



FRESH TO CUP COFFEE BUSINESS PLANNING AND DEVELOPMENT IN WEST JAVA USING THE TRIPLE LAYERED BUSINESS MODEL CANVAS

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Abstract

This study designs a fresh-to-cup coffee business development model in West Java using the Triple Layered Business Model Canvas (TLBMC) approach. The main problem is the lack of implementation among coffee MSMEs in integrating sustainability into their business models. The research, conducted through a case study on MSMEs in Cimahi City, combines SWOT analysis, IFAS and EFAS matrices, and Plus Minus Implication Analysis (PMIA). Findings show strengths in product quality, marketing, and social impact, but weaknesses in space, distribution, and waste management. The IE matrix positions the business in the "Grow & Build" quadrant, recommending product expansion. TLBMC successfully integrates economic, environmental, and social sustainability dimensions, though some areas require improvement. PMIA results show positive potential in each sustainability dimension, highlighting opportunities for long-term business success. Overall, TLBMC provides strategic guidance for MSMEs to create sustainable economic, environmental, and social value.

Keywords: business model; sustainability; triple layered business model canvas; entrepreneurship; business strategy

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INTRODUCTION

Coffee is one of the plantation commodities extensively cultivated by both farmers and the private sector due to its high economic value and strategic role in enhancing farmers' income and the country's foreign exchange earnings (Sairdama, 2013). Indonesia's tropical climate and fertile soil provide highly conducive conditions for coffee cultivation, making the country one of the largest coffee producers in the world (Statista, 2023). In addition to serving as a major export commodity, coffee has also become an essential part of the lifestyle of many people, including in Indonesia (Sawitri & Maulina, 2021). Changes in coffee consumption patterns in Indonesia indicate a continuously increasing trend, as reflected in a (Statista, 2023). survey, which found that 80% of respondents identified as coffee consumers. This growth is believed to be driven by increasing public awareness regarding coffee quality, sustainability, and the overall drinking experience.

Nevertheless, further supporting data or relevant literature is needed to strengthen this assumption, such as research on consumer behavior related to coffee or trends in the specialty beverage industry in Indonesia.

As one of the provinces with superior coffee production, West Java faces challenges in increasing the competitiveness of the coffee business amidst global competition. Traditional business models are often inadequate to integrate sustainability aspects that include economic, environmental, and social dimensions. The Triple Layered Business Model Canvas (TLBMC), which is a development of the Business Model Canvas (BMC), offers an innovative approach by providing a framework that can align economic and sustainability goals more effectively (Joyce & Paquin, 2016). The existence of an increasingly competitive market also requires every businesspeople to develop effective strategies in facing various external and internal challenges (Yuliaty et al., 2020). The integration of sustainability into business strategy is increasingly becoming a necessity rather than an option. Strength, Weakness, Opportunity and Threat (SWOT) analysis is a tool that is often used in identifying strengths, weaknesses, opportunities, and threats that are relevant to business strategy (Rangkuti, 2014).

The results of (BMC) can be used to conduct a SWOT analysis, which functions to compare the strengths, weaknesses, opportunities, and threats that may be faced by the company (Weullas et al., 2022). Furthermore, Tjitradi (2015) concluded that the combination of SWOT analysis and BMC resulted in a more focused assessment and in-depth evaluation of the company's business model. Meanwhile, the results of the SWOT analysis serve as a reference for changing the business model that has been implemented until now (Weullas et al., 2022).

In this context, The Triple Layered Business Model Canvas allows business people to design a holistic strategy. This strategy is not only oriented towards economic profit but also pays attention to environmental sustainability, such as the use of environmentally friendly raw materials, and social responsibility (García-Muiña et al., 2020). Mili & Loukil (2023) added that the The Triple Layered Business Model Canvas framework helps integrate sustainability goals in business models, guiding the creative process of communicating and implementing improvements. Not only that, The Triple Layered Business Model Canvas is also able to assist farmer groups in exploring new ideas in business models that focus on sustainability, as well as providing a global picture of business models in simple visuals (Furqon et al., 2019). The implementation of The Triple Layered Business Model Canvas in the coffee agribusiness sector also still faces several obstacles. Among them are the lack of understanding of small and medium business actors regarding this concept and the challenges in integrating sustainability aspects into operational practices (Sultan et al., 2021). Then Hurriyati et al. (2023) added that in micro, small and medium enterprises (MSMEs) it was shown that although they recognized the importance of business planning and the use of models such as Business Model Canvas and The Triple Layered Business Model Canvas, there was still a lack of practical insight into how MSMEs in Indonesia could successfully adopt and run these models.

The Triple Layered Business Model Canvas (TLBMC) is an advanced and integrative framework that extends the traditional Business Model Canvas by incorporating two additional layers—environmental and social—thereby enabling businesses to innovate toward sustainability in a more structured and holistic manner (Joyce & Paquin, 2016). The model consists of three interconnected layers: the economic layer, which represents the conventional business model canvas focused on value creation, delivery, and capture from an economic standpoint; the environmental layer, which adopts a lifecycle perspective to analyze the ecological impact of business operations and identify areas for improvement; and the social layer, which adopts a stakeholder perspective, highlighting the social value generated for various groups such as employees, customers, suppliers, and communities (Joyce & Paquin, 2016; Pardalis et al., 2020; Gunarta & Hanggara, 2018). One of the key features of TLBMC is its holistic value creation capability, allowing firms to simultaneously map out economic, environmental, and social outcomes and recognize trade-offs or synergies among them (Kwak et al., 2019; Hurriyati et al., 2023). The model supports integrated analysis by promoting coherence not only across layers (horizontal coherence), but also within each layer (vertical coherence), thus offering new dynamics in sustainability-oriented strategic planning (Joyce & Paquin, 2016). Moreover, its

visual and modular structure facilitates innovation and communication of sustainable business strategies, fostering stakeholder engagement and transparent decision-making (Mili & Loukil, 2023).

