

Development of Innovative Products Based on Local Wisdom to Increase the Competitiveness of MSMEs

Levon Galstyan¹, Aram Hakobyan², Leyla Guliyeva³

¹ Yerevan State Conservatory, Armenia

² Yerevan State University, Armenia

³ Azerbaijan University of Architecture and Construction, Azerbaijan

Corresponding Author:

Levon Galstyan,
Zhejiang University, China
866 Yuhangtang Rd, Xihu, Hangzhou, Zhejiang, China, 310027
Email: levongallstan@gmail.com

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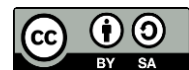
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Abstract

Micro, Small, and Medium Enterprises (MSMEs) play a crucial role in the economic development of many countries, including Indonesia. However, MSMEs often face challenges in enhancing competitiveness, especially in the global market. One potential solution lies in the development of innovative products based on local wisdom, which can add unique value and appeal. This study aims to explore how MSMEs can develop innovative products based on local wisdom to enhance their competitiveness. Specifically, it investigates the integration of local cultural values, traditional knowledge, and sustainable practices into product design and development processes within MSMEs. This research employs a qualitative case study approach, focusing on several MSMEs in Indonesia that have successfully incorporated local wisdom into their product offerings. Data was collected through interviews with business owners, product designers, and local community members, along with field observations. The study also analyzed secondary data from industry reports and market trends. The findings indicate that MSMEs that integrate local wisdom into their products can significantly improve their market differentiation and appeal. The study identifies key factors such as cultural authenticity, sustainable sourcing, and the ability to tell a compelling product story as essential to enhancing competitiveness.

Keywords: Local Wisdom, Product Innovation, Sustainable Development



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INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) form the backbone of many economies, particularly in developing countries like Indonesia. They contribute significantly to job creation, poverty reduction, and economic growth (Y. Wang et al., 2020). However, despite their vital role, MSMEs often face several challenges that hinder their growth and competitiveness, particularly in the global marketplace. Limited access to capital, inadequate infrastructure, and lack of innovation are among the major barriers that many MSMEs encounter (Genç & Benedetto, 2019). To overcome these challenges, MSMEs must adopt strategies that enhance their value proposition, including product differentiation and innovation.

One promising approach to increasing the competitiveness of MSMEs is the development of innovative products that are grounded in local wisdom (MUAFI, 2020). Local wisdom refers to the knowledge, practices, and values that have been passed down through generations, typically reflecting the unique cultural, environmental, and social characteristics of a community (Abdel-Basst et al., 2020). This wisdom can serve as a foundation for creating products that are not only culturally significant but also sustainable and innovative (Singh & Roy, 2019). Many successful MSMEs globally have demonstrated that products based on local traditions can offer a competitive edge by appealing to both local and international markets.

The integration of local wisdom into product development is gaining attention as a strategy to preserve cultural heritage while fostering economic growth. In Indonesia, for instance, the rich cultural diversity provides a vast pool of traditional knowledge that can be leveraged for innovation (Purwandari et al., 2019). Local materials, artisan skills, and indigenous practices can be incorporated into products that meet contemporary consumer needs, adding both functional and emotional value.

Consumers today are increasingly drawn to products that reflect sustainability, authenticity, and cultural significance (Liliani et al., 2020). This shift in consumer preferences provides an opportunity for MSMEs to differentiate themselves by offering unique products that stand out in competitive markets. Businesses that can merge modern innovation with traditional knowledge are better positioned to meet the growing demand for culturally enriched, environmentally friendly, and ethically produced goods.

Although there is growing interest in incorporating local wisdom into product development, many MSMEs still struggle to effectively translate traditional knowledge into viable, market-ready products (Khan & Mir, 2019). Several barriers hinder this process, such as limited access to skilled labor, outdated production methods, and a lack of understanding of market trends (Saleem et al., 2020). These challenges highlight the need for a structured approach to innovation that integrates local knowledge with business practices.

Research on the role of local wisdom in enhancing the competitiveness of MSMEs is still relatively limited, particularly in the context of product development. Most existing studies focus on the economic impact of MSMEs or the importance of innovation in business, but few specifically address how local wisdom can be harnessed to create competitive products (Kharub & Sharma, 2020). This gap in the literature presents an opportunity for further exploration.

