

FROM LOCAL GRAINS TO GLOBAL SHELVES: A SUSTAINABLE PRODUCT INNOVATION AND MARKETING OPERATIONS STRATEGY FOR NUTSAFIR COOKIES MSME IN LOMBOK

Joni Prayogi^{1*}, Bagas Gumintang², Filda Khoirun Nikmah³, Ronald Haryanto⁴

¹⁻⁴ Department of Management, Faculty of Economics and Business, Universitas Jenderal Soedirman, Indonesia

*Email corresponding author: joni.prayogi@unsoed.ac.id

Abstract

Nutsafir Cookies is a processed food MSME from Lombok that has been operating since 2012 and has successfully expanded into export markets through the Shopee Export Program and Shopee FLEXI. Amid sales growth reaching hundreds of percent annually through digital channels, the owner faces increasingly intense competition from similar souvenir MSMEs in Lombok. This community service article aims to formulate a sustainability-oriented product innovation and marketing operations strategy to help Nutsafir Cookies maintain its competitiveness. The approach used is descriptive qualitative research based on document analysis and a single case study, drawing on secondary data from official publications, mass media, and the partner's social media accounts, which is then triangulated with findings from prior studies on similar MSMEs in Indonesia. The analysis maps the partner's condition onto the Dynamic Capability Theory and Triple Bottom Line frameworks. The findings indicate that the product innovation strategy can be directed toward diversifying local grain-based variants and adopting more environmentally friendly packaging, while the marketing operations strategy needs to integrate production efficiency with a social sustainability narrative, namely the empowerment of local women, as a point of differentiation in the souvenir market. This pattern is consistent with findings on batik MSMEs, culinary MSMEs, and other women-led MSMEs in Indonesia that have applied similar strategies. This article is based on secondary data, so its conclusions are analytical-strategic in nature and have not been empirically tested directly at the partner's site.

Keywords: product innovation, marketing operations, sustainability, competitiveness, MSME

INTRODUCTION

The processed food MSME sector is one of the pillars of the local economy in tourism destinations such as Lombok, particularly in the regional souvenir segment. Nationally, MSMEs contribute up to 61 percent of Indonesia's Gross Domestic Product and absorb around 97 percent of the national workforce (Coordinating Ministry for Economic Affairs of the Republic of Indonesia, 2023), while at the destination level, local food products also help sustain regional identity and the visitor experience, as shown by Everett & Aitchison (2008) in their study of culinary tourism in Cornwall, England. One long-standing player in the Lombok souvenir segment is Nutsafir Cookies, a home-based business founded by Sayuk Wibawati in Mataram in September 2012 (Inside Lombok, 2026). Its main products are cookies made from local West Nusa Tenggara grains, such as red beans, corn, cashews, soybeans, and lebui, a black bean variety native to Lombok that has traditionally been known as a vegetable ingredient, processed without preservatives, artificial coloring, or artificial sweeteners.

Nutsafir Cookies recorded sales growth of up to 20 percent after joining e-commerce platforms, with annual increases of up to hundreds of percent through Shopee, and has been included in the Shopee Export Program and Shopee FLEXI as part of its international market expansion (Inside Lombok, 2026). Behind this achievement, the owner has openly stated that the business is under pressure due to the growing number of competitors, requiring resilience,

continuous innovation, and learning from experience to maintain its market position (Inside Lombok, 2026). This pattern aligns with Patma et al. (2021) finding that social media and digital platform marketing accelerates Indonesian MSMEs' sales growth, while at the same time making it easier for new entrants to reach the same market, so that competitive pressure rises alongside the expansion of digital channels.

This statement points to two interrelated issues. First, on the product side, the current range, ten nut-based flavor variants, risks losing its differentiating appeal if not regularly refreshed, while similar competitors in Lombok continue to emerge offering relatively comparable products. Second, on the marketing operations side, Nutsafir Cookies' presence across many channels at once, from Shopee, Tokopedia, WhatsApp Business, TikTok, and Instagram to its official website, is not necessarily matched by adequate production capacity and local raw material supply chain management to sustain seasonal or export demand surges.