SWOT analysis is a strategic planning tool used to identify and evaluate the strengths, weaknesses, opportunities, and threats that affect the performance of an organization or project (Paschalidou et al., 2018; Ghazinoory et al., 2011). Strengths and weaknesses reflect internal factors, while opportunities and threats arise from the external environment (Sternick & Curran, 2009). SWOT has been widely applied across various fields, including business management (Tusil, 2016), education (Zheng & Liu, 2011), healthcare (Sternick & Curran, 2009), engineering (Ma & Schmahl, 2020), and maritime operations (Arslan & Er, 2008a, 2008b), making it a flexible and cross-sectoral framework.

In its development, SWOT has been integrated with various methodological approaches, such as Computing with Words to address linguistic uncertainty (Meškauskas, 2019), fuzzy evaluation to combine qualitative and quantitative data (Sun, 2012), and TRIZ-based tools to facilitate systematic innovation (Brad & Brad, 2015). Hybrid approaches, such as the integration of SWOT with the Analytical Hierarchy Process (AHP), have also been employed to prioritize strategies more objectively (Ma & Schmahl, 2020). The strength of SWOT lies in its simple yet comprehensive structure, which encourages critical thinking and supports strategic decision-making based on organizational strengths and potential (Coman & Ronen, 2009; Sujatha, 2016). However, its limitations include subjectivity, difficulties in visualizing interrelationships between factors, and the absence of a systematic prioritization mechanism (Phadermrod et al., 2014; Schmahl & Chen, 2017). Therefore, the effectiveness of SWOT heavily depends on the user's ability to contextualize and integrate it with other managerial tools.

In practical applications, TLBMC has demonstrated adaptability across various sectors including energy-efficient housing (Pardalis et al., 2020), agrotourism (Gunarta & Hanggara, 2018; Dolorosa et al., 2025), mobile services (Kwak et al., 2019), the fashion industry (Hurriyati et al., 2023), and the fruit and vegetable supply chain (Mili & Loukil, 2023). In academic research, TLBMC contributes significantly to sustainable business model innovation by providing a structured framework for identifying sustainability issues and generating new opportunities for environmental and social value creation (Joyce & Paquin, 2016; Pardalis et al., 2020; Kwak et al., 2019). Ultimately, TLBMC functions not only as a design tool but also as a strategic planning framework that assists organizations in mapping strengths, weaknesses, opportunities, and threats (SWOT) in the context of sustainability. By doing so, it aligns sustainability goals with actionable business strategies, making it highly relevant for MSMEs and large enterprises alike in responding to sustainability challenges and opportunities in various cultural and industrial settings (Dolorosa et al., 2025).

Based on the issues previously outlined, there is a pressing need for in-depth research to explore effective strategies that can assist micro, small, and medium enterprises (MSMEs), particularly those operating in the coffee agribusiness sector, in adopting and implementing the Triple Layered Business Model Canvas (TLBMC). This study, therefore, aims to design a business development model for the "fresh-to-cup" coffee concept using the TLBMC framework. To achieve this objective, the research will first identify internal and external factors affecting coffee MSMEs through a SWOT analysis, which will then be elaborated using the Internal Factor Analysis Summary (IFAS) and External Factor Analysis Summary (EFAS) matrices. These tools enable a systematic evaluation of strategic strengths, weaknesses, opportunities, and threats. Following this stage, the Plus Minus Implication Analysis (PMIA) method will be applied to support decision-making by analyzing the advantages, disadvantages, and potential implications of various strategic alternatives in shaping the elements of the TLBMC. The resulting model is expected to serve as a strategic guide for enhancing business sustainability across three key dimensions: economic value creation, environmental preservation, and the reinforcement of social values. From a theoretical standpoint, this study aims to contribute to the growing, yet still limited, body of knowledge on the application of TLBMC, particularly within the Indonesian agribusiness context. Previous literature has predominantly focused on the implementation of TLBMC in industrial or service-based sectors in developed countries, whereas empirical studies that integrate decision-support methods such as PMIA into the TLBMC framework within coffee-based MSMEs in developing economies remain scarce. Thus, this research addresses an important gap by offering a contextualized and integrated approach to sustainable business model innovation in the coffee sector.

In addition, this study has important practical implications, namely helping coffee business actors in utilizing market opportunities related to sustainability trends. Through the integration of The Triple Layered Business Model Canvas, coffee businesses can strengthen their position in the global market. Thus, the results of this study are expected to provide direct benefits to coffee business actors and support sustainable economic development in West Java.

METHOD

The research method used is a case study as conducted by (Sultan et al., 2021 ; Weullas et al., 2022) . This research was conducted at one of the MSMEs in West Java, precisely in Cimahi City with a disguised brand, namely "KN" from early August to mid-December. The selection of research objects using the purposive sampling method is based on community recommendations, unique names, competitive prices, and unique innovations that absorb foreign cultures, but still maintain local culture.

The types of data used are primary and secondary data. For primary data, data collection is carried out using survey methods and direct interviews with business owners and experts who are considered to understand the coffee industry, while secondary data is data derived from the results of literature studies and related data that have been published on the internet.

