal of Technological Innovation*, 3(4), 10-22.
- Kurniady, D. A., Suharto, N., Suryadi, S., Hafidh, Z., & Permana, R. D. (2024). Strategic resource management in Islamic boarding schools: The role of income-generating units in supporting educational goals. *Al-Tanzim: Jurnal Manajemen Pendidikan Islam*, 8(4), 1360–1375.
- Laila, N., Ratnasari, R. T., Ismail, S., Mohd Hidzir, P. A., & Mahphoth, M. H. (2023). The intention of small and medium enterprises' owners to participate in waqf: the case of Malaysia and Indonesia. *International Journal of Islamic and Middle Eastern Finance and Management*, 16(3), 429–447.
- Leal Filho, W., Salvia, A. L., Frankenberger, F., Akib, N. A. M., Sen, S. K., Sivapalan, S., Novo-Corti, I., Venkatesan, M., & Emblen-Perry, K. (2021). Governance and sustainable development at higher education institutions. *Environment, Development and Sustainability*, 23, 6002–6020.
- Lehoux, P., Silva, H. P., Denis, J., Miller, F. A., Pozelli Sabio, R., & Mendell, M. (2021). Moving toward responsible value creation: Business model challenges faced by organizations producing responsible health innovations. *Journal of Product Innovation Management*, 38(5), 548–573.
- Nartin, S. E., Faturrahman, S. E., Ak, M., Deni, H. A., MM, C. Q. M., Santoso, Y. H., SE, S., Paharuddin, S. T., Suacana, I. W. G., & Indrayani, E. (2024). *Metode penelitian kualitatif (Quantitative research method)*. Cendikia Mulia Mandiri.
- Obeng, S., Iyelolu, T. V., Akinsulire, A. A., & Idemudia, C. (2024). The transformative impact of financial technology (FinTech) on regulatory compliance in the banking sector. *World Journal of Advanced Research and Reviews*, 23(1), 2008–2018.
- Pocol, M. A., Popescu, S., & Vlad, L. (2022). Exploring the social role of pesantren: Business initiatives to support local economies. *International Journal of Social Economics*, 49(8), 1263-1281.
- Pugu, M. R., Riyanto, S., & Haryadi, R. N. (2024). *Metodologi penelitian: Konsep, strategi, dan aplikasi (Research methodology: Concepts, strategies, and applications)*. PT. Sonpedia Publishing Indonesia.
- Qizam, M., Mahfud, A., & Buntoro, R. (2024). A comprehensive review of business diversification strategies in pesantren. *Journal of Islamic Education Studies*, 4(2), 67-79.
- Riinawati, R. (2022). Strategy of financing management to improve the quality of Islamic education institution. *AL-Isblah: Jurnal Pendidikan*, 14(3), 2757–2768.
- Setiawan, A., & Ekaningsih, L. A. F. (2025). Education financing management in the digital era: an analysis of the role of virtual accounts tuition payments in Islamic boarding school. *Proceeding: Islamic Education Management International Conference*, 1(1), 1–15.
- Shaturaev, J. (2021). Financing and management of Islamic (Madrasah) education in Indonesia. *Zeszyty Naukowe Politechniki Częstochowskiej. Zarządzanie*, 42, 57–65.
- Tunio, N., Abidin, A., & Alwi, S. (2021). Enhancing pesantren financial independence through business diversification: The importance of technological adoption and innovation. *Global Business Review*, 9(3), 243-261.

- Xie, Y., Wang, L., & He, X. (2022). Strategic management and market trends in the Islamic education sector: The role of innovation. *Journal of Business Strategy*, 18(2), 131-148.
- Zaki, I., Zusak, M. B. F., Mi'raj, D. A., & Hasib, F. F. (2022). Islamic community-based business cooperation and sustainable development goals: A case of pesantren community in Indonesia. *International Journal of Ethics and Sustainability*, 16(2), 87-104.