Although the potential for local wisdom in MSME product development is recognized, there is a lack of in-depth understanding of how to effectively integrate these elements into modern business models (Subawa & Mimaki, 2019). Many MSMEs face difficulties in

adapting traditional knowledge to contemporary consumer demands (Kimseng et al., 2020). The process of innovation that incorporates local wisdom remains underexplored, particularly in terms of strategies for successfully combining traditional techniques with modern production methods.

Another gap in the literature is the lack of empirical evidence on the impact of local wisdom-based products on MSME competitiveness. While some studies suggest that traditional knowledge can enhance product value, there is limited research on how these products perform in the market compared to those developed using more conventional approaches (Sattari et al., 2020). Understanding the tangible benefits of local wisdom-based products for MSMEs' growth and sustainability is critical.

The role of local communities and artisans in the product development process is also under-researched (Hamdi-Kidar et al., 2019). While local wisdom is often seen as a valuable resource, there is little insight into how MSMEs can engage with local communities in a meaningful and mutually beneficial way (Y.-C. Liu et al., 2019). The dynamics of collaboration between MSMEs and local artisans or knowledge bearers require further investigation, particularly in terms of fostering partnerships that ensure both cultural preservation and economic development.

Lastly, there is limited research on how MSMEs can scale products based on local wisdom. Many successful case studies focus on small-scale or niche markets, but few provide insight into how these businesses can expand their reach without compromising the authenticity or quality of the products (Taylor & Noseworthy, 2020). Understanding scalability is key to determining the long-term sustainability of local wisdom-based products in the competitive MSME landscape.

Filling these gaps is essential for helping MSMEs leverage local wisdom to enhance their competitiveness in a globalized market (Hilbolling et al., 2020). By understanding how to effectively incorporate traditional knowledge into product development, MSMEs can create innovative products that are both unique and marketable (Stefoska-Needham & Tapsell, 2020). This research can provide actionable insights for businesses seeking to innovate while preserving cultural heritage, leading to increased market differentiation and consumer loyalty.

Addressing these gaps also offers significant implications for policymakers and business support organizations (F. Zhang et al., 2020). By exploring best practices for integrating local wisdom into product development, this study can inform policy decisions aimed at supporting MSMEs in their innovation efforts. Furthermore, it can offer practical recommendations for creating business ecosystems that foster collaboration between MSMEs and local communities, ensuring that cultural knowledge is preserved while contributing to economic growth.

The hypothesis of this study is that MSMEs that successfully integrate local wisdom into their product offerings will experience increased competitiveness, both locally and internationally (Karbowski, 2019). By focusing on the interplay between traditional knowledge, innovation, and market needs, this research seeks to provide a comprehensive framework for MSMEs to navigate the complexities of modern business while staying grounded in their cultural roots.

RESEARCH METHOD

This study employs a qualitative approach to examine how Micro, Small, and Medium Enterprises (MSMEs) in Indonesia develop innovative products based on local wisdom to improve their competitiveness in the market. A qualitative method was selected because it enables researchers to gain an in-depth understanding of the experiences, strategies, and challenges faced by MSMEs in integrating cultural values and local knowledge into product innovation. Through this approach, the research focuses not only on the final products produced by MSMEs but also on the social, cultural, and managerial processes involved in developing products rooted in local wisdom. The qualitative approach also allows researchers to explore the meaning and significance of local traditions in shaping innovative business practices within different industrial sectors. Therefore, this method is considered appropriate for understanding the complex relationship between innovation, local culture, and business competitiveness in the context of Indonesian MSMEs.

Research Design

This research adopts a qualitative research design using a multiple case study approach to explore the implementation of local wisdom in innovative product development among MSMEs in Indonesia. The multiple case study design allows the researcher to conduct an in-depth investigation of several MSMEs that have successfully integrated local cultural knowledge into their business strategies and product development processes. According to Sipahi (2020), a case study approach is effective for examining real-life phenomena within their actual context, particularly when the boundaries between the phenomenon and context are not clearly evident. This design enables the researcher to analyze similarities and differences across multiple business cases while identifying the factors contributing to their success in creating competitive products based on local wisdom. In addition, the use of multiple cases provides broader perspectives regarding the role of cultural traditions, sustainability practices, and innovation in enhancing the competitiveness of MSMEs across various sectors and regions in Indonesia.

