

## Strategies to Strengthen the Business Resilience of Seashell Craft MSMEs in Serangan Village, Bali

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**Abstract:** *The shell handicraft industry in Serangan Village, Bali, originated from the efforts of a former bank employee who lost his job following the Bali Bombing and subsequently utilized shell waste generated from seaweed cultivation to create products with economic value. For nearly two decades, this business has endured various challenges, including fluctuations in the supply of raw materials, dependence on the skills of artisans, and the limited interest of younger generations in continuing the artisan profession. This study aims to identify the business resilience strengthening strategies implemented by the shell handicraft MSME in maintaining its business sustainability. The study employed a descriptive qualitative approach using a single case study. Data were collected through in-depth interviews with the business owner and analyzed thematically. The findings indicate that the business resilience of this MSME is supported by four main strategies: product and market diversification, a community empowerment-based production system with a profit-sharing wage scheme, active participation in interregional training and exhibition networks, and the adaptation of product designs to the local cultural wisdom of each region. Efforts to regenerate artisans through intergenerational training also serve as a key factor in ensuring the long-term sustainability of the business. These findings provide practical insights for similar MSME in designing strategies to survive amid limitations in human resources and raw material availability.*

**Keywords:** *business resilience, handicraft MSME, community empowerment, waste-based economy*

## Introduction

Micro, small, and medium enterprises (MSME) based on handicrafts play an important role in the economy of Indonesia's coastal regions. In many fishing villages, marine waste that was previously discarded can be processed into products with high added value. One example has developed in Serangan Village, Bali, where discarded shells from fishermen are transformed into various handicraft products such as incense holders, candle holders, decorative lamps, brooches, and hair clips.

This business was established by an individual who previously worked at a bank. After the bank where he was employed went bankrupt due to the economic impact of the Bali Bombing, he changed his profession and became a seaweed farmer. Through this activity, he noticed that many shells were discarded around the seaweed farming area and began transforming them into handicrafts with commercial value. Over the course of nearly twenty years, the business has not only survived but has also developed into a shell handicraft training center that has reached various regions across Indonesia, including Bengkulu, Banyuwangi, Morotai, West Kalimantan, North Sumatra, Papua, Raja Ampat, and Makassar.

Business resilience has become a crucial issue for MSME of this type because their sustainability depends heavily on the availability of natural raw materials, the skills of artisans, and the interest of younger generations in continuing the business. (Kurniawan et al., 2023) found that technological adaptation supported by government assistance contributes to MSME performance that is more resilient to economic shocks, including during crises such as the pandemic. Meanwhile, various initiatives utilizing shell waste in Indonesia's coastal regions, as reported in Kendari (Purbaningsih et al., 2023), Ketapang (Julianto, Sapwan Noor, Hendri Muhammad & Miniarti, 2025), and Karawang (Nuraini et al., 2026), demonstrate a similar pattern: waste that was previously considered an environmental problem is transformed into a source of income for coastal communities through training and mentoring.

Although studies on the utilization of shell waste for handicrafts have been widely conducted in the form of community service activities (Abubakar et al., 2021; Mahendra et al., 2023), research specifically analyzing the business resilience strategies of shell handicraft MSME that have operated for decades and expanded across multiple regions remains limited. Most of the available publications focus on short-term training activities in a single location, while the aspects of long-term sustainability, artisan regeneration, and the adaptation of product designs to local cultures have not been widely discussed in an integrated manner.



Figure 1 Shell Handicraft MSME in Serangan Village, Bali

Based on the above description, this study aims to identify and analyze the business resilience strengthening strategies implemented by the shell handicraft MSME in Serangan Village, Bali. This study is expected to contribute theoretically to the development of the literature on the business resilience of MSME based on coastal resources, while also providing practical contributions for similar business actors and stakeholders in designing sustainable coastal community empowerment programs.

## **Method**

This study employed a descriptive qualitative approach with a single case study design to examine the business resilience strategies of the shell handicraft MSME in Serangan Village, Bali. The research informant was selected purposively, namely the owner and founder of the business, who has extensive experience in developing and managing the shell handicraft enterprise.