The determination of this business development planning strategy will be carried out starting with a SWOT analysis which is then used as a component for the IFAS and EFAS matrices to be calculated with numbers. The result will be an IE Matrix to get the position of the business which is then used as a reference to formulate a development planning strategy. In addition, the Triple Layered Business Model Canvas (TLBMC) which is a research tool as a strategic planning will be used to describe the business model in more detail, by identifying three important layers, namely, economic, environmental and social. Then the Plus Minus Implication Analysis (PMIA) will be carried out to analyze each element in the TLBMC using the results of the TLBMC analysis so that decisions can be made based on these values. The PMIA method in principle classifies aspects of action or thought into three groups, namely: 1) Plus group (positive), in the form of positive aspects of the action or thought which is given a positive value between 1 and 10; 2) Minus group (negative), in the form of negative aspects of the action or thought which is given a negative value between -10 and -1; 3) Implication group (impact), in the form of impacts or possibilities that are still uncertain to occur after the action or thought, which will be given a positive or negative value between -10 and 10. The result will be known by adding up the values according to the equation below.

$$\text{PMIA score} = \sum P + \sum M + \sum I$$

Based on the results of the calculation, a decision is made, namely if the PMIA score is positive, then the action or thought is recommended to be taken, whereas if the PMIA score is negative, then the action or thought must be avoided.



Figure 1. TLBMC Economic Layer

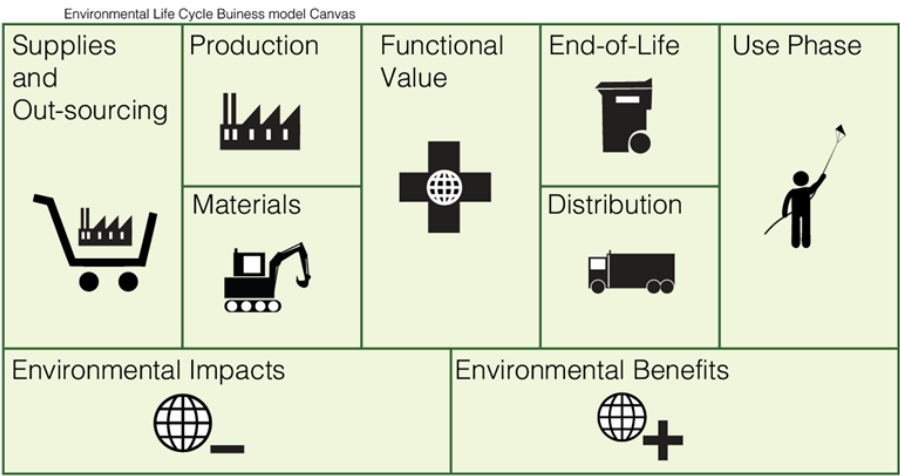


Figure 2. TLBMC Environment Layer

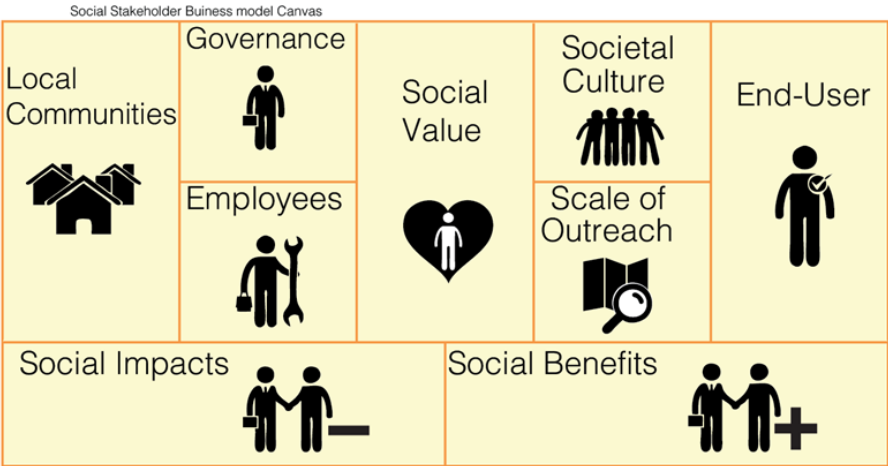


Figure 3. TLBMC Social Layer

RESULTS

SWOT analysis is a tool used to systematically identify and evaluate internal factors—strengths and weaknesses—as well as external factors—opportunities and threats—that influence a business’s performance and strategic direction. This step serves as the initial phase to develop the Internal Factor Evaluation (IFE) and External Factor Evaluation (EFE) matrices. The main goal of the SWOT analysis is to enable businesses to understand their market position and formulate appropriate strategies in responding to competition. By

recognizing internal capabilities and constraints, business actors can leverage their strengths and minimize weaknesses, while anticipating external opportunities and mitigating potential threats.

Strengths: (1) Unique and innovative menu that differentiates the brand from competitors; (2) High-quality raw materials sourced from selected coffee producers; (3) Competitive pricing that appeals to budget-conscious consumers; (4) Friendly, communicative, and professional staff, enhancing customer service quality; (5) Comfortable and attractive atmosphere that supports customer retention; (6) Distinctive and eco-friendly packaging for coffee products; (7) Consistent cleanliness and sanitation that enhances customer trust; (8) Contemporary and relevant brand image appealing to the younger demographic; (9) Skilled and experienced human resources in coffee preparation and service.