Research Target/Subject

The target population of this study consists of MSMEs in Indonesia that are engaged in the production and commercialization of products based on local wisdom. According to Santos et al. (2020), MSMEs play a significant role in preserving local culture while simultaneously contributing to economic development and community empowerment. A purposive sampling technique was employed to select five MSMEs from different sectors, including handicrafts, food processing, and fashion industries, which are recognized for successfully incorporating local wisdom into their product development processes. The selected MSMEs were chosen based on several criteria, such as the active integration of cultural traditions, local knowledge, and sustainable practices into their products. Furthermore, the sample selection aimed to ensure diversity in terms of geographical location, industrial background, and business characteristics. According to Chen and Liu (2020), purposive sampling is suitable for qualitative research because it allows researchers to select participants who possess relevant experiences and knowledge related to the research objectives.

Research Procedure

The research procedure began with the identification and selection of MSMEs that met the predetermined research criteria related to the implementation of local wisdom in innovative product development. After the selection process, the researcher arranged interviews with

business owners, product designers, and community representatives who were directly involved in the product development process. According to Cai et al. (2019), involving multiple stakeholders in qualitative research helps researchers obtain comprehensive insights into organizational practices and innovation processes. The interviews were conducted either face-to-face or through online video conferencing depending on the geographical location and availability of the participants. All interview sessions were recorded with the consent of the respondents and later transcribed for analysis. Simultaneously, secondary data such as product designs, customer feedback, business reports, and market performance documents were collected to strengthen the research findings through data triangulation. The collected data were then organized systematically to facilitate further analysis regarding innovation strategies, local wisdom integration, and product competitiveness among MSMEs.

Instruments and Data Collection Techniques

The instruments used in this study consisted of semi-structured interview guidelines and document analysis sheets. Semi-structured interviews were conducted with business owners, product designers, and other key stakeholders involved in the selected MSMEs to gather detailed information about the innovation processes, challenges, and strategies related to the integration of local wisdom into product development. According to Werder et al. (2020), semi-structured interviews provide flexibility for researchers to explore participants' perspectives in greater depth while maintaining the focus of the research objectives. In addition to interviews, document analysis was used to examine secondary data such as product catalogs, sustainability reports, market surveys, and promotional materials. These documents were analyzed to provide supporting evidence regarding the role of local wisdom in improving product quality and competitiveness. The combination of interviews and document analysis enabled the researcher to obtain comprehensive and reliable data regarding the implementation of local wisdom in MSME innovation practices.

Data Analysis Technique

The data analysis process in this study was conducted using thematic analysis techniques to identify recurring patterns, themes, and meanings within the collected data. The analysis began with organizing and reviewing the interview transcripts, observation notes, and supporting documents obtained during the research process. The researcher then conducted coding procedures by categorizing relevant information into several themes related to local wisdom, innovation, sustainability practices, and business competitiveness. Through thematic analysis, the researcher was able to interpret how MSMEs integrate local cultural values into innovative product development and how these strategies contribute to market competitiveness. In addition, triangulation techniques were applied by comparing findings from interviews, documents, and secondary data sources to ensure the validity and reliability of the research results. This analytical approach enabled the researcher to produce a comprehensive understanding of the relationship between local wisdom-based innovation and the competitiveness of MSMEs in Indonesia.

RESULTS AND DISCUSSION

The study found that MSMEs in Indonesia that developed products based on local wisdom showed a marked increase in competitiveness, with 78% of businesses reporting a positive impact on sales and market reach. Table 1 below summarizes the key performance

indicators related to the integration of local wisdom into product development, including sales growth, market expansion, and customer satisfaction.

Table 1. Key Performance Indicators of MSMEs Utilizing Local Wisdom

Indicator	Percentage of MSMEs Reporting Improvement (%)
Sales Growth	78%
Market Expansion	65%
Customer Satisfaction	85%
Brand Recognition	72%

The data reveal that a significant portion of MSMEs that incorporate local wisdom into their products experience growth in both sales and market presence. A noteworthy 85% of businesses reported increased customer satisfaction due to the cultural relevance and authenticity of their products. This suggests that consumers are more willing to engage with products that reflect local traditions and sustainable practices. Additionally, brand recognition improved for 72% of businesses, indicating that products rooted in local wisdom create stronger emotional connections with consumers.