Data were collected through semi-structured interviews and direct observation at the business site. Subsequently, the data were analyzed thematically through the stages of data reduction, data presentation, and conclusion drawing. The validity of the data was strengthened through triangulation between the interview and observation findings.

## **Result and Discussion**

### **Supply Chain and Raw Material Management**

The primary raw materials for this business are discarded shells obtained from local fishermen, which are purchased on a per-kilogram basis rather than by sack or bundle. The price of uncleaned shells ranges from IDR 2,000 to IDR 10,000 per kilogram, depending on their type and condition, while after undergoing the cleaning process, their value can increase to as much as IDR 40,000 per kilogram. This significant price increase indicates that the raw material cleaning process generates substantial economic added value for the business, consistent with the findings of various shell waste utilization initiatives in other coastal regions of Indonesia, which have likewise transformed low-value waste into products with high commercial value (Abubakar et al., 2021; Purbaningsih et al., 2023).

The business owner distinguishes three categories of shells that every artisan needs to understand: protected shells, which may not be traded because doing so violates legal regulations; cultivated shells, such as pearl oysters and abalones, which serve different economic purposes; and discarded shells from fishermen's catches and restaurant waste, which constitute the primary raw materials for handicrafts. Understanding this classification is important to ensure that the business complies with conservation regulations while continuing to utilize resources sustainably.

Before being processed, the shells are cleaned using bleaching agents such as Bayclin, hydrochloric acid (HCl), or hydrogen peroxide to remove dirt and fishy odors. After the bleaching stage, the shells are washed again using lime water or citric acid to neutralize the odor, then sanded until their surfaces become smooth and ready to be shaped into various handicraft products. This process demonstrates that the success of the business depends not only on the availability of raw materials but also on mastery of appropriate processing techniques.



Figure 2: Raw materials for making seashell crafts.

### Production Process and Skill Standardization

The shell handicraft production process is highly influenced by the skills of the artisans. The higher the level of skill, the more efficient the production process and the better the quality of the products produced. Therefore, training and experience are important factors in increasing production capacity.

To maintain efficiency and quality, the MSME implements a division of labor based on the capabilities of each artisan. The implementation of this work system supports the smooth operation of the production process while minimizing constraints in product manufacturing. These findings are consistent with the studies by (I Nyoman Jayanegara et al., 2025; Purbaningsih et al., 2023), which demonstrate that the division of labor and skill enhancement contribute to productivity and product quality.

## **Community Empowerment-Based Production Model**

One of the distinctive characteristics of this business lies in its production system, which extensively involves the surrounding community. Before receiving any work, community members first participate in training to understand the production standards for each type of product. Once an order is received, the raw materials are distributed to the artisans to be processed in their respective homes, after which the finished products are returned to the business owner.

The wage system uses a profit-sharing scheme. For example, for a product with a selling price of IDR 10,000, the artisan receives approximately IDR 5,000, or the equivalent of fifty percent of the selling price. This scheme provides income certainty for the artisans while maintaining production flexibility for the business owner, as there is no need to bear the fixed cost of employee salaries. This community empowerment model is consistent with various coastal community-based programs aimed at strengthening local economies, including those targeting coastal youth groups through training in transforming waste into products with commercial value (Nuraini et al., 2026).

## **Marketing Strategy and Market Diversification**

This business implements a multi-layered marketing strategy. Products such as incense holders are primarily marketed to the local market according to the needs and characteristics of the local community, while decorative lamps are targeted toward the national market, which has higher purchasing power. In addition to selling finished products, the business actively participates in handicraft exhibitions in various regions as a means of promotion and as a source of inspiration for new product designs. This diversification strategy is consistent with findings from other traditional handicraft industries, which indicate that product diversification is one of the primary drivers of competitiveness for small and micro-scale handicraft enterprises (Susilowati et al., 2023).