Weaknesses: (1) Limited seating capacity and constrained physical space; (2) Strong dependency on weather conditions due to open/outdoor layout; (3) Difficulty competing with large-scale competitors due to limited scale; (4) Financial constraints for renovation and business expansion; (5) Insufficient staffing during peak hours, leading to slow service; (6) Disorganized layout and interior design that hampers operational flow; (7) Brand name that is relatively difficult to pronounce and recall; (8) Vulnerability to fluctuations in coffee bean prices, affecting cost control; (9) Ineffective marketing strategy—limited digital presence, lack of promotional campaigns, and minimal engagement on social media; (10) Lack of integration with online ordering and delivery platforms, reducing accessibility for potential customers.

Opportunities: (1) Expanding online presence through partnerships with delivery platforms and social media marketing; (2) Developing co-working or community spaces to attract business professionals and local groups; (3) Introducing loyalty programs or time-limited promotions to improve customer retention; (4) Diversifying the menu by adding more substantial food options (e.g., light meals, snacks); (5) Entering the specialty coffee segment by offering traceable, single-origin beans with unique roasting profiles; (6) Developing retail packaged coffee products to be distributed through minimarkets or supermarkets; (7) Strengthening digital marketing through targeted campaigns across multiple platforms; (8) Exploring alternative funding opportunities—such as business incubators or government microfinance schemes—based on improving financial reporting and legal compliance; (9) Gradual expansion to new outlets in high-traffic urban areas, based on sales performance and market research; (10) Establishing direct partnerships with coffee farmers (local and international) to ensure quality and traceability.

Threats: (1) Intense competition from well-known café chains with stronger brand equity and marketing power; (2) Volatility in global coffee bean prices that may reduce profit margins; (3) Shifting consumer preferences, including a growing interest in non-coffee beverages or health-oriented products—requiring continuous market adaptation; (4) Negative online reviews that can significantly influence brand perception and consumer trust; (5) Competition from mobile coffee units and pop-up cafés offering novelty and mobility; (6) Supply chain disruptions (e.g., logistics delays or quality inconsistency from suppliers); (7) Decline in coffee quality due to poor storage or handling practices.

The following are the results of the analysis of internal and external elements from the SWOT analysis which have been quantified into the IFAS and EFAS matrices:

Table 1. IFAS Matrix

No	Strength	Weight	Rank	Score
1	Unique and innovative menu	0.05	4	0.2
2	Good quality raw materials	0.05	4	0.2
3	Competitive pricing compared to surrounding competitors	0.07	5	0.35
4	Friendly and professional service	0.05	4	0.2
5	Comfortable and attractive atmosphere	0.055	4	0.22
6	Unique packaging in presenting coffee products	0.035	3	0.105
7	Maintained cleanliness and sanitation	0.05	4	0.2
8	Good staff communication	0.05	4	0.2
9	Brands with contemporary themes	0.04	3	0.12
10	HR who is experienced in the field of copying	0.05	3	0.15
Total Strength		0.5	38	1,945

No	Weakness	Weight	Rank	Score
1	Limited space and seating in the cafe	0.045	2	0.09
2	Weather dependency	0.035	2	0.07
3	Not yet able to compete with big competitors	0.055	3	0.165
4	Limited funds to renovate or develop the cafe	0.05	3	0.15
5	Lack of number of employees in serving	0.05	2	0.10
6	Unorganized place design	0.045	2	0.09
7	A brand that is a bit difficult to pronounce and remember	0.035	1	0.035
8	Dependence on fluctuating coffee raw material prices	0.06	3	0.18
9	Marketing strategies that are not yet effective	0.075	3	0.225
10	Lack of integration with online ordering platforms to improve customer accessibility	0.05	3	0.15
Total Weakness		0.5	24	1,255

Table 2. EFAS Matrix

No	Opportunity	Weight	Rank	Score
1	Opportunity to expand online presence through online ordering and delivery	0.065	5	0.325
2	Potential to provide co-working space or meeting space for business meetings and community events	0.035	3	0.175
3	Opportunity to offer loyalty programs or discounts to increase customer retention	0.06	3	0.3
4	Addition of a more substantial food menu to attract customers	0.035	3	0.175
5	Expanding into the specialty coffee market by offering coffee varieties from different regions and unique production processes	0.053	4	0.212
6	Become a supplier of packaged coffee for minimarkets and supermarkets	0.035	3	0.105
7	Do marketing using all digital platforms	0.062	5	0.31
8	Get capital from investment	0.035	3	0.105
9	Expanding operations by opening new branches in strategic locations	0.07	5	0.35
10	Opportunity to get suppliers from coffee farmers from all over the country and abroad	0.05	5	0.25
Total Opportunity		0.5	39	2,307
No	Threat	Weight	Rank	Score
1	Competition from large cafe chains that have large marketing budgets and well-known brands	0.062	3	0.186
2	Fluctuations in coffee raw material prices can affect profit margins	0.062	3	0.186
3	Potential changes in consumer trends in interest in coffee or changes in taste preferences	0.035	1	0.035
4	Poor business planning and unclear concepts	0.05	3	0.15
5	Threat of declining coffee or food quality	0.05	3	0.15
6	Potential logistics or supply issues that could impact product availability to customers	0.032	2	0.096
7	Threats to business reputation from negative online reviews or bad service incidents.	0.055	3	0.165
8	Bad Business Management Threats	0.062	3	0.186
9	The threat of negative influence from bad customer reviews on social media that can damage a business's reputation	0.062	3	0.186
10	Competition from non-traditional coffee shops such as mobile cafes, pop ups or other unique concepts	0.03	1	0.03
Total Threat		0.5	25	1.37

Based on the calculation results of the IFAS and EFAS matrices, the IFAS strength score is 1.945 and the IFAS weakness is 1.255. With that, the total IFAS score is 3.2. The EFAS opportunity score is 2.307 and the EFAS threat score is 1.37, resulting in a total EFAS score of 3.677.

