ANALYSIS OF THE IMPACT OF ENVIRONMENTAL, SOCIAL, AND GOVERNANCE (ESG) STRATEGIES ON PRODUCT AVAILABILITY AND BUSINESS SUSTAINABILITY OF MYCOLA FARMA'S PHARMACY BUSINESS

Ridzal Wahid[1], Christina Whidya Utami[2]
Universitas Ciputra Surabaya[1,2]
Email: ridzalwahid03@magister.ciputra.ac.id , whidyautami@ciputra.ac.id

Abstract:
This study examines the impact of Environmental, Social, and Governance (ESG)-based strategic planning on product availability and business sustainability at Mycola Pharmacy. Using a qualitative approach through in-depth interviews, observations, and document analysis involving the pharmacy owner, pharmaceutical wholesalers, employees, and consumers, the research highlights how ESG implementation strengthens supply chain efficiency, optimizes stock management, and promotes transparent governance. The social and governance dimensions of ESG further enhance customer loyalty, operational effectiveness, and corporate reputation, contributing to long-term business sustainability amid external challenges such as the pandemic and inflation.

Keywords: Environmental, Social, and Governance (ESG), pharmacy business, product availability, business sustainability

INTRODUCTION

Pharmacies play a vital role in ensuring the availability of safe and high-quality medicines and medical devices for the community, especially amid increasing healthcare demands driven by population growth, urbanization, and longer life expectancy (Ministry of Health, 2023; Pradana, 2021; Hajar, 2019). Since 2020, Mycola Farma Pharmacy in Probolinggo has served more than 200,000 customers through drug sales, health consultations, and periodic check-ups. However, challenges within the pharmaceutical supply chain such as fluctuating demand, logistical constraints, regulatory changes, and the impact of the COVID-19 pandemic highlight the need for robust strategic planning between pharmacies and drug manufacturers to maintain product availability sustainably (Samodro, 2020; Yusuf, 2020 in Zulkarnain, 2023).

In response to these dynamics, Mycola Pharmacy has begun integrating Environmental, Social, and Governance (ESG)-based strategies, including initiatives to reduce waste, improve energy efficiency, enhance employee welfare, and implement transparent governance practices (Rahma et al., 2024). While these efforts align with global trends and increasing consumer awareness of responsible business practices, their implementation presents challenges, such as the high cost of eco-friendly packaging, additional resource requirements, and bureaucratic barriers that may slow decision-making processes.

Previous studies by Anwarudin et al. (2013) and Ariska et al. (2023) primarily explored internal aspects of pharmacies such as service quality improvement and employee development leaving a research gap regarding the integration of ESG strategies and their impact on product availability and business sustainability in the pharmacy sector. Addressing this gap, the present study aims to analyze how ESG-based strategic planning influences both product availability and the long-term sustainability of Mycola Pharmacy.

To achieve this, the research involves four pharmaceutical wholesalers (PBF) PT. Elang Makmur Niaga, PT. Pangestu Farmindo Muliatama, PT. Lancar Jaya Sehat, and PT. Mitra Sumber Abadi as key informant providing assessments of ESG implementation at Mycola Farma Pharmacy. These partners represent suppliers of both patented and generic drugs, offering a comprehensive perspective on the cooperative relationships developed by the pharmacy. By conducting an in-depth qualitative analysis of the collaboration between Mycola Farma Pharmacy and its suppliers under the ESG framework, this study aims to provide practical insights for pharmacy business practitioners and health-sector stakeholders in designing efficient, effective, and sustainable business strategies. Moreover, the findings are expected to enrich the academic literature on sustainability-based strategic management in the pharmaceutical industry, particularly in Indonesia, where such research remains limited. This approach not only contributes to Mycola Farma Pharmacy's case but may also serve as a reference for other pharmacies facing similar challenges in maintaining sustainability amid logistical pressures and dynamic regulatory environments.

LITERATURE REVIEW

SWOT analysis is one of the most commonly used methods in strategic management to assess an organization's internal and external conditions. According to Wijaya and Lathifah (2025), SWOT evaluates strengths, weaknesses, opportunities, and threats to formulate appropriate strategic alternatives (Hasna, 2023). In pharmacy businesses, strengths may include broad distribution networks, while weaknesses often relate to limited human resources or capital. Opportunities can arise from digitalization trends in healthcare, whereas threats may stem from regulatory changes or intense market competition.

