



(RESEARCH ARTICLE)



## Sustainable business model innovation in the pre-owned footwear industry

Vincensia Serenade \*, Intan Mustika Jati and Natalin Yahya Nurfathin

*International Business Management, Faculty of Law and Business Technology, Sugeng Hartono University, Ir. Soekarno 69, Dusun I, Madegondo, Grogol, Sukoharjo, Jawa Tengah, Indonesia.*

International Journal of Science and Research Archive, 2024, 13(01), 2556–2562

Publication history: Received on 03 September 2024; revised on 12 October 2024; accepted on 15 October 2024

Article DOI: <https://doi.org/10.30574/ijrsra.2024.13.1.1946>

### Abstract

The fashion industry is a dynamic sector with high consumer demand. However, it faces pressing environmental challenges. To address these issues, the implementation of sustainable business models is necessary. This research aims to identify sustainable business innovation strategies in the secondhand footwear fashion industry to increase consumer awareness and behavior towards environmentally friendly products. By using a case study of Sepatu Thrift Singapura by Lix as a digital fashion business, this research seeks to find creative ways to make this business more environmentally friendly, attract consumers, and optimize online sales. The results highlight the importance of innovative marketing strategies, sustainable supply chain management, and the utilization of digital technology.

**Keywords:** Business Strategy; Sustainable Business Model Innovation; Financial Technology; MSMEs

### 1 Introduction

The fashion industry is currently experiencing significant growth due to the increasing demand for fashion products among the public. This has led to intense competition among businesses, both new and established, in this industry. Munaf (2018) states that as one of the most promising sectors in the creative industry, fashion makes a significant contribution to the national economy, especially in terms of income and employment absorption. In addition, technological advancements and creativity have also encouraged the emergence of various innovations in the fashion business. As one of the fastest-growing sectors in the world, the fashion industry is also a significant contributor to environmental problems. According to McKinsey & Company (2021), the fashion industry produces more than 92 million tons of textile waste annually and contributes approximately 10% of global greenhouse gas emissions. In this context, sustainable business model innovation becomes crucial for creating solutions that can reduce these negative impacts.

One attractive approach is the utilization of secondhand or thrift shoes. This business model not only helps reduce waste but also provides a more affordable and environmentally friendly alternative for consumers. As expressed by Ghemawat and Nueno (2006), innovation in business models can be key to creating sustainable value in a competitive market. By implementing innovative sustainable business models, players in the secondhand fashion footwear industry can address sustainability challenges while meeting the growing needs of consumers who are increasingly concerned about environmental issues.

Today's consumers are becoming increasingly aware of the importance of sustainability in their purchasing choices. A survey by Nielsen (2015) shows that 66% of consumers are willing to pay more for products from companies committed to sustainability. Therefore, the implementation of sustainable business model innovation in the secondhand fashion footwear industry not only benefits the environment but can also enhance the competitiveness of companies in the market.

\* Corresponding author:

With this background, this research will explore sustainable business model innovation in the secondhand fashion footwear industry and how its implementation can increase consumer awareness and behavior towards environmentally friendly products.

### 1.1 Problem Statement

The main challenges faced in the context of sustainable business model innovation in the secondhand fashion footwear industry are how to reduce the environmental impact of fashion production while increasing consumer awareness and interest in environmentally friendly products. Although secondhand shoes have the potential to reduce waste, challenges in ensuring product quality, differentiating oneself from competitors, and developing effective and profitable business models are crucial in attracting increasingly intelligent and sustainability-conscious consumers. In addition, regulations governing the trade in secondhand goods can also affect the sustainability of businesses, so comprehensive strategies are needed to address all of these aspects.

#### *Objectives of the Research*

This research focuses on the application of the SBMI concept in the thrift shoe fashion industry, with the results presented in the form of tables and narratives categorized into three aspects: (1) implementation of the SBMI concept; (2) driving factors for the implementation of SBMI; and (3) strategies that can be applied to develop a sustainable fashion business.