The Internal-External (IE) Matrix is a strategic management tool divided into nine quadrants, each of which represents a recommended strategic orientation. The matrix is structured around two axes: the X-axis, which reflects the weighted score from the Internal Factor Analysis Summary (IFAS) matrix, and the Y-axis, which represents the weighted score from the External Factor Analysis Summary (EFAS) matrix. Scores ranging from 1.0 to 1.99 indicate a weak position, scores between 2.0 and 2.99 suggest a moderate position, while scores from 3.0 to 4.0 reflect a strong strategic position. Based on the results of the IFAS and EFAS assessments, the fresh-to-cup coffee business "KN" obtained a total IFAS score of 3.2 and a total EFAS score

of 3.677. These values place the business in Quadrant I (Grow and Build) of the IE Matrix. This quadrant indicates an optimal condition in which internal strengths significantly outweigh internal weaknesses, and external opportunities are more prominent than threats. Numerically, both scores exceeding 3.0 suggest that the business is not only in a favorable position for growth but is situated in a very strong strategic position. This positioning implies that the business should proactively pursue aggressive growth strategies, such as market development, product diversification, brand strengthening, and expansion to new locations. The combination of strong internal capabilities and favorable external conditions presents a solid foundation for "KN" to scale its operations, enhance competitive advantage, and strengthen long-term sustainability.

Triple Layer Business Model Canvas (TLBMC) is a tool designed to assist in designing sustainable business models by considering three main dimensions: economic, social, and environmental. This approach allows entrepreneurs and organizations to formulate business strategies that not only focus on short-term profitability, but also integrate social and ecological objectives into business operations. This is in line with research by Furqon et al. (2019) , Rukman et al. (2023) and Hurriyati et al. (2023).

Table 3. Results of TLBMC Economic Layer

Partners	Activities	Value proposition	Customer Relationship	Customer Segments
<ul style="list-style-type: none"> Local coffee bean supplier Snack food ingredient supplier Digital marketing partner 	<ul style="list-style-type: none"> Make coffee and prepare snacks Brand promotion 	<ul style="list-style-type: none"> High quality coffee with unique taste Cozy and trendy cafe atmosphere Innovative snack options that complement coffee Competitive pricing with a premium feel 	<ul style="list-style-type: none"> Friendly and welcoming interaction from the staff Collecting and responding to customer feedback 	<ul style="list-style-type: none"> Young adult Student Coffee lover Community
Resources		Channels		
<ul style="list-style-type: none"> Quality coffee beans Skilled barista Coffee equipment and cafe space Digital marketing and social media tools 		<ul style="list-style-type: none"> Physical cafe location Social media platforms 		
Costs			Revenues	
<ul style="list-style-type: none"> Procurement of coffee beans and snack ingredients Employee salary Purchase of tools Rent Marketing Employee training 			<ul style="list-style-type: none"> Sales of coffee and snacks at physical locations Sales via online delivery 	

Table 4. Results of TLBMC Environmental Layer

Supplies & Outsourcing	Production	Functional Value	End of Life	Use Phase
<ul style="list-style-type: none"> Procurement of local coffee beans Eco-friendly materials 	<ul style="list-style-type: none"> Minimal waste production process with technology Collaboration with suppliers who implement environmentally friendly practices 	Improvement and development of quality coffee and snack products	<ul style="list-style-type: none"> Use of environmentally friendly packaging Waste and compost management 	Encourage environmentally friendly habits in the surrounding area
Materials		Distribution		
<ul style="list-style-type: none"> Local coffee beans Local food raw materials 		Food and beverage delivery services		
Environmental Impacts			Environmental Benefits	
<ul style="list-style-type: none"> Optimal energy use Reduction of pollution and non-biodegradable waste 			<ul style="list-style-type: none"> Support for sustainable practices Reducing emissions and waste 	

Table 5. Results of TLBMC Social Layer

Local Communities	Governance	Social Value	Societal Culture	End User
<ul style="list-style-type: none"> Support for local coffee farmers Support for local residents 	<ul style="list-style-type: none"> Business ethics Business transparency Focus on sustainability 	<ul style="list-style-type: none"> Create memorable experiences Building social relationships 	<ul style="list-style-type: none"> Supporting Indonesian coffee culture Social space for community 	<ul style="list-style-type: none"> Coffee lover Local community
Employees		Scale of Outreach		

<ul style="list-style-type: none"> Employee skills development Creating a comfortable working environment Administering employees 	with the surrounding community	<ul style="list-style-type: none"> Focus on local customers Presence on social media
Social Impacts		Social Benefits
<ul style="list-style-type: none"> Improving the welfare of local farmers Increasing consumer awareness of local businesses Creating jobs Supporting the local economy 		<ul style="list-style-type: none"> Connection with customers and suppliers Community empowerment Employee empowerment

Plus Minus Implication Analysis is the final stage of this research method which is a method for looking at alternative actions on several different factors from the plus, minus and implication perspectives (Wibowo et al., 2019). This technique is designed to analyze the consequences of various actions related to TLBMC elements at each layer, namely the economic, environmental, and social layers. The assessment of the elements in the three layers is based on the conditions and actions currently carried out by the “KN” fresh to cup coffee business. The following are the calculation results from the PMIA analysis:

Table 6. Result of PMIA Economic Layer

Plus	Minus	Implication
<i>Value proposition</i> +9	<i>Channel</i> -3	<i>Customer Relationship</i> +6
<i>Key resources</i> +8	<i>Revenue Streams</i> -4	<i>Key Activities</i> +5
<i>Customer Segments</i> +7		<i>Key Partnerships</i> +4
<i>Cost Structure</i> +6		
Total: 30 - 7 + 15 = 38		

Table 7. Result of PMIA Environmental Layer

Plus	Minus	Implication
<i>Supplies & Outsourcing</i> +7	<i>Materials</i> -3	<i>Functional Value</i> +6
<i>Production</i> +6	<i>Environmental Impacts</i> -4	<i>Use Phase</i> +5
<i>Environmental Benefits</i> +8	<i>End of Life</i> -3	<i>Distribution</i> +4
Total: 21 - 10 + 15 = 26		

Table 8. Result of PMIA Social Layer

Plus	Minus	Implication
<i>Social Value</i> +8	<i>Societal Culture</i> -4	<i>Local Communities</i> +7
<i>Governance</i> +6	<i>Social Impacts</i> -3	<i>Employees</i> +6
<i>Social Benefits</i> +9	<i>End User</i> -4	<i>Scale of Outreach</i> +5
Total: 23 - 11 + 18 = 30		

DISCUSSION

Based on the ie matrix derived from the results of the SWOT analysis, the appropriate strategies for Kōnā Nijūroku are as follows: 1) expansion strategy, namely expanding into new markets, developing new products, and increasing market share; 2) integration strategy such as conducting mergers or acquisitions to strengthen market position; 3) product development strategy by developing new and innovative products to meet market demand; 4) market penetration strategy by increasing market share in existing markets.

TLBMC's economic layer prioritizes collaborative efforts of business partners to create sustainable value for customers. Local coffee bean suppliers, snack suppliers, and digital marketing partners are key partners in maintaining the smooth running of the cafe. Core activities include providing the best coffee, making snacks, and advertising the brand through various channels. The goal of all this is to strengthen the value of coffee with good taste, comfortable and modern cafe culture while maintaining competitive prices with a very good impression. This reflects the customer segment, which includes young people, students, and coffee enthusiasts as well as customers looking for a comfortable cafe atmosphere. By leveraging the right resources such as quality coffee beans, skilled baristas, and digital marketing tools, businesses can improve operations and business differentiation. The use of social media and physical locations allows for strong customer relationships through a communication strategy that prioritizes friendly interactions and responsive responses. The pricing model

covers essential costs such as raw material procurement, wage rates, and marketing costs, while profits are generated from coffee and snack sales made in-cafe and online. Furthermore, this approach features a comprehensive business plan that includes sustainability, innovation, and customer focus.

The environmental layer in the Triple Layer Business Model Canvas (TLBMC) emphasizes sustainability throughout the product lifecycle, from raw material sourcing to end-use. By sourcing raw materials such as locally sourced coffee beans and environmentally friendly materials, one can demonstrate a sustainable approach. Production processes are designed to minimize waste by utilizing environmentally friendly technologies and collaborating with suppliers who share the same vision for the environment. Primary materials, such as locally sourced coffee beans and local food ingredients, not only support the local economy but also reduce the environmental impact of long global supply chains. At the use stage, the product promotes environmentally friendly practices such as biodegradable packaging and compostable waste. The design of delivery services in distribution is to optimize emission reduction. This leads to reduced environmental impact through energy consumption and reduced pollution, with the benefits of reducing waste and encouraging sustainable practices. This strategy creates value not only for the business but also for the environment, integrating ecological responsibility as the core of business operations.

The implementation of the Triple Layer Business Model Canvas (TLBMC) on the social aspect requires a comprehensive approach in integrating various stakeholders. This business model emphasizes the importance of local community involvement through support for local coffee farmers and local residents, which is strengthened by governance that prioritizes business ethics, transparency, and a focus on sustainability. The social value aspect that is built not only creates a memorable experience for consumers, but also builds social relationships with the surrounding community, which is then translated into a social culture that supports Indonesian coffee and creates social space for the community. This is in line with Joyce & Paquin (2016) who emphasized that social sustainability in a business model must consider the impact on various levels of society. The employee dimension and scale of reach in this model demonstrate a strong commitment to human resource development, reflected in the focus on skills development, creating a comfortable work environment, and employee well-being. The resulting social impacts include improving the welfare of local farmers, increasing consumer awareness of local businesses, creating jobs, and supporting the local economy. The social benefits obtained in the form of connections with customers and suppliers, as well as empowering communities and employees, indicate the success of the model in creating shared value as stated by Kramer & Porter (2011).

PMIA on the Triple Layered Business Model Canvas (TLBMC) shows a strong foundation for the economic layer. Strengths lie in the value proposition, customer segments, and key resources, all derived from the creation of value for customers and the optimization of resources by the business. Weaknesses are found in channels and revenue streams that require innovative strategies to add value to product distribution and diversify revenue streams. Therefore, a score of +38 indicates a healthy business that still has much room for improvement. The environmental layer demonstrates the company's efforts towards sustainability, but major challenges remain. The main strengths in this area are supply & outsourcing and environmental benefits, all of which are manifestations of the company's commitment to environmentally friendly materials and practices aimed at improving sustainability. On the other hand, there are weaknesses in materials, environmental impacts, and end of life, which raise positive needs for further innovation in waste management, increased use of raw materials, and recycling processes. With an overall score of +26 in this layer, it shows great potential in improving efficiency and environmental responsibility. In the social layer, the company's positive impact on the local community is represented by elements such as social value, social benefits, and governance, which strengthen community ties and also provide better welfare conditions for employees and consumers. Challenges in societal culture, social impacts, and end-users indicate that businesses need to improve adaptation to local cultures and improve relationships with end users. With a score of +30, this layer shows quite good social performance.