The concept of Environmental, Social, and Governance (ESG) has emerged as a crucial business standard, serving not only as an ethical guideline but also as an indicator of long-term sustainability (Rahma et al., 2024). ESG encompasses three pillars environmental, social, and governance and has been gradually mandated for public companies by Indonesia's Financial Services Authority (OJK) from 2019 to 2025. In the pharmaceutical sector, ESG implementation includes waste management, energy efficiency, and ethical drug distribution (Kumar et al., 2023). Thus, ESG-based strategies are seen as more adaptive, socially responsible, and environmentally conscious. As a high-risk and highly regulated industry, the pharmaceutical sector particularly benefits from the integration of ESG principles. Soeratin (2023) highlights that ESG helps identify environmental risks such as pharmaceutical waste while uncovering sustainable business opportunities. Larasati and Mawardi (2024) found that strong social performance can reduce financial distress risks, while Velte (2017) associated good governance with improved long-term financial outcomes. Hence, ESG adoption not only ensures regulatory compliance but also strengthens competitiveness, reputation, and business resilience.

In Indonesia, ESG assessments are facilitated by the Indonesia Stock Exchange (IDX) and Morningstar Sustainalytics, using a matrix of exposure (a company's level of ESG risk) and management (the extent of mitigation through policies and actions) (IDX, 2024). This framework is highly relevant for pharmacies working with distributors and manufacturers, as high exposure to ESG risks can directly affect product availability and overall business sustainability.

A research gap remains, however, as few studies specifically examine ESG-based strategic management within Indonesian pharmacies. Prior works by Belkhir and Elmeligi (2019) and Sazvar et al. (2021) focused on global supply chains and manufacturing, while local studies have centered on service quality rather than ESG integration. Therefore, this study contributes both academically and practically by exploring how ESG implementation can enhance operational resilience and product availability in pharmacy settings through collaborative relationships with pharmaceutical distributors and producers.

METHODOLOGY

This study employed a qualitative case study approach to examine the implementation of Environmental, Social, and Governance (ESG) principles at Mycola Farma Pharmacy in Probolinggo. Adopting a post-positivist paradigm, the research acknowledges diverse social realities while maintaining systematic and rational procedures.

Informants included SM (pharmacy owner), XX (pharmaceutical wholesaler representative), YY (pharmacy employee), and ZZ (consumer), selected based on relevant experience and involvement in ESG-related activities. Data were collected between April and May 2025 through in-depth interviews, participatory observations, and document analysis. The instruments comprised semi-structured interview guides, observation checklists, and document review matrices.

Interviews explored ESG implementation strategies and challenges; observations focused on waste management, community health services, and governance practices; and document analysis reviewed annual reports, SOPs, and sustainability policies. All data were transcribed, organized, and coded using NVivo 12 Plus software, which facilitated thematic categorization through open and axial coding.

Thematic analysis identified core themes such as pharmaceutical waste management, implementation barriers, and consumer perceptions of sustainability initiatives. Data validation was conducted through triangulation of sources, methods, researchers, and theories to ensure reliability. Finally, the results were synthesized into narrative interpretations supported by tables and diagrams, linking the empirical findings with sustainability and strategic management theories.

Through this systematic process, the study provides a comprehensive yet practical understanding of ESG implementation in Mycola Farma Pharmacy's operations and partnerships.

DISCUSSION

Mycola Farma Pharmacy was founded in 2020 by Ridzal Wahid in Probolinggo as the first family business with the vision of providing quality medicine and health services to the surrounding community. Based in

Wangkal, Gading, this pharmacy upholds the values of integrity, quality, and friendly service as the main pillars in its operations. The pharmacy's organizational structure consists of the CEO, Director of Operations, and Director of Finance, each of whom holds a strategic role ranging from the company's vision to operational and financial management (Internal data, 2020). The SWOT matrix analysis is used to identify the strengths, weaknesses, opportunities, and threats faced by Mycola Farma Pharmacy. The main strengths include strategic location, fast and friendly service, complete medicine, and competitive prices. The disadvantages are limited sales territory, sub-optimal promotions, and dependence on multiple suppliers. The opportunity comes from increasing public awareness of health, government support for primary health services, and online drug shopping trends. Significant threats include stiff competition from large pharmacies and franchises as well as changes in pharmaceutical regulations (Data processed, 2025). From the SWOT results, four alternative marketing strategies were developed to ensure business sustainability:

1. S-O (Strengths-Opportunities) Strategy:
   a. The development of online drug ordering services to improve customer access and convenience, expand the market, and keep up with digitalization trends.
   b. The implementation of health education through social media such as Instagram, Facebook, and TikTok to increase customer engagement and loyalty.
2. W-O (Weakness-Opportunities) Strategy:
   a. Collaborate with digital startups that already have a drug ordering and health consultation platform to accelerate digital transformation and expand service reach.
   b. Offering free blood sugar and cholesterol check service packages for loyal customers as an incentive based on the loyalty card system.
3. S-T (Strength-Threats) Strategy:
   a. Partnering with local doctors and clinics to expand service networks and increase credibility and transaction volume.
   b. Diversify products by adding herbal supplements, medical devices, and other care products to reduce dependence on conventional pharmaceutical products and face strict regulations.
4. W-T (Weakness-Threats) Strategy:
   a. Increase community-based local promotions with a personalized approach, such as loyalty programs, local discounts, free health counseling, and cooperation with local institutions to compete with large pharmacies without a large budget.
   b. Finding alternative suppliers to reduce the risk of dependency and ensure stable stock availability, increasing bargaining power and flexibility in product procurement.

These strategies are designed so that Mycola Farma Pharmacy can increase competitiveness, expand the market, and maintain business sustainability amid evolving market dynamics and regulations.

Envivo Analytics

Based on the search results with this feature, the most frequently appearing sets of words in the data are shown in the following:

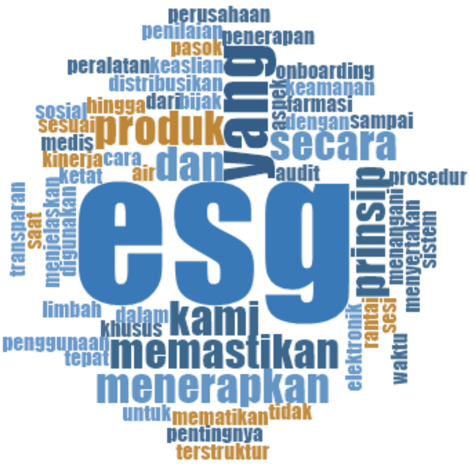

Figure 1. Go Cloud
Source: NVivo12Pro Processing

The Word Cloud visualization (Figure 1) provides an initial overview of the most frequent and dominant concepts that appeared during the interviews. This finding serves as the foundation for determining the preliminary codes used in thematic analysis. The prominence of words such as ESG, ensure, and apply reflects respondents' emphasis on the operational integration of sustainability principles, which then guided the coding process for themes such as "Implementation of ESG Functions," "Product Availability," and "Business Sustainability." Thus, the visualization supports the identification of the core focus areas in the qualitative data.

Based on the results of visualization using the word cloud feature, there are words that appear the most and are the main concern for respondents related to the research question. The findings in the form of the frequency of mention of the word in Figure 1 above show that the word "ESG" is the center of attention of the text, indicating that the content of the document emphasizes the importance of applying Environmental, Social, and Governance principles. Words such as ensure, apply, and principles also appear with high frequency, indicating an active commitment from an entity or organization to integrating ESG values into their business processes. The existence of our word also reinforces that the text is delivered in a narrative style or a direct statement of the organization. In addition, words such as product, distribution, audit, transaction, system, and medical indicate that the application of ESG principles is carried out operationally and structurally, including in terms of supply chain management, medical product management, and internal audit systems. The word strict, precise, and structured shows that the application is not only symbolic, but is carried out in a disciplined and measurable manner. Thus, a word cloud describes a strategic and systematic approach to ensuring that ESG principles are integrated into all company processes and policies.