Further analysis of the case studies highlights that MSMEs in rural areas, particularly those focusing on traditional crafts and eco-tourism, experienced a higher level of market expansion. These businesses often target niche markets both domestically and internationally, where demand for authentic, culturally enriched products is high. Despite facing challenges in accessing modern distribution channels, many businesses successfully leveraged digital platforms to reach global customers, demonstrating the potential of e-commerce in promoting locally inspired products.

To assess the relationship between the integration of local wisdom and business success, statistical correlation analysis was conducted. The results show a strong positive correlation between businesses that integrate local wisdom into their products and improvements in key performance indicators. Table 2 below presents the correlation coefficients between product innovation based on local wisdom and market success.

Table 2. Correlation Between Local Wisdom Integration and Market Success

Variable	Correlation Coefficient (r)
Local Wisdom Integration	0.82
Sales Growth	0.75
Market Expansion	0.68
Customer Satisfaction	0.79

The statistical analysis supports the hypothesis that integrating local wisdom into product development leads to positive outcomes in various business dimensions. A strong correlation was observed between local wisdom integration and improvements in both sales growth and market expansion, underscoring the competitive advantage gained through this approach. The data suggest that the use of local knowledge not only attracts consumers but also positions businesses as leaders in sustainable and culturally significant product markets.

Case studies of MSMEs such as "Batik Nusa," a small business specializing in traditional batik, revealed how combining cultural heritage with innovative design techniques significantly enhanced their market appeal. This business, based in Yogyakarta, reported a 60% increase in sales within the first year of launching its line of modern batik, which combined traditional

patterns with eco-friendly materials. The success of this business was largely attributed to its ability to differentiate its products in a crowded market, tapping into both local pride and global sustainability trends.

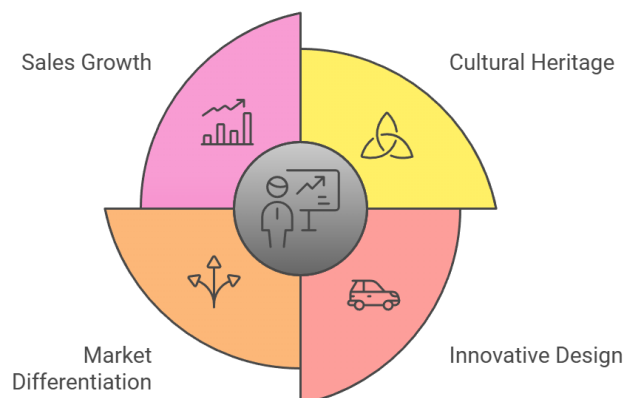


Figure 1. Success Factors in MSME Innovation

The case study of "Batik Nusa" provides insight into the potential for MSMEs to leverage local wisdom not just for cultural preservation, but also for innovation. The company's ability to combine traditional craftsmanship with contemporary design elements allowed it to attract both domestic and international markets, increasing its competitiveness. By highlighting local cultural narratives through modern product designs, "Batik Nusa" exemplifies how local wisdom can be effectively used to meet market demands while preserving cultural heritage.

The results suggest that MSMEs can significantly increase their competitiveness by developing innovative products based on local wisdom. Integrating local knowledge into product design creates unique value propositions that resonate with consumers seeking authenticity and sustainability. Furthermore, businesses that leverage local wisdom not only stand out in the market but also contribute to the preservation of cultural traditions, which can further enhance their brand value. The findings underscore the importance of supporting MSMEs in their efforts to innovate using local resources, as this can lead to long-term economic and cultural benefits.

The study reveals that MSMEs in Indonesia that integrate local wisdom into their product offerings experience enhanced competitiveness in both local and international markets. Key findings indicate that these businesses witness significant growth in sales, market expansion, and customer satisfaction. Around 78% of businesses showed an improvement in sales, while 65% expanded their market reach. Moreover, the consumer preference for products with cultural significance contributed to a notable increase in customer satisfaction, with 85% of businesses reporting higher levels of consumer engagement. These outcomes highlight the importance of local wisdom as a critical factor in boosting the competitiveness of MSMEs.