This operational challenge cannot be separated from the issue of sustainability. Nutsafir Cookies' raw materials depend on grain supplies from local NTB farmers, while its production process involves local women's groups. Both aspects represent social and economic sustainability capital that, if managed strategically, can become a source of competitive advantage difficult for competitors to replicate, while also risking becoming a weak point if the supply chain and production capacity are not managed according to sustainable operational principles.

This community service article aims to formulate a sustainability-based product innovation and marketing operations strategy for Nutsafir Cookies, linking the Dynamic Capability Theory and Triple Bottom Line frameworks to the context of a home-scale local food MSME. Theoretically, this article enriches the application of both frameworks to regional souvenir sector MSMEs, a context relatively rarely discussed compared to their application in large corporations. Practically, this strategic framework is designed as a reference for the partner and similar processed food MSMEs in Lombok facing similar competitive pressure. The novelty of this article lies in its attempt to explicitly connect the dimensions of product innovation and marketing operations with the three pillars of sustainability, namely economic, social, and environmental, while triangulating the formulated strategy with empirical evidence from similar MSMEs across various regions of Indonesia.

LITERATURE REVIEW

Dynamic Capability Theory explains an organization's ability to integrate, build, and reconfigure internal and external competencies to respond to rapidly changing business environments, through three main processes: sensing, seizing, and transforming (Teece, 2007). In the context of Nutsafir Cookies, sensing capability is reflected in its response to export opportunities through the Shopee Export Program and Shopee FLEXI, while seizing and transforming capabilities still need strengthening on the production and product development side, so that digital sales growth does not rest solely on promotional strategy but also on adaptive internal capacity.

This finding aligns with empirical evidence from Indonesian MSMEs. Prabowo et al. (2021) found that dynamic capability positively influences sustainable competitive advantage among small businesses in the food-and-beverage and fashion sectors in Palembang, with entrepreneurial marketing acting as a mediator. This finding reinforces the relevance of the Dynamic Capability framework for analyzing food MSMEs such as Nutsafir Cookies, given the comparable sector and business scale.

The Resource-Based View states that sustainable competitive advantage stems from resources that are valuable, rare, inimitable, and non-substitutable, or VRIN (Barney, 1991). NTB's distinctive grain-based raw materials, particularly lebu, which is rarely processed into snacks, along with the involvement of local women's groups in production, meet these VRIN characteristics, as

they are difficult for competitors to replicate identically without the same access to and relationships with local farmers and communities. This characteristic aligns with Nuryakin's (2018) findings on batik MSMEs in Central Java, which showed that competitive advantage and product innovation significantly affect the marketing performance of craft MSMEs rooted in local wisdom, a pattern structurally similar to Nutsafir Cookies' position as a local-ingredient-based souvenir producer.

Product innovation in food MSMEs generally proceeds through stages of opportunity identification, concept development, testing, and new product launch (Cooper, 1990). At the home-industry scale, these stages are typically carried out more simply and quickly than in large corporations, yet still require clear direction so that new product variants genuinely respond to market preferences rather than merely adding to the number of variants.

Sustainable Operations Management emphasizes the importance of integrating environmental and social dimensions into everyday operational decisions, from raw material procurement and production processes to packaging and distribution (Kleindorfer et al., 2005). This framework aligns with the Triple Bottom Line concept, which assesses business performance not only in terms of profit but also people and planet (Elkington & Rowlands, 1999). Simpson et al. (2004) showed that environmental responsibility among SMEs, including in raw material management and production processes, can be a source of competitive advantage rather than merely a compliance burden. For an MSME such as Nutsafir Cookies, the profit dimension is reflected in digital sales growth, the people dimension in the empowerment of local women in the production process, while the planet dimension can be strengthened through its existing practice of production without preservatives and artificial coloring, as well as the potential development of more environmentally friendly packaging.