#### *Research Questions*

- How is the concept of Sustainable Business Model Innovation (SBMI) applied in the thrift shoe fashion industry?
- What are the factors that encourage the implementation of SBMI in the thrift shoe fashion business?
- What strategies can be applied to develop a sustainable fashion business in the thrift shoe sector?

#### *Significance of the Study*

This study has significant relevance for both academics and practitioners in the fashion industry. For the academic community, this research contributes to a deeper understanding of the application of the Sustainable Business Model Innovation (SBMI) concept in the thrift shoe fashion industry, as well as adding to the existing literature on sustainable practices in this sector. The results of this study can serve as a basis for further studies exploring business model innovation and its impact on sustainability.

For industry practitioners, the findings of this research offer practical insights into the factors that encourage the implementation of SBMI and the strategies that can be applied to increase the competitiveness of the thrift shoe business. By understanding how to reduce environmental impact, improve product quality, and differentiate themselves from competitors, industry players can be more effective in attracting consumers who are increasingly concerned about sustainability issues.

In addition, this study also provides guidance for entrepreneurs in formulating comprehensive strategies that not only address existing challenges but also take advantage of opportunities for sustainable growth. Thus, it is hoped that this study can contribute to the development of more responsible and innovative business practices in the fashion industry.

---

## 2 Literature review

In the ever-evolving fashion industry landscape, sustainable business model innovation (SBMI) has become a major focus, particularly in the secondhand shoe segment. In line with the increasing consumer concern for the environment, many fashion companies are now vying to adopt more sustainable business practices. As defined by Bocken et al. (2014), SBMI is a business model approach that integrates profitability with social and environmental responsibility. The secondhand shoe industry offers a unique opportunity to implement the SBMI concept by reducing waste and excessive resource consumption.

### 2.1 Opportunities and Challenges

In the secondhand shoe industry, quality and differentiation are two interrelated aspects. Consumers are not only looking for environmentally friendly products, but also high-quality ones. As emphasized by Garrone et al. (2016), product quality is a crucial factor for business success. To differentiate themselves from competitors, companies need to develop effective marketing strategies that not only highlight product quality but also showcase their sustainability aspects.

## 2.2 SBMI Implementation Strategy

The implementation of SBMI in the secondhand shoe industry can involve various approaches, ranging from the use of recycled materials to increased supply chain transparency. As emphasized by Kumar et al. (2019), involving consumers in the production process is also a strategic step. In addition, integrating technology with the use of digital technology, such as e-commerce platforms, can expand market reach and increase consumer engagement. Lehner (2015) states that companies that successfully integrate technology to support sustainable business practices tend to be more successful in attracting environmentally conscious consumers.

## 2.3 Consumer Awareness

High consumer awareness of environmental issues is a key driver in the success of sustainable business models, as researched by Thøgersen and Ölander (2006). Therefore, companies need to actively educate consumers about the benefits of secondhand shoes and their positive impact on the environment. In doing so, consumers will be more motivated to choose sustainable products.

## 2.4 Regulations and Policies

In Indonesia, regulatory aspects also play a significant role in promoting sustainable business models, especially in the secondhand fashion shoe industry. Government policies that support waste management and the use of environmentally friendly products can encourage companies to adopt sustainable practices. For example, government programs promoting the use of secondhand goods and plastic waste reduction can be incentives for industry players to adapt to more environmentally friendly business models (Ministry of Environment and Forestry, 2020).

The implementation of regulations such as the Government Regulation on Waste Management and efforts to reduce the use of single-use items can also help companies formulate effective strategies (Susanto, 2021). By understanding the regulatory framework and existing opportunities, businesses can more easily develop sustainable initiatives that not only comply with legal requirements but also attract the attention of increasingly environmentally conscious consumers.