This study involved interviews with 11 participants, consisting of Mycola Pharmacy Owners (1 person), Pharmaceutical Wholesalers (4 people), Pharmacy Employees (1 person), and Consumers (5 people). To maintain confidentiality, the identity of the participants is disguised with initials. The interview data were transcribed and analyzed using NVivo 12 software. One of NVivo's features, Word Frequency Query, is used to display a visualization of the words that appear most frequently in the data through a word cloud (NVivo12Pro).

The word cloud results confirm that the word "ESG" (Environmental, Social, and Governance) is the most dominant word, showing respondents' focus on the importance of implementing ESG principles in pharmacy operations. Other words such as ensure, apply, principles, products, distribution, audit, and transactions indicate the application of ESG not only as a concept, but as part of structured and disciplined operational management. This reinforces the impression that Mycola Pharmacy implements ESG seriously and systematically.

Based on the results of coding processing using Nvivo 12 Pro software using a hierarchy chart visualization model, data was obtained in the form of a Hierarchy Chart of all interview data codes related to the theory used as follows:

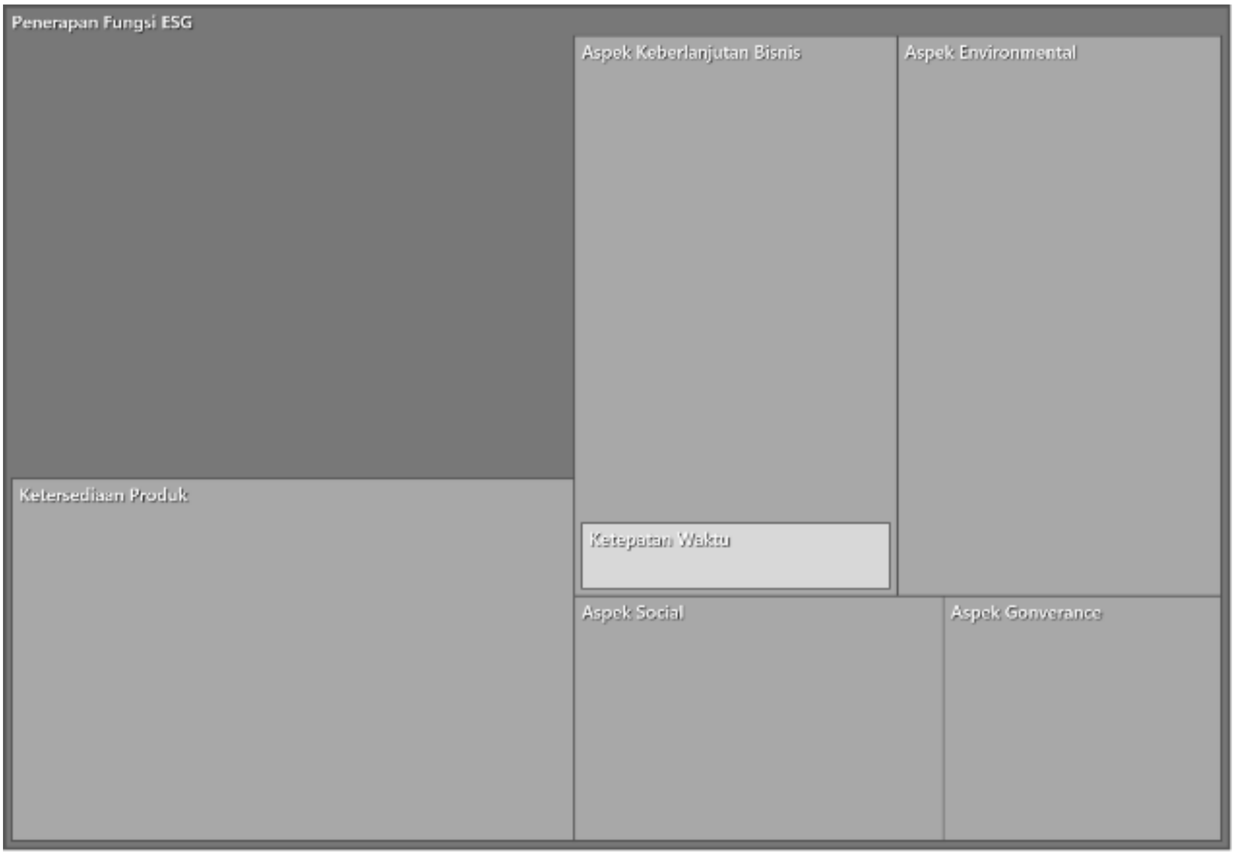

Figure 2. Hierarchy Chart
Source: NVivo12Pro Processing

The Hierarchy Chart (Figure 2) further refines the results by illustrating how the major and minor themes are interconnected. This visualization helps clarify how the concept of ESG is operationalized in Mycola Farma Pharmacy, linking environmental, social, and governance practices to measurable outcomes such as supply chain efficiency and business sustainability. The hierarchical structure demonstrates that "Implementation of ESG Functions" is the central theme, supported by sub-themes related to product management, timeliness, and sustainability. Therefore, this figure directly supports the findings by visually representing the thematic relationships derived from the NVivo coding process.

Furthermore, thematic analysis using the Hierarchy Chart feature in NVivo 12 shows that the most prominent main theme is "Implementation of ESG

Functions". The hierarchical visualization indicates that the majority of the data is strongly associated with the actual implementation of ESG principles across environmental, social, and governance dimensions within companies. Two other important sub-themes that emerged were "Product Availability" and "Business Sustainability, which reflected the importance of maintaining an efficient supply chain as well as a long-term strategy to keep the business stable and thriving. Themes related to the ESG pillars environmental, social, and governance also emerged, though less prominently, indicating that the organization's ESG approach is integrated and holistic rather than segmented by individual aspects. In addition, the theme "Timeliness" also emerged, highlighting the important role of time factors such as delivery speed and reporting in the success of ESG implementation. Overall, NVivo's analysis revealed that the main focus in the interview was the concrete and systematic implementation of ESG, with special attention to the efficiency of product management and business sustainability as the main indicators of the successful implementation of ESG principles at Mycola Farma Pharmacy.