Based on the results of the PMIA analysis, this business is worth continuing with several considerations. Positive scores on all three layers (economic, environmental, and social) indicate that although there are some weaknesses, the potential advantages and positive implications are more dominant. With a final score of +38

on the economic layer, +26 on the environmental layer, and +30 on the social layer, this business has a solid foundation in terms of profitability and social and environmental impacts. However, in order to maintain business sustainability, improvements are needed in elements that are weaknesses, such as optimizing channels and revenue streams, managing materials and end of life, and increasing involvement in societal culture and end-users. With a commitment to addressing these weaknesses, the business can continue to grow and become more competitive while being socially and environmentally responsible.

CONCLUSION

The implementation of the Triple Layered Business Model Canvas (TLBMC) in fresh-to-cup coffee MSMEs in West Java has shown positive impact on business sustainability by integrating economic, environmental, and social aspects. Based on the IE Matrix, which utilizes SWOT-derived internal and external factors, the business is positioned in the "Grow & Build" quadrant, signaling strong opportunities for innovation and expansion. The PMIA analysis further supports this with positive scores across the economic (+38), environmental (+26), and social (+30) dimensions, indicating that the business is viable with room for improvement. However, the success of TLBMC implementation is also influenced by local consumer responses. While some consumers appreciate sustainability initiatives, others remain price- and taste-driven, indicating a gap in awareness and alignment with sustainability values. This presents both challenges—such as limited consumer literacy—and opportunities, particularly among younger, environmentally conscious segments. This study offers practical insights for MSMEs aiming to adopt sustainable models and recommends future research to explore consumer acceptance and contextual adaptation of TLBMC in different sectors and cultural environments.

REFERENCES

- Arslan, O., & Er, I. D. (2008a). SWOT Analysis for Safer Carriage of Bulk Liquid Chemicals in Tankers. *Journal of Hazardous Materials*. <https://www.scopus.com/pages/publications/42649118834>
- Arslan, O., & Er, I. D. (2008b). A SWOT Analysis for Successful Bridge Team Organization and Safer Marine Operations. *Process Safety Progress*. <https://www.scopus.com/pages/publications/40849116684>
- Brad, S., & Brad, E. (2015). Enhancing SWOT Analysis with TRIZ-based tools to Integrate Systematic Innovation in Early Task Design. *Procedia Engineering*. <https://www.scopus.com/pages/publications/84960475688>
- Coman, A., & Ronen, B. (2009). Focused SWOT: Diagnosing Critical Strengths and Weaknesses. *International Journal of Production Research*. <https://www.scopus.com/pages/publications/70449602537>
- Dolorosa, E., Suharyani, A., Kurniati, D., & Sawerah, S. (2025). Agritourism Business Model Development in Kubu Raya, West Kalimantan, Indonesia. *IOP Conference Series: Earth and Environmental Science*.
- Furqon, C., Sultan, M., & Wijaya, F. (2019). Business Development of Coffee Farmers Group Using Triple Layered Business Model Canvas. *Jurnal Business and Economic Review*, 4(4), 163–170.
- García-Muiña, F. E., Medina-Salgado, M. S., Ferrari, A. M., & Cucchi, M. (2020). Sustainability Transition in Industry 4.0 and Smart Manufacturing with the Triple-Layered Business Model Canvas. *Sustainability*, 12(6), 2364.
- Ghazinoory, S., Abdi, M., & Azadegan-Mehr, M. (2011). SWOT Methodology: A State of the Art Review for the Past, a Framework for the Future. *Journal of Business Economics and Management*. <https://www.scopus.com/pages/publications/79958745829>
- Gunarta, I. K., & Hanggara, F. D. (2018). Development of Agrotourism Business Model as an Effort to Increase the Potency of Tourism Village (Case study: Punten Village, Batu City). *MATEC Web of Conferences*.
- Hurriyati, R., Dagustani, D., Surachim, A., & Lisnawati, L. (2023). Triple-Layered Business Model Canvas Environment Based in the Fashion Industry. *Journal of Human, Earth, and Future*, 4(4), 411–423.
- Joyce, A., & Paquin, R. L. (2016). The Triple Layered Business Model Canvas: A Tool to Design More Sustainable Business Models. *Journal of Cleaner Production*, 135, 1474–1486.

