

# Analysis of Jambal Roti Product Development, Case Study at the Original Jambal Roti Kiosk "SR" Pangandaran

## Abstract

Pangandaran Regency is a leading salted fish production center in Indonesia, with jambal roti salted fish as a superior product that uses manyung fish as raw material. This study aims to analyze the development of jambal roti products by SR MSMEs in Pangandaran. Qualitative data analysis methods with two types of data, namely primary data and secondary data. Primary data was obtained through observation, while secondary data was obtained from literature studies and documentation. The results show that the product development strategy is carried out by applying the technology of storage machines or Chest Freezers, the use of vacuum machines and sealers for packing products, developing packaging innovations, and developing marketing techniques carried out online.

**Keywords:** Food Product quality, Jambal Roti, Packaging Strategies, Pangandaran

## Introduction

Pangandaran Regency is one of the leading salted fish production centers in Indonesia. Salted fish, as a processed fish product made through salting and drying processes, has become an important part of the fisheries industry in this area. The salting and drying methods used in fish processing are traditional techniques that have long been used in Indonesia to preserve fish, as described by Indriastuti *et al.* (2019).

The names and types of salted fish produced in various parts of Indonesia generally vary, depending on the type of fish used as raw material. In Pangandaran, one type of salted fish that is in great demand by consumers is jambal roti salted fish (Mutaqin & Natari 2021). This jambal roti fish uses manyung fish (*Arius thalassinus*) as its main ingredient, which is known for its tender meat texture and crumbles easily after frying, similar to toast. The processing process, including salting, fermentation, drying, and storage, greatly affects the aroma and distinctive texture of the produce (Fauzi *et al.* 2022).

Product development is a crucial aspect of business sustainability in the salted fish industry. According to Ulrich (2010), product development includes analyzing market perceptions and business opportunities, which include ultimately resulting in a product with higher added value than the previous product. In the context of salted fish businesses, product development not only helps sustain the business but also increases competitiveness in a competitive market. By improving quality and developing product innovations, businesses can more easily cater to diverse consumer tastes, attract new customers, and improve production efficiency, leading to reduced costs and increased profitability.

Kiosk SR in Pangandaran is a successful example of the development of "jambal roti" a traditional Indonesian salted fish product known for its unique flavor and texture. This kiosk offers various product

variants, such as jambal roti special, honey, super, and butter, which are favored by consumers for their distinctive taste and tender texture. Located near the Pangandaran Beach tourist attraction, this kiosk is a favorite destination for tourists looking for regional souvenirs. By maintaining product quality through a good production process, jambal roti salted fish from SR kiosk remains a top choice in the local market as well as for tourists. Thus, the purpose of this study was to analyze the development of salted jambal roti fish products carried out by SR a small and medium enterprise (SME) in Indonesia.

### **Methods**

This research was conducted in September 2024 at Jambal Roti SR Kiosk in Pangandaran Regency, West Java Province. The research method used was the survey method. Data were obtained from observations. Information was focused on the development of jambal roti products that have been carried out. Secondary data were obtained from the results of literature studies, analysis of records, reports and documentation. The data obtained was analyzed using a qualitative descriptive data analysis method. Qualitative descriptive data analysis method is in-depth data processing with data from observations and literature (Hansen 2020).

### **Results and Discussion**

#### **MSMEs Profile**

SR's original jambal roti Micro, Small and Medium Enterprises (MSMEs) is a small and medium enterprise engaged in the traditional processing of fishery products. This MSME is located on Jl. Kidang Pananjung, Pangandaran, Pangandaran sub-district, Pangandaran district. This business was founded by Mrs. Sumiyati and her family in 2000. At Kiosk SR, an important role in marketing jambal roti products is held by Mrs. Sumiyati who is assisted by her son. This marketing section includes various activities, such as product promotion, order handling, and maintaining relationships with customers. The entire production of salted jambal roti is done independently by Mrs. Sumiyati which ensures the quality and taste of the product.



**Figure 1.** Kios Jambal Roti SR

### **Technology Development of Raw Material Storage Machine (Chest Freezer)**

At the beginning of its operations, Kiosk SR did not use chest freezer technology for storing jambal roti products, which was one of the main challenges at the time obstacles in maintaining product quality and durability. Prior to this storage tool, producers only stored raw materials in styrofoam boxes. Under these conditions, raw materials that are susceptible to changes in temperature and humidity often spoil quickly, resulting in significant losses. Without adequate storage, producers had to race against time to process ingredients before they spoiled. With chest freezers, manufacturers can keep raw materials fresh longer, extend shelf life, and reduce the risk of losses due to spoilage. This technology provides significant advantages, allowing manufacturers to operate more efficiently, especially in the face of weather fluctuations.

Dried jambal roti can also be stored at low temperatures to inhibit quality loss due to microorganism growth or spoilage. Low temperatures also preserve the texture, flavor, and nutrients of the fish, so that the raw materials remain high quality until processing time. Storing jambal roti in a tightly closed chest freezer at a low temperature can also prevent contamination from the outside environment, maintaining the cleanliness and hygiene of the raw materials. This is very important to ensure food safety.