This study indicates that Mycola Farma Pharmacy has systematically and comprehensively implemented ESG principles in its operations. From an environmental perspective, the pharmacy manages hazardous and expired pharmaceutical waste in compliance with regulations through partnerships with licensed third parties, thereby minimizing environmental pollution risks. In addition, efforts to reduce the use of plastic are carried out by replacing ordinary plastic bags with environmentally friendly bags and educating customers about the importance of reducing plastic waste. However, this initiative needs to be supported with more measurable performance indicators so that it is not just symbolic. In terms of distribution, pharmacies collaborate with distributors who implement logistics efficiency through the use of energy-efficient vehicles, optimal delivery routes, and repackaging using recycled cardboard and return blisters for recycling, further strengthening the commitment to sustainability in the supply chain. Support from multiple stakeholders, including management and distributors, indicates that these practices are implemented consistently and contribute to minimizing the environmental risks associated with pharmacy operations.

In the social dimension, Mycola Farma Pharmacy fulfills its social responsibility by conducting monthly health education programs in collaboration with health centers to enhance public health literacy. The pharmacy demonstrates its commitment to drug accessibility by providing generic medicines and using digital monitoring to ensure continuous stock availability, particularly for lower-income communities. Friendly service and empathetic communication by pharmacy staff are also a major concern, which provides an inclusive healthcare experience and builds customer trust. This is reflected in the testimonials of consumers who feel satisfied and comfortable in getting drug information and professional services. Furthermore, pharmacies have included ESG literacy in onboarding training for employees, so that sustainability values have been part of the organization's culture since the beginning of the tenure. This training increases staff awareness and responsibility towards environmental, social, and governance aspects which then encourages the creation of a healthy and productive work environment.

In the aspect of Governance, Mycola Farma Pharmacy shows good governance by prioritizing price transparency and product education to consumers openly, which helps build trust and avoid practices that are detrimental to customers. The integrated digital stock system and the implementation of the Highest Retail Price (HET) demonstrate a commitment to operational accountability in accordance with applicable pharmaceutical regulations. The implementation of SOPs for medical waste management and staff training strengthens regulatory compliance, while quality audits and real-time ordering systems support supply chain efficiency and transparency. In addition, the integration of ESG principles into employee performance evaluations reflects the internalization of sustainable governance within the organization's work culture. These governance practices not only meet legal standards but also create a strong foundation for the long-term sustainability of the business.