Diversification extends beyond product types to include an educational tourism business model. Visiting tourists can participate in short training sessions on making shell handicrafts by paying a training and material fee, after which they can take home the products they have created. According to the business owner, this model provides added value in the form of an experience that is more memorable than simply purchasing finished products. This approach of combining handicrafts with cultural tourism is also evident in creative economy MSME based on sustainable tourism in other handicraft centers, which utilize visitor experiences as part of their business sustainability strategy (Mukti Azhar et al., 2023).

## **Design Adaptation to Local Cultural Identity**

Sensitivity to local cultural wisdom has become one of the business owner's key strengths in developing product designs. When conducting training in Papua, he designed products that reflected the distinctive characteristics of the local culture. A similar approach was also applied when training communities in Rote and Bali, resulting in products with different visual identities in each training location. The ability to adapt product designs to the local cultural context broadens the relevance of the products across diverse markets while strengthening their value as representations of regional identity, as also demonstrated in efforts to preserve the local cultural values of Javanese traditions through pottery handicrafts (Suharson, 2024).

## **Artisan Regeneration as a Sustainability Challenge**

Although this business has operated for nearly twenty years, the greatest challenge it faces does not come from the market or raw material supply, but rather from the regeneration of its artisan workforce. Younger generations tend to prefer jobs that are considered cleaner and more practical, resulting in relatively low interest in the shell handicraft profession. According to the business owner, however, access to information and technology is now far easier than when he started the business without any prior skills or experience. Such regeneration challenges are not new in the traditional handicraft sector; (Suharson, 2024) documented similar challenges in the regeneration of female pottery artisans in Java, who also face a declining interest among younger generations in pursuing artisan professions.

To address this challenge, the business owner established intergenerational training groups that bring together young people and adults. Young participants are considered more creative in developing new designs, while adults provide motivation based on their life experiences. The training approach is also tailored to the target groups, ranging from elementary school children who are taught basic skills to MSME practitioners who are oriented toward achieving short-term economic outcomes.

## **Discussion**

The findings indicate that the business resilience of the shell handicraft MSME in Serangan Village is built through a combination of raw material management, community empowerment, product and market diversification, and the ability to adapt to local needs and cultural contexts. These findings are consistent with those of (Kurniawan et al., 2023), who stated that adaptability is an important factor in strengthening MSME resilience, although in this study adaptation is manifested more through the development of production skills and training networks than through the utilization of digital technology.

The implementation of a community empowerment-based production system also strengthens the role of social capital in maintaining business sustainability, as reported by, (Julianto, Sapwan Noor, Hendri Muhammad & Miniarti, 2025; Nuraini et al., 2026; Purbaningsih et al., 2023). On the other hand, artisan regeneration remains a challenge because the continuity of the business depends heavily on the skills of the artisans and the owner's role as the primary trainer, making a more structured regeneration strategy necessary (Suharson, 2024). Unlike previous studies, which have generally focused on short-term training activities (Abubakar et al., 2021; Mahendra et al., 2023), this study demonstrates that the business resilience of MSME is more strongly determined by the ability to build a sustainable production system, expand training networks, and adapt products to the characteristics of local markets and cultures (Mukti Azhar et al., 2023; Susilowati et al., 2023).

## Conclusion

This study demonstrates that the business resilience of the shell handicraft MSME in Serangan Village, Bali, is built through a combination of raw material management, the division of production processes, community empowerment, product and market diversification, the adaptation of product designs to local cultural contexts, and artisan regeneration through training activities. The implementation of these strategies has enabled the business to survive and develop sustainably despite facing challenges related to limited raw material availability, dependence on artisan skills, and the low interest of younger generations in pursuing the artisan profession. The findings provide practical implications for MSME practitioners in designing more adaptive business sustainability strategies while also offering valuable input for governments and other stakeholders in developing coastal community empowerment programs that focus not only on improving skills but also on strengthening long-term business resilience. Since this study is limited to a single case study involving one primary informant, future research is recommended to involve a larger number of informants, adopt a comparative approach, and examine business resilience strategies among various handicraft MSME in different regions to obtain a more comprehensive understanding of the factors influencing the sustainability of businesses based on coastal resources. pemahaman yang lebih komprehensif.

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