**Figure 2.** Chest Freezer Storage

### **Product Packing Technology Development**

Kiosk SR, known as a producer and seller of jambal roti from manyung fish, initially did not utilize vacuum packaging and sealer technology in its operations. The jambal roti products produced were conventionally packaged, which is less than optimal in maintaining the quality and freshness of the salted fish during distribution and storage. Without vacuum packaging, the risk of quality degradation due to air, moisture, and bacterial contamination was higher, which can affect the taste, texture, and durability of the product. Along with the development of market needs and increasing awareness of the importance of food product quality standards, Kiosk SR then began to switch to vacuum packaging and sealer technology. The development of packaging technology for salted jambal roti fish products in SR MSMEs using vacuum and sealer methods has shown great potential in improving product quality and shelf life. Vacuum packaging is effective in inhibiting bacterial growth, because vacuum conditions reduce the growth of aerobic bacteria, thereby minimizing changes in odor, taste, and appearance of the product (Maherawati *et al.* 2023). In addition, the use of sealers provides additional protection against contamination and mechanical damage during distribution (Ariyetti *et al.* 2022). With this innovation, SR MSMEs can not only extend product shelf life, but also increase competitiveness in the processed food market, while answering consumer needs for practical and high-quality products.



**Figure 3.** Vacuum



**Figure 4.** Sealer

## Product Packaging Development

SR kiosk initially used traditional jambal roti packaging in the form of dried banana leaves, which is environmentally friendly but has limitations in terms of durability and hygiene. Over time, the packaging was modified using newspaper which, although more practical, is still less than optimal for maintaining product quality, then switched to LDPE packaging which is more durable. Today, packaging continues to evolve to use labeled plastic that provides brand identity and is inserted into cardboard boxes for added protection.

Product development is one of the tactics that can help manufacturers stay afloat in the increasingly fierce competition as well as attract more potential consumers, along with changing trends and consumer preferences towards a product. Companies offer a variety of products with variations in types, packaging, flavors, and processing methods (Nurendah *et al.* 2021). These variations give consumers more choices, keep up with growing taste trends, and target different market segments. One product development strategy that can be applied to jambal roti is through innovation in packaging.

Packaging design is a highly technical field that combines elements of science, engineering and art. Creative packaging is packaging that makes the product look more unique and stand out compared to other products, so it has more appeal to consumers. The more innovative and attractive the packaging design, the greater the interest of consumers to buy the product (Morrisan 2015).

Packaging should influence consumers to give a positive impression. There is a relationship between the uniqueness of the design and the attractiveness of the product. The effect of creative design on consumer appeal is to arouse consumer appetite for the product (Dhameria *et al.* 2014). According to Mukhtar and Nurif (2015), technology has made packaging change function, where packaging used to protect what is being sold. But now, the packaging has improved to better protect the product during storage and transportation

Product packaging is the most important thing in competing in the business world. Especially for food products that have many competitors in the market. Added value is needed so that the product is more chosen than other products. The following is an example of food product packaging development carried out by Kiosk Jambal Roti SR.



**Fig 5. Initial Packaging**



**Fig 6. Packaging Development Innovation**

Along with the development of time, packaging design is not only protective, but also an artistic value that illustrates product features, persuades consumers, product philosophy, and so on. Creative packaging can also be used as a marketing strategy and product brand reinforcement. The marketing aspect plays a very important role. Products that are favored by consumers, the right pricing, the right selection of locations and distribution channels, and the right promotion will be able to improve business performance in terms of marketing and turnover.

### **Development of Product Marketing Techniques**

Jambal Roti SR Kiosk initially promoted its products manually with limited marketing strategies. Promotion is done directly to consumers, such as by offering products at the time of sale. However, promotion is now carried out not only by the owner through social media accounts, but also by customers who share their experiences and reviews online. Then photos and videos are often taken by consumers who are uploaded on their social media so that they help promote the jambal roti products produced.

Indonesia has entered the Industry 4.0 era. This is characterized by increasing connectivity, interaction between humans, machines and other resources that are increasingly converging through information and communication technology. In this digital era (Industry 4.0.) businesses must keep up with the times in order to survive. The rapid growth of internet and telephone users is a potential for the national digital economy. This is an opportunity and challenge for the business world to compete and get market share or market share in each segment. Market share is one of the business strategies that must be carried out by every business because market share can also be used as a business strategy. The benchmark in determining the success of a business in controlling the market includes factors such as market share,

customer retention, and competitive positioning (Riwoe and Mulyana 2022). An ineffective business strategy will bring losses to business people.

This is a big challenge for MSME players who sell products only from physical stores. The impact of the industrial revolution 4.0 will certainly affect MSME players who are not yet literate in technology. MSMEs that are still selling manually will certainly be crushed by the existence of e-commerce that actively attracts customers to shop online. However, UMKM Kios Jambal Roti SR can compete in marketing expansion through the following strengths:

1. MSME players are tech-savvy.



Figure 7. Platform Youtube

2. MSMEs are mastering online marketing.
3. MSMEs are able to turn to e-commerce such as shopee.
4. MSMEs have a dedicated website.