Overall, the implementation of ESG strategies at Mycola Farma Pharmacy has had a significant positive impact on supply chain stability and operational efficiency. Environmental aspects help reduce waste and negative impacts on ecosystems through waste management and logistics efficiency. The social aspect strengthens the pharmacy's relationship with the community through health education, quality services, and employee welfare. The governance aspect ensures transparency, accountability, and compliance with regulations that are the basis for sound operations. Interviews with various stakeholders, ranging from owners, distributors, employees, to consumers, emphasized that ESG is not only an ethical idealism, but also a business strategy that is able to increase the trust, loyalty, and competitiveness of pharmacies. Owners consider ESG to be an important long-term investment to face market changes and increasingly sustainability-conscious consumer demands. Distributors emphasize the importance of good governance to maintain stable and mutually beneficial business relationships. Employees are feeling a positive change in a more disciplined and collaborative work culture, while consumers appreciate transparency and service that cares about their needs.

The impact of ESG implementation is evident not only in consistently maintained product availability through efficient inventory management and real-time information systems, but also in improved business sustainability. ESG has strengthened Mycola Farma Pharmacy's community reputation and expanded access to sustainability-based funding, making it a clear example of how healthcare businesses can integrate environmental, social, and governance principles to create long-term value for all stakeholders.

Managerial Implications

The practical implications of this study provide a real picture for pharmacy managers, especially medium-sized ones, that Environmental, Social, and Governance (ESG) strategies can be realistically applied and provide significant benefits. The implementation of ESG is not limited to large companies but can also be effectively adopted by pharmacies such as Mycola Pharmacy. In terms of operational efficiency, the implementation of an integrated waste management system and partnering with third parties helps reduce environmental risks while preventing potential legal sanctions. In addition, the use of a digital stock system integrated with price transparency practices also improves the accuracy of inventory management while satisfying consumers. In terms of business image, consumers responded positively to various environmentally friendly initiatives, such as the use of recycling bags and health education programs run by pharmacies. A friendly and professional service ethic further strengthens customer loyalty and supports long-term business relationships. For pharmacies seeking to adopt ESG, simple initial steps such as staff education on ESG principles, energy efficiency, and local community engagement can serve as effective entry points. In addition, internal training and clear ESG-related policies have been shown to shift employee mindsets and support the sustainable implementation of ESG initiatives.

In terms of theoretical implications, the findings of this study make an important contribution to the academic literature on the application of ESG in the context of the health industry, which has been dominated by the manufacturing and financial sectors. This study expands the scope of ESG theory by demonstrating that sustainability principles can be effectively applied at the micro-enterprise level and within healthcare services, such as pharmacies. The findings also reinforce a systemic approach that states that sustainability is not just about environmental aspects, but the result of complex interactions between social dimensions including human resources and customers, transparent and regulatory governance, and efficient environmental management. This is in line with the triple bottom line theory that integrates economic, social, and environmental aspects holistically. Furthermore, this study opens avenues for future research, such as examining the relationship between the level of ESG implementation and the financial performance of pharmacies, or comparing consumer perceptions of pharmacies that adopt ESG with those that have not. Consequently, this study provides an important foundation for advancing ESG research in the healthcare sector, which remains relatively underexplored.

CONCLUSION

Based on the research findings, it can be concluded that Mycola Farma Pharmacy has successfully implemented Environmental, Social, and Governance (ESG) principles as an integral component of its operational strategy, rather than merely as a theoretical concept. The implementation of ESG has made a significant contribution to maintaining a stable supply chain, ensuring consistent product availability, and strengthening the sustainability of the pharmacy business through transparent governance, strong social engagement with stakeholders, and environmental responsibility. These findings also contribute theoretically by extending the application of ESG principles to micro enterprises within the healthcare sector. Furthermore, this study presents a practical model of sustainability practices that can serve as a reference for other pharmacies and health-related MSMEs in promoting more sustainable business management.