Government support in the form of tax incentives or easier licensing for companies that implement environmentally friendly practices can further strengthen their market position (Khan et al., 2020). Therefore, a good understanding of applicable regulations is crucial for companies to survive and thrive in the competitive fashion industry in Indonesia.

## 2.5 Gaps in the Existing Literature

In the existing literature, there are some gaps that need to be considered regarding the application of the Sustainable Business Model Innovation (SBMI) concept in the thrift shoe fashion industry. Although previous studies have highlighted the importance of sustainability and product quality in the context of the fashion business, there are still limitations in understanding how SBMI is implemented in practice in the secondhand shoe industry. In particular, previous research has not sufficiently explored the specific factors that drive the adoption of SBMI at the UMKM level, as well as the appropriate strategies to address the challenges faced by industry players in Indonesia. In addition, although government regulations have the potential to support sustainable practices, there is still a lack of research analyzing the direct impact of these policies on business model development in the thrift shoe sector. Therefore, this study aims to fill these gaps by providing in-depth insights into the implementation of SBMI, its driving factors, and the strategies that can be applied to create a more sustainable fashion business.

---

## 3 Methods

This research aims to identify business strategies in the thrift shoe fashion industry through the application of the Sustainable Business Model Innovation (SBMI) concept. This research uses a qualitative method with a case study approach on UMKM Sepatu Thrift Singapura by Lix, which was established on December 1, 2021, in Padang, West Sumatra. This business operates in the secondhand shoe fashion sector and adopts the SBMI approach to expand its operational scale.

Data collection was conducted using the triangulation method, which includes direct and indirect observation and interviews with business owners as respondents. Additional data was obtained from document analysis (Hermawan & Amirullah, 2016). Subsequently, the collected data was analyzed using the descriptive qualitative method (Sugiyono, 2022).

This research aims to explore the application of the SBMI concept in the thrift shoe fashion industry, with the results presented in the form of tables and narratives categorized into three aspects: (1) implementation of the SBMI concept; (2) driving factors for the implementation of SBMI; and (3) strategies that can be applied to develop a sustainable fashion business.

### 3.1 Analysis Results

#### 3.1.1 Sustainable Business Model Innovation Implementation

UMKM Sepatu Thrift Singapura by Lix is a business established by a married couple in Padang City, West Sumatra. This micro-enterprise was founded on December 1, 2021, and operates in the secondhand shoe trade. The owners are drawn to the thrift shoe business due to the rapid growth of the fashion industry and the need to reduce the waste of wearable shoes. They purchased 6 bales of shoes between January and December, each containing 100 pairs. By the end of 2023, they had sold 664 pairs of shoes. UMKM Sepatu Thrift Singapura by Lix sells its products both online and offline. They utilize e-commerce platforms like Shopee for online sales and social media channels such as TikTok Live and Facebook Live. Their promotional methods include both conventional and digital approaches. Despite leveraging digital promotions, they haven't neglected traditional methods like word-of-mouth.

Business model innovation is crucial to adapt to technological advancements and changing behaviors. This enables businesses to operate effectively, identify opportunities and threats, and compete effectively with existing and new competitors. Sepatu Thrift Singapura by Lix has developed its business based on the Sustainable Business Model Innovation (SBMI) concept.

**Table 1** Characteristics of Sustainability in Singapore Thrift Shoe Business Model Innovation by Lix

Concept	Implementation of the Main Characteristics of Sustainability in the Singapore Thrift Shoes Innovation Business Model by Lix
Sustainable Business Development	Started a business selling used shoes and continued to grow by utilizing various marketing channels (online and offline).
Revenue Streams and Profitability	Revenue is used to purchase new inventory, pay for operations, and grow the business.
Product Service System Development	Utilize e-commerce platforms (Shopee) and social media (TikTok Live, Facebook Live) to expand market reach.
Collaboration	Collaborate with suppliers in Batam to get a regular supply of used shoes.
Resources and Capabilities	Utilize existing resources, such as social networks and online selling capabilities.
Capturing Changes	Adapt to changes in fashion trends by continuing to update the collection of shoes sold.
Identifying Obstacles	Identify challenges such as intense competition and fluctuations in demand.
Efficiency	Buy inventory in bulk to get better prices.
Customer Perspective	Building good relationships with customers through good customer service by receiving feedback and effective promotions.