On the packaging dimension specifically, Marvinita et al. (2026) found that the adoption of environmentally friendly packaging among culinary MSMEs in Bandar Lampung is influenced by perceived environmental value, which shapes a positive attitude toward green innovation before ultimately driving adoption intention. This stimulus-organism-response pattern indicates that packaging changes in food MSMEs cannot simply be introduced as a technical decision, but need to be communicated as part of the environmental values the business upholds.

On the people dimension, Veranita et al. (2023) showed that digital marketing training for women-led MSME actors contributes to strengthening family economic resilience, while also building women's confidence and social role within the business. This finding is relevant to the position of local women's groups in Nutsafir Cookies' production process, which could potentially be strengthened through a similar approach.

METHODS

This article uses a descriptive qualitative approach with a document analysis design and a single case study of the Nutsafir Cookies MSME in Mataram, Lombok (Yin & Campbell, 2017). This design was chosen because field conditions at the time of writing did not allow for interviews or direct observation with the partner, so the primary data sources are public documents and verifiable secondary literature.

The data used comprise three groups. First, public documents on Nutsafir Cookies, namely mass media publications, the official website, and the business's social media accounts. Second, verified academic literature on dynamic capability, operational sustainability, and marketing strategy among similar MSMEs in Indonesia, used as a comparison and basis for triangulating findings. Third, policy documents relevant to Indonesia's processed food MSME sector.

The preparation of this article was carried out in four stages. The first stage was collecting public documents on Nutsafir Cookies' condition. The second stage was identifying operational and

marketing problems based on those documents. The third stage was formulating a sustainability-based product innovation and marketing operations strategy, mapping the findings onto the Dynamic Capability Theory and Triple Bottom Line frameworks. The fourth stage was triangulating the formulated strategy with findings from prior research on similar MSMEs in Indonesia, covering batik, culinary, and women-led MSMEs, to assess how well the strategic pattern aligns with published empirical evidence.

The data were analyzed through descriptive thematic analysis, grouping findings into three categories: product condition, marketing operations condition, and indications of sustainability practices already in place or not yet implemented at the partner business, which were then compared with patterns found in research on similar MSMEs.

RESULTS AND DISCUSSION

Partner's Operational-Marketing Conditions and Challenges

Nutsafir Cookies currently operates across six sales and promotion channels at once: Shopee, Tokopedia, WhatsApp Business, TikTok, Instagram, and its official website, nutsafirlombok.com, in addition to two physical outlets on Jalan Angsoka in Mataram and at Lombok International Airport. This multichannel presence supports digital sales growth reaching hundreds of percent annually, yet according to the owner's own statement, this growth has occurred alongside increasingly intense competitive pressure from similar souvenir MSMEs in Lombok. This condition suggests that downstream strength, i.e., sales channels, is not necessarily matched by upstream strength, i.e., production capacity and local raw material supply chain management.

Sustainability-Based Product Innovation Strategy

The proposed product innovation is directed at two targets. First, strengthening differentiation of local-ingredient-based variants, which have long been Nutsafir Cookies' strength, for instance by developing seasonal variants from local grains not yet widely processed by competitors, building on the lebui or Lombok black bean base that has become part of the product's identity. Second, developing more environmentally friendly packaging, for example by reducing single-use plastic layers in souvenir packaging, in response to growing consumer attention to the environmental aspects of the products they purchase. This pattern is consistent with Marvinita et al.'s (2026) finding that the adoption of eco-friendly packaging among culinary MSMEs is more effective when communicated as an environmental value the business holds, rather than merely as a material change to the packaging.

Sustainable Marketing Operations Strategy

On the marketing operations side, the proposed strategy is not to add new channels but to integrate existing channels through a shared content calendar and a consistent sustainability narrative across each channel. The story of local women's empowerment in the production process can be featured as marketing content that differentiates Nutsafir Cookies from competitors, while also strengthening the people dimension within the Triple Bottom Line framework. This approach aligns with Veranita et al. (2023) finding that digital marketing training for women-led MSMEs not only increases income but also strengthens women's confidence and social role in the business, a value worth featuring in Nutsafir Cookies' marketing narrative. On the production operations side, strengthening partnerships with local grain suppliers needs to be planned on a more structured

schedule, given that digital sales growth may drive demand that does not always align with local raw material harvest cycles.