SUGGESTIONS

Based on the findings and conclusions of the research, there are several suggestions that can be given to various related parties. First, the management of Mycola Farma Pharmacy is advised to continue to strengthen the implementation of ESG, especially through increasing internal training and digitizing the reporting system so that operational efficiency and transparency will increase. Second, for other pharmacies and MSMEs in the healthcare sector, the ESG implementation model adopted by Mycola Farma can serve as a practical reference for building strong trust-based relationships with drug manufacturers and consumers, while also functioning as an effective strategy for long term business sustainability. Third, for stakeholders and regulators, policy support in the form of incentives, training, and structured mentoring is needed to encourage the implementation of ESG in the pharmaceutical and healthcare sectors. Formal recognition of small businesses' sustainability performance can serve as a strong motivational factor. From an academic perspective, future research should develop ESG frameworks tailored to micro and small enterprises by incorporating relational and adaptive dimensions identified in this study. Additionally, quantitative or comparative research across other healthcare sectors is needed to statistically examine the impact of ESG implementation on business performance and to strengthen the evidence base for sustainability practices in this field.

REFERENCES

Abdullah, A. M., & Karim, Z. A. (2024). Prestasi Indeks Berkaitan ESG di Pasaran Malaysia dan Amerika Syarikat : Satu Analisis Perbandingan Comparative Analysis). 58(3)

Anwarudin, I., Zaman, R., & Setiawan, A. (2013). Performance measurement of pharmacy business units using balanced scorecard framework. Journal of Pharmacy Management, 15(2), 45-58.

Anwarudin, W., Fudholi, A., & Satibi, S. (2013). Evaluasi Kinerja Unit Bisnis Apotek Perusahaan Daerah Farmasi Ciremai Kota Cirebon Dengan Balanced Scorecard Sebagai Bahan Penyusunan Strategy Maps. JURNAL MANAJEMEN DAN PELAYANAN FARMASI (Journal of Management and Pharmacy Practice), 3(4), 291-310.

Ariska, A., Putra, R. R., & Destriano, S. (2024). Analisis penerapan manajemen kinerja model Deming (PDCA CYCLE) Studi kasus pada apotek central care. Jurnal Adijaya Multidisplin, 1(06), 1309-1315.

Aydoğmuş, M., Gülay, G., & Ergun, K. (2022). Impact of ESG performance on firm value and profitability. Borsa Istanbul Review, 22, S119–S127. https://doi.org/10.1016/j.bir.2022.11.006

Belkhir, L., & Elmeligi, A. (2019). Carbon footprint of the global pharmaceutical industry and relative impact of its major players. Journal of Cleaner Production, 214, 185-194.

Carrera, L. (2022). Corporate social responsibility. A strategy for social and territorial sustainability. International Journal of Corporate Social Responsibility, 7(1). https://doi.org/10.1186/s40991-022-00074-0

Chen, L., Zhang, Y., & Zhao, W. (2021). Supply chain disruptions and resilience in the pharmaceutical industry during the COVID-19 pandemic. Supply Chain Management: An International Journal, 26(4), 523-535. https://doi.org/10.1108/SCM-05-2020-0201

Hajar, H. I. (2019). Manajemen Strategik-Konsep Keunggulan Bersaing. Penerbit Andi.

Harisudin, M., & Qurtubi. (2023). Analysis of Ecotourism Marketing Strategy Using. Jurnal Disprotek, 14(1), 91–98. https://doi.org/10.34001/jdpt

Hasna, M. (2023). Digitalisasi Pengelolaan Sekolah Dasar Negeri Kota Banjarmasin: Tinjauan Analisis SWOT Dalam Strategi Pengembangan Sekolah Digital.

Hassan, M., Khan, A., & Azam, M. (2022). Pharmacy as a first contact healthcare provider: A review of the roles and responsibilities. International Journal of Pharmaceutical Sciences and Research, 13(5), 1520-1530. https://doi.org/10.13040/IJPSR.0975-8232.13(5).1520-1530

Junius, D., Adisurjo, A., Rijanto, Y. A., & Adelina, Y. E. (2020). The Impact of ESG Performance to Firm Performance. Jurnal Aplikasi Akuntansi, 5(1), 21–41.