- Kramer, M. R., & Porter, M. (2011). Creating Shared Value. *Harvard Business Review*, 17. FSG Boston, MA, USA.
- Kwak, H. Y., Kim, J. S., Lee, S. T., & Gim, G. Y. (2019). A study on the sustainable value generation of mobile messenger service using 'Triple Layered Business Model Canvas'. In *Proceedings of the 20th IEEE/ACIS International Conference on Software Engineering, Artificial Intelligence, Networking and Parallel/Distributed Computing (SNPD)*. <https://www.scopus.com/pages/publications/85077966554>
- Ma, Y., & Schmahl, K. E. (2020). Combining SWOT and AHP for more Effective Strategic Planning. In *Proceedings of the 2020 IISE Annual Conference*. <https://www.scopus.com/pages/publications/85105626535>
- Meškauskas, Ž. (2019). CWW Enhanced Fuzzy SWOT Evaluation for Risk Analysis and Decision Making Under Uncertainty. *CEUR Workshop Proceedings*. <https://www.scopus.com/pages/publications/85074063101>
- Mili, S., & Loukil, T. (2023). Enhancing Sustainability with the Triple-Layered Business Model Canvas: Insights from the Fruit and Vegetable Industry in Spain. *Sustainability*, 15(8), 6501. <https://www.scopus.com/pages/publications/85156157588>
- Pardalis, G., Mahapatra, K., & Mainali, B. (2020). A Triple-Layered One-Stop-Shop Business Model Canvas For Sustainable House Renovations. *IOP Conference Series: Earth and Environmental Science*. <https://www.scopus.com/pages/publications/85097128421>
- Paschalidou, A., Tsatiris, M., Kitikidou, K., & Papadopoulou, C. (2018). Methods (SWOT analysis). *Green Energy and Technology*. <https://www.scopus.com/pages/publications/85047001374>
- Payan-Carreira, R., Silva, R., Rebelo, H., & Sebastião, L. (2024). Training critical thinking and decision-making using SWOT matrices. *Progress in Education*. <https://www.scopus.com/pages/publications/85201728329>
- Phadermrod, B., Crowder, R. M., & Wills, G. B. (2014). Developing SWOT Analysis from Customer Satisfaction Surveys. In *Proceedings of the 11th IEEE International Conference on E-Business Engineering (ICEBE)*. <https://www.scopus.com/pages/publications/84920722440>
- Rangkuti, F. (2014). *Teknik Membedah Kasus Analisis SWOT*. Jakarta: PT Gramedia Pustaka Utama.
- Rukman, A., Marliani, Y. U., Muharram, L. H., & Yunan, A. (2023). Strategi Pengembangan Bisnis Berkelanjutan Berbasis Komunitas Dengan Menggunakan Triple Layer Business Model Canvas (Studi kasus: Komunitas Magotsuka). *Jurnal Bisnis dan Kewirausahaan*, 19(1), 13–21.
- Sairdama, S. S. (2013). Analisis Pendapatan Petani Kopi Arabika (Coffea Arabica) dan Margin Pemasaran di Distrik Kamu Kabupaten Dogiyai. *Jurnal Agribisnis Kepulauan*, 2(2), 44–56.
- Sawitri, H., & Maulina, N. (2021). Derajat pH Saliva Pada Mahasiswa Program Studi Kedokteran Fakultas Kedokteran Universitas Malikussaleh Yang Mengonsumsi Kopi Tahun 2020. *AVERROUS: Jurnal Kedokteran dan Kesehatan Malikussaleh*, 7(1), 84–94.
- Schmahl, K. E., & Chen, C.-S. (2017). An Updated Approach for Depicting SWOT Factors and Strategic Actions. In *Proceedings of the ASEM 2017*. <https://www.scopus.com/pages/publications/105003851790>
- Statista. (2023). Coffee Production in Indonesia from 2014 to 2023. <https://www.statista.com/statistics/706965/production-of-coffee-in-indonesia/>
- Sternick, E., & Curran, B. (2009). Conducting a SWOT Analysis – A Useful Framework for Medical Physics Strategic Planning. *Medical Physics*. <https://www.scopus.com/pages/publications/85024806187>
- Sujatha, V. (2016). A Review on Survival Analysis in Medical Journals using SWOT as a Tool. *Research Journal of Pharmacy and Technology*. <https://www.scopus.com/pages/publications/84971500960>
- Sultan, M. A., Furqon, C., & Wijaya, F. (2021). Triple Layer Business Model Canvas design of Arabica coffee agroindustry supply chain in Bandung Regency. *International Journal of Entrepreneurship and Sustainability Studies*, 1(2), 22–27.
- Sun, Z. (2012). Fuzzy Evaluating on Enterprise Competition Based on the SWOT Analysis. *International Journal of Digital Content Technology and its Applications*. <https://www.scopus.com/pages/publications/84862735709>

- Tjitradi, E. C. (2015). *Evaluasi dan perancangan model bisnis berdasarkan Business Model Canvas*. *Agora*, 3(1), 8–16.
- Tusil, P. (2016). The water treatment plant in Želivka – SWOT analysis of reconstruction and modernization. *Vodohospodarske Technicko-Ekonomie Informace*.
<https://www.scopus.com/pages/publications/85118336158>
- Weullas, W., Sultan, M. A., & Furqon, C. (2022). *Evaluasi dan strategi pengembangan bisnis usaha kopi dengan pendekatan Triple Layered Business Model Canvas (TLBMC)*. *Syntax Literate: Jurnal Ilmiah Indonesia*, 7(11), 17595–17608.
- Wibowo, R., Suciati, L. P., Setyawati, I. K., & Zainuddin, A. (2019). *Manajemen Pengambilan Keputusan Agribisnis: Teori & Aplikasi*.
- Yuliaty, T., Shafira, C. S., & Akbar, M. R. (2020). *Strategi UMKM dalam menghadapi persaingan bisnis global*. *MBIA*, 19(3), 293–308.
- Zheng, J.-J., & Liu, X.-S. (2011). The SWOT analysis of new practical English. *Advances in Intelligent and Soft Computing*. <https://www.scopus.com/pages/publications/80455156179>