Comparison with Studies on Similar MSMEs in Indonesia

The strategies formulated in the two preceding sections can be triangulated with findings from prior research on similar MSMEs in Indonesia. Among batik MSMEs in Central Java, Nuryakin (2018) found that competitive advantage and product innovation significantly affect marketing performance, a pattern supporting the argument that local-ingredient-based variant diversification at Nutsafir Cookies could yield similar results. Among small food-and-beverage businesses in Palembang, Prabowo et al. (2021) found that dynamic capability affects sustainable competitive advantage, reinforcing the argument that the sensing and seizing capabilities Nutsafir Cookies has already shown through its participation in the Shopee Export Program need to be followed by transforming capability on the operational side. Among culinary MSMEs in Bandar Lampung, Marvinita et al. (2026) found that eco-friendly packaging adoption is influenced by consumers' perceived environmental value, supporting the argument that Nutsafir Cookies' packaging changes need to be accompanied by a clear environmental narrative. Among women-led MSMEs in West Bandung, (Veranita et al., 2023) found that digital marketing training strengthens economic resilience as well as women's social role, supporting the argument that the story of local women's empowerment at Nutsafir Cookies could be reinforced through a similar training approach. The consistency of patterns across these four studies indicates that the strategy formulated for Nutsafir Cookies aligns with published empirical evidence on similar MSMEs across various regions of Indonesia, even though each business's context remains distinct.

The interrelation of the three strategic dimensions, product, marketing operations, and sustainability, is summarized in Table 1.

Table 1. Triple Bottom Line-Based Strategy Mapping for Nutsafir Cookies

TBL Dimension	Current Condition	Proposed Strategy	Literature Support
Profit	Sales growth of up to hundreds of percent annually through Shopee; included in the Shopee Export Program and Shopee FLEXI	Seasonal variant diversification based on local grains; cross-channel content calendar integration for promotional efficiency	Nuryakin (2018); Prabowo et al. (2021)
People	Involves local women's groups in the production process	Women's empowerment storytelling as marketing content; digital marketing training for the production team	Veranita et al. (2023)
Planet	Production without preservatives, artificial coloring, or artificial sweeteners	Development of more environmentally friendly packaging accompanied by an explicit environmental narrative	Marvinita et al. (2026); Simpson et al. (2004)

Source: processed from secondary data and literature triangulation, 2026

Discussion

The three strategies above are interconnected within the Dynamic Capability framework. Sensing capability is reflected in reading the competitive pressure reported by the owner, seizing capability in formulating sustainability-based product and packaging innovation, while transforming capability is reflected in the effort to integrate production operations and multichannel marketing so that they work in concert rather than in isolation. From a Triple Bottom Line perspective, this strategy balances the profit dimension through sales and export growth, the people dimension through local women's empowerment, and the planet dimension through preservative-free production and the potential for more environmentally friendly packaging. These three dimensions need to be managed together, since strengthening one dimension while neglecting the others risks creating imbalance, for example rapid sales growth without adequate production capacity and raw material supply.

CONCLUSION

A sustainability-based product innovation and marketing operations strategy has the potential to help Nutsafir Cookies maintain its competitiveness amid the growing number of competitors in Lombok's regional souvenir segment. In practical terms, the partner can begin with the steps most feasible given current resources, such as developing a shared content calendar that features a sustainability narrative, before moving toward larger changes such as developing eco-friendly packaging. Triangulation with research on batik MSMEs, culinary MSMEs, and women-led MSMEs across various regions of Indonesia shows that this strategic pattern is consistent with published empirical evidence, even though each MSME operates in a different context. This article's limitation lies in its data sources, which consist entirely of secondary data and comparative literature, without direct testing at the partner's site, so the resulting conclusions are analytical-strategic in nature and have not measured implementation impact empirically. Further research or community service work on similar MSMEs is recommended to measure the impact of implementing this strategy more concretely, for instance through changes in sales volume, production cost efficiency, or the level of local women's group involvement.

BIBLIOGRAPHY

- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Cooper, R. G. (1990). Stage-gate systems: A new tool for managing new products. *Business Horizons*, 33(3), 44–54. [https://doi.org/10.1016/0007-6813\(90\)90040-I](https://doi.org/10.1016/0007-6813(90)90040-I)
- Coordinating Ministry for Economic Affairs of the Republic of Indonesia. (2023, August 24). Dorong UMKM naik kelas dan go export, pemerintah siapkan ekosistem pembiayaan yang terintegrasi.
- Elkington, J., & Rowlands, I. H. (1999). Cannibals with forks: The triple bottom line of 21st century business. *Alternatives Journal*, 25(4), 42.
- Everett, S., & Aitchison, C. (2008). The Role of Food Tourism in Sustaining Regional Identity: A Case Study of Cornwall, South West England. *Journal of Sustainable Tourism*, 16(2), 150–167. <https://doi.org/10.2167/jost696.0>
- Inside Lombok. (2026, January 24). Nutsafir Cookies Lombok Tembus Pasar Global, Penjualan Naik hingga Ratusan Persen Lewat E-Commerce.

- Kleindorfer, P. R., Singhal, K., & VanWassenhove, L. N. (2005). Sustainable Operations Management. *Production and Operations Management*, 14(4), 482–492. <https://doi.org/10.1111/j.1937-5956.2005.tb00235.x>
- Marvinita, R., Sakinah, T., Nabila, N. I., Angelita, A., & Rohmah, L. N. (2026). Analysis of green packaging adoption behavior in culinary small and medium enterprises in Bandar Lampung City: The SOR model approach towards sustainable innovation. *Journal of Management: Small and Medium Enterprises (SMEs)*, 19(2), 953–971.
- Veranita, M., Gunardi, Yusuf, R., & Ratna H, Y. (2023). Pemberdayaan Pelaku UMKM Perempuan Dalam Upaya Peningkatan Ketahanan Ekonomi Melalui Pelatihan Digital Marketing. *JURPIKAT (Jurnal Pengabdian Kepada Masyarakat)*, 4(3), 388–401. <https://doi.org/10.37339/jurpikat.v4i3.1461>
- Nuryakin, N. (2018). Competitive Advantage and Product Innovation: Key Success of Batik SMEs Marketing Performance in Indonesia. *Academy of Strategic Management Journal*, 17(2), 1–17. <https://www.abacademies.org/articles/Competitive-advantage-and-product-innovation-1939-6104-17-2-201.pdf>
- Patma, T. S., Wardana, L. W., Wibowo, A., Narmaditya, B. S., & Akbarina, F. (2021). The impact of social media marketing for Indonesian SMEs sustainability: Lesson from Covid-19 pandemic. *Cogent Business & Management*, 8(1). <https://doi.org/10.1080/23311975.2021.1953679>
- Prabowo, H., Sriwidadi, T., & Ikhsan, R. B. (2021). The Influence of Dynamic Capability on Sustainable Competitive Advantage: An Empirical Study of Small Businesses in Indonesia. *Journal of Asian Finance, Economics and Business*, 8(6), 949–959. <https://doi.org/10.13106/jafeb.2021.vol8.no6.0949>
- Simpson, M., Taylor, N., & Barker, K. (2004). Environmental responsibility in SMEs: does it deliver competitive advantage? *Business Strategy and the Environment*, 13(3), 156–171. <https://doi.org/10.1002/bse.398>
- Teece, D. J. (2007). Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319–1350. <https://doi.org/10.1002/smj.640>
- Yin, R. K., & Campbell, D. T. (2017). *Case Study Research and Applications: Design and Methods* (6th ed.). SAGE Publications. <https://books.google.co.id/books?id=uX1ZDwAAQBAJ>