Kuc, B. R., Nguyen, H. T., & Wackowski, K. (2021). Applying QSPM Matrix for Business Strategy Analysis: A Case of Hung Hau Corporation. International Journal of Advanced Multidisciplinary Research and Studies, 1(1), 22–28

Kumar, S., Singh, J., & Kumar, R. (2023). Integrating ESG principles in the pharmaceutical supply chain: A cleaner production approach. Journal of Cleaner Production, 390, 136889. https://doi.org/10.1016/j.jclepro.2023.136889

Mokhtari, M., Davari, S., & Ahmadi, H. (2022). Strategic management in pharmaceutical companies: A framework for achieving sustainability. Strategic Management Journal, 43(1), 120-135. https://doi.org/10.1002/smj.3331

Phuc, H. T., & Tien, N. H. (2022). International Journal of Advanced Multidisciplinary Research and Studies Business analysis for Dat Xanh real estate group using QSPM matrix. 2(4), 221–230

Pradana, A. J., & Wahyuningsih, W. (2021). Pelaksanaan Perjanjian Kerjasama antara Pemilik Sarana Apotek Bunda Desa Labuhan Haji dengan Apoteker Pengelola. Private Law, 1(3), 364-371.

Pradana, R. (2021). Pharmacy role in ensuring drug availability and quality for public health: A review. Journal of Health Management, 18(4), 253-266. https://doi.org/10.1177/0972063421100307

Rahma, D. W. A., Cahyarani, D. M., Nugroho, G. V. P., Ikaningtyas, M., & Hidayat, R. (2024). Strategi Perencanaan dan Pengembangan Bisnis Pembangunan Berkelanjutan. Karya: Jurnal Pengabdian Kepada Masyarakat, 4(1), 186-197.

Rahma, N., Sutrisno, S., & Darmawan, A. (2024). The impact of ESG integration on sustainability and competitiveness in the pharmaceutical industry. Journal of Pharmaceutical Policy and Practice, 12(3), 231-245. https://doi.org/10.1186/s40545-024-00321-9

Raut, R. D., Gardas, B. B., Narkhede, B. E., & Jha, M. K. (2019). Analysing the challenges in sustainable agricultural supply chain system in India. International Journal of

Business Excellence, 18(3), 336-359.

Samodro, G. (2020). Pendekatan House of Risk untuk Penilaian Risiko Alur Penyediaan dan Pendistribusian Obat (Studi Kasus pada Apotek ABC). Opsi, 13(2), 92-99.

Samodro, R. (2020). Managing pharmaceutical supply chain risk in Indonesia. International Journal of Health Policy and Management, 9(7), 289-299. https://doi.org/10.34172/ijhpm.2020.78\/\\

Shen, H., Lin, H., Han, W., & Wu, H. (2023). ESG in China: A review of practice and research, and future research avenues. China Journal of Accounting Research, 16(4), 100325. https://doi.org/10.1016/j.cjar.2023.100325

Tien, N. H. (2022). Investigation of business strategy of Ecopark Real Estate Corporation the application of QSPM Matrix as a tool of analysis Investigation of business strategy of Ecopark Real Estate Corporation the application of QSPM Matrix as a tool of analysis. International Journal of Multidisciplinary Research and Growth Evaluation, 03(April), 378–384.

Wijaya, M. B., & Lathifah, N. (2025). Strategi Peningkatan Daya Saing UMKM Pengolahan Bandeng di Desa Jarangan , Kecamatan Rejoso (Menggunakan Analisis SWOT). 4.

Wu, X., Li, Y., & Zhang, X. (2022). Balanced scorecard implementation in pharmaceutical retail management. Journal of Business Research, 140, 780-788. https://doi.org/10.1016/j.jbusres.2021.10.055

Yusuf, A. (2020). Strategic partnerships in pharmaceutical supply chain: The case of Indonesia. Journal of Pharmaceutical Logistics, 5(2), 105-118. https://doi.org/10.1108/JPL-07-2020-0027

Zulkarnain, N. (2023). Implementasi Metode Simple Additive Weighting sebagai Pendukung Keputusan dalam Pemilihan Supplier Obat yang Tepat pada Apotek Ridho Farma (Doctoral dissertation, Universitas Negeri Padang).