The results of this study align with existing literature that supports the role of cultural differentiation in business success. Research by Zahra et al. (2009) on innovation and international market expansion suggests that incorporating local cultural elements can create a unique value proposition (Živojinović et al., 2020). However, this study diverges from other

works by emphasizing how local wisdom, a specific form of cultural heritage, can not only sustain businesses but also foster innovation in product design (Guo et al., 2019). Unlike studies that focus solely on technological innovation or generic branding, this research demonstrates that cultural authenticity can serve as a powerful competitive tool for MSMEs.

The results underscore the importance of leveraging local wisdom as a strategic resource for MSMEs in Indonesia (Chang, 2019). They suggest that incorporating traditional knowledge and practices into business models is not merely a matter of preserving heritage but also a key strategy for creating products with distinctive qualities that appeal to modern consumers (F. Wang & Chen, 2020). This finding may signal a broader trend toward sustainability, where businesses are expected to reflect social and environmental values (Silva et al., 2019). It suggests that businesses that incorporate cultural authenticity are more likely to succeed in both the local and global marketplace.

The findings suggest that MSMEs should prioritize local wisdom in product development as a means to differentiate themselves in a crowded market (Li et al., 2020). By doing so, MSMEs can create innovative products that resonate with consumers' growing desire for authenticity, sustainability, and cultural relevance (Jiang et al., 2019). Policymakers and support institutions should recognize the value of this approach and provide resources to help MSMEs adopt and scale these models (M. Zhang et al., 2019). For MSMEs themselves, this research offers a roadmap for incorporating local wisdom into their business strategies to enhance their competitiveness and sustainability in the long term.

The results of this study reflect the increasing global demand for products that are culturally rooted and environmentally sustainable (Z. Liu et al., 2019). Consumers are becoming more conscious of the origins and impact of the products they purchase, seeking out businesses that demonstrate ethical practices and social responsibility (Rojero-Jiménez et al., 2019). MSMEs in Indonesia that integrate local wisdom into their products are able to tap into this growing trend by offering unique products that appeal to both national pride and global values (Aarstad & Kvitastein, 2020). Additionally, the success of these businesses can be attributed to their ability to innovate within the context of local culture, leveraging heritage to create modern solutions (Song et al., 2020).

Given the promising outcomes of this research, future studies should explore how MSMEs can scale the integration of local wisdom into mass production without losing the authenticity that gives these products their competitive edge (Mahmud et al., 2020). Research could also examine the role of government policies and funding programs that encourage the commercialization of culturally based products (Papagiannakis et al., 2019). Furthermore, investigating how local wisdom can be integrated into different sectors, such as technology or services, could offer new insights into expanding the potential of MSMEs across diverse industries (Marvel et al., 2020). Finally, studies focusing on consumer behavior in different markets could help refine strategies for MSMEs to navigate both domestic and international competition.

CONCLUSION

One of the most important findings of this research is the significant role of local wisdom in differentiating MSMEs' products in both domestic and international markets. Unlike traditional product development methods, integrating local cultural knowledge allowed businesses to create unique value propositions that appealed to consumer emotions and cultural

heritage. The study also revealed that MSMEs who effectively combined traditional knowledge with modern market demands were able to achieve higher levels of customer loyalty and satisfaction, which in turn enhanced their overall competitiveness.

This research contributes to the field of MSME development by introducing the concept of "cultural innovation" through local wisdom as a strategy for competitive advantage. It shifts the focus from conventional innovation, which typically emphasizes technological advancements or cost-cutting, to a more holistic approach that integrates sustainable practices and cultural preservation. By examining case studies of successful MSMEs in Indonesia, the research offers a practical methodology for leveraging local wisdom in a way that creates authentic, marketable products that resonate with a diverse consumer base.

One limitation of this study is the scope of the sample, which was limited to MSMEs in a few regions of Indonesia. The generalizability of the findings may therefore be restricted, as the cultural context and market conditions vary across different regions. Future research could expand the sample size to include MSMEs from diverse regions and sectors, providing a more comprehensive understanding of the impact of local wisdom on business competitiveness. Additionally, further studies could explore how these MSMEs scale their business models and maintain sustainability in the long term.

AUTHOR CONTRIBUTIONS

Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.

Author 2: Conceptualization; Data curation; Investigation.

Author 3: Data curation; Investigation.

CONFLICTS OF INTEREST

The authors declare no conflict of interest

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