Source: Primary data processed, 2024

Table 1 and Table 2 show the implementation of the main characteristics of sustainability in the Singapore Thrift Shoes Innovation Business Model by Lix. Thrift Shoes Singapore by Lix started sustainable business development with a focus on selling used shoes and continues to expand its reach through the use of various marketing channels, both online and offline. The income stream generated from shoe sales is used to purchase new inventory, finance operations, and expand the business. In terms of product service system development, this business optimizes the use of e-commerce platforms such as Shopee and also social media such as TikTok Live and Facebook Live, allowing them to reach more customers in various regions.

To maintain smooth supply, Thrift Shoes Singapore by Lix collaborates with suppliers in Batam, who regularly provide stock of used shoes. Apart from that, this business utilizes internal resources, such as an extensive social network and expertise in running an online business. Adaptation to fast-changing fashion trends is the key to success, where the business constantly updates its shoe collection to remain relevant in the market. The challenges faced, such as

increasingly fierce competition and fluctuations in demand, continue to be identified and managed to maintain business sustainability.

**Table 2** Implementation of SBMI Driving Factors for the Singapore Thrift Shoe Business by Lix

Macro-trend	Driver of Sustainable Innovation	Where does it drive Innovation in the Business Model?
Circular Economy	Second-hand products	Start a business with a focus on selling used shoes, reducing textile waste and extending product life cycles.
Corporate Social Responsibility	Local sourcing and community empowerment	Collaborating with local suppliers in Batam to support the local economy and create job opportunities.
Sharing Economy and Collaborative Consumption	Online marketplace and social media	Utilize e-commerce platforms such as Shopee and social media such as TikTok Live and Facebook Live to expand market reach and allow consumers to interact directly.
Technological Innovation	Digital marketing and e-commerce	Optimize the use of digital technology for marketing, sales and customer service.
Consumer Awareness	Sustainable fashion	Fulfilling the needs of consumers who are increasingly aware of the importance of sustainable fashion by offering quality used shoe products.

Source: Primary data processed, 2024

Efficiency in stock management is one of the main focuses, with large purchases made to get better prices. From a customer perspective, Thrift Shoes Singapore by Lix builds good relationships with customers through responsive and effective service. They are open to customer input and continually develop promotional strategies to strengthen customer loyalty, ensuring that the business remains competitive and sustainable into the future.

#### 4 Results and discussion

The MSME business strategy for Singapore Thrift Shoes by Lix can be developed by implementing 10 strategic operations management decision activities proposed by Heizer et al. (2017). This managerial decision includes the design of goods and services, where used shoe suppliers are carefully selected to maintain quality and resale value. Optimizing the distribution process is important so that the business can run efficiently and in accordance with the set goals. Utilization of e-commerce platforms such as Shopee and social media, including TikTok Live and Facebook Live, is part of the strategy to deliver products to a wider range of customers.

The application of the Business Model Canvas (BMC) from Osterwalder & Pigneur (2010) provides clear guidance in managing this business. BMC enables Singapore Thrift Shoes by Lix MSMEs to illustrate how to create, deliver and capture value effectively. One of the main elements in BMC that is relevant for Singapore Thrift Shoes by Lix MSMEs is customer segments, which include consumers who are interested in sustainable fashion as well as consumers who are looking for quality products at affordable prices. In addition, online platforms strengthen these business channels, with e-commerce and social media becoming crucial distribution channels. Revenue streams generated from sales are used to develop the business and finance daily operations.

In the context of sustainable business model innovation (SBMI), this MSME emphasizes sustainability in all its operations. As stated by Todeschini et al. (2017), sustainable fashion trends and reducing textile waste are the main thrust. This business is committed to the circular economy principle by extending the life cycle of shoes that are still fit for use. In addition, this MSME adopts a Corporate Social Responsibility (CSR) approach by establishing relationships with local suppliers in Batam, which contributes to the local economy.

This business development is also in line with the sustainability values conveyed by Evans et al. (2014), which emphasizes the integration of economic, social and environmental values. From an environmental perspective, this MSME supports reducing shoe waste through selling used shoes that are still in good condition. On the social side, the owner opens up job opportunities for residents around the shop to host streaming and creates collaborations with local suppliers to help create jobs and strengthen the community economy.

This business will start in 2021 in line with the COVID-19 pandemic. This influences consumer behavior, these MSMEs are changing their business models by increasing their focus on online marketing to remain competitive in the market. Research by Baden-Fuller & Haefliger (2013) shows that digital technology is the main driver of business model innovation. This MSME uses digital technology through e-commerce and social media as a wider marketing tool, as well as utilizing collaboration with public figures to increase awareness of sustainable fashion.

Apart from that, these MSMEs increase efficiency by purchasing stock in large quantities to get cheaper prices and implementing a pre-order system to avoid stock buildup. The focus on environmentally friendly materials is part of their sustainable business strategy, which not only reduces waste but also attracts the interest of consumers who care about the environment. Through innovation and adaptation to changing consumer trends, Singapore Thrift Shoes by Lix MSMEs have managed to survive and continue to grow in changing market conditions.

---

## 5 Conclusion

This research explores the application of the Sustainable Business Model Innovation (SBMI) concept to Singapore Thrift Shoes by Lix MSMEs in the used shoe fashion industry. The research results show that this business has succeeded in integrating sustainability principles into its business model, both through the use of e-commerce and social media, as well as collaborating with local suppliers to strengthen its supply chain. The sustainable business approach adopted, such as implementing a circular economy and social responsibility, shows that SBMI can be an effective solution for reducing waste and increasing economic value in the thrift shoe sector.

In addition, this business is able to adapt to consumer trends who are increasingly concerned about environmental issues, as well as taking advantage of digital opportunities to expand market reach and maintain its competitiveness. SBMI's driving factors such as consumer awareness, technological innovation, and support from environmental policies help the business overcome operational challenges, such as demand fluctuations and intense competition.

Overall, this research provides a valuable contribution to the literature related to SBMI in the MSME sector, especially in the context of the used shoe industry, as well as offering practical guidance for business actors to increase competitiveness and create sustainable business models.

### *Research Limitations*

Although this research provides in-depth insight into the application of SBMI in the thrift shoe industry, there are several limitations that need to be noted:

- **Limited Research Scope:** This study only focuses on one MSME, namely Singapore Thrift Shoes by Lix. This limits the generalizability of the findings to the thrift shoe industry as a whole. Further research involving more business actors from various regions and business scales is needed to expand the conclusions.
- **Time Limitations:** This research was conducted over a relatively short period of time, so it may not have captured long-term changes in business operations or broader consumer trends. Longer longitudinal studies may provide more comprehensive insights.
- **Focus on the Business Owner's Perspective:** The primary data source comes from interviews with business owners. A lack of data from consumers or other suppliers may limit understanding of the external factors that influence the success of SBMI implementation. Gathering broader data from various stakeholders can enrich research results.
- **Influence of Regulations and Policies:** Although this research highlights the role of regulations in supporting sustainable business, it does not explore the direct impact of government policies on MSMEs in the used shoe sector. Further research could explore the specific impact of local regulations and policies on SBMI implementation.

By considering these weaknesses, future research can improve existing limitations and provide a more holistic picture of the application of SBMI in the fashion industry, especially in the thrift footwear sector.

---

## Compliance with ethical standards

### *Disclosure of conflict of interest*

No conflict of interest to be disclosed.

---

**References**

- [1] Baden-Fuller, C., & Haefliger, S. (2013). Business models and technological innovation. *Long Range Planning*, 46(6), 419-426. doi: 10.1016/j.lrp.2013.08.023.
- [2] Bocken, N. M. P., Short, S. W., Rana, P., & Evans, S. (2014). A literature and practice review to develop sustainable business model archetypes. *Journal of Cleaner Production*, 65, 42-56.
- [3] Evans, S., Vladimirova, D., Holgado, M., Van Fossen, K., Yang, M., Silva, E. A., & Barlow, C. Y. (2017). Business model innovation for sustainability: Toward a unified perspective for creation of sustainable business models. *Business Strategy and the Environment*, 26(5), 597-608. doi: 10.1002/bse.1939.
- [4] Garrone, P., Melacini, M., & Perego, A. (2016). A circular economy perspective on the fashion supply chain: An exploratory study of the Italian footwear industry. *Sustainability*, 8(4), 412.
- [5] Ghemawat, P., & Nueno, J. L. (2006). *Invincible: The 10 lies we learn when we buy*. Harvard Business Review Press.
- [6] Heizer, J., Render, B., & Munson, C. (2017). *Operations management: Sustainability and supply chain management*. The SAGE Encyclopedia of Alcohol: Social, Cultural, and Historical Perspectives (12th Edition). Pearson Education. doi: 10.4135/9781483331096.n334.
- [7] Hermawan, S., & Amirullah. (2016). *Business Research Methods: Quantitative & Qualitative Approaches*. Media Nusa Creative.
- [8] Ministry of Environment and Forestry. (2020). *Waste and Garbage Management Program*.
- [9] Khan, N. R., Rehman, A., & Awan, M. A. (2020). The impact of regulatory environment on the sustainable business model of SMEs: Evidence from the manufacturing sector. *Journal of Cleaner Production*, 256, 120-135.
- [10] Kumar, A., Singh, R. K., & Singh, J. (2019). Sustainable fashion: A systematic literature review and future research agenda. *Sustainable Production and Consumption*, 20, 104-122.
- [11] Lehner, M. (2015). The role of digitalization in sustainable business models: The case of the food industry. *Journal of Cleaner Production*, 107, 240-249.
- [12] McKinsey & Company. (2021). *The state of fashion 2021*. Retrieved from <https://www.mckinsey.com/industries/retail/our-insights/the-state-of-fashion-2021>
- [13] Munaf, T. (2018). *Statistical Data and Results of Creative Economy Surveys*. Collaboration between the Creative Economy Agency and the Central Statistics Agency.
- [14] Nielsen. (2015). *The sustainability imperative: New insights on consumer expectations*. Retrieved from <https://www.nielsen.com/wp-content/uploads/sites/3/2019/04/global-sustainability-report-2015.pdf>
- [15] Osterwalder, A., & Pigneur, Y. (2010). *Business model generation: A handbook for visionaries, game changers, and challengers*. John Wiley & Sons, Inc.
- [16] Sugiyono. 2022. *Quantitative Research Methods*. Bandung: Alfabeta.
- [17] Susanto, R. (2021). *Regulations and Challenges in Waste Management in Indonesia*. *Journal of Environment and Development*.
- [18] Thøgersen, J., & Ölander, F. (2006). To what extent are environmentally friendly choices dictated by consumers' habits? *Sustainable Development*, 14(3), 147-161.
- [19] Todeschini, B.V., Cortimiglia, M.N., Callegarode-Menezes, D., & Ghezzi, A. (2017). Innovative and sustainable business models in the fashion industry: Entrepreneurial drivers, opportunities, and challenges. *Business Horizons*, 60(6), 759–770. doi: 10.1016/j.bushor.2017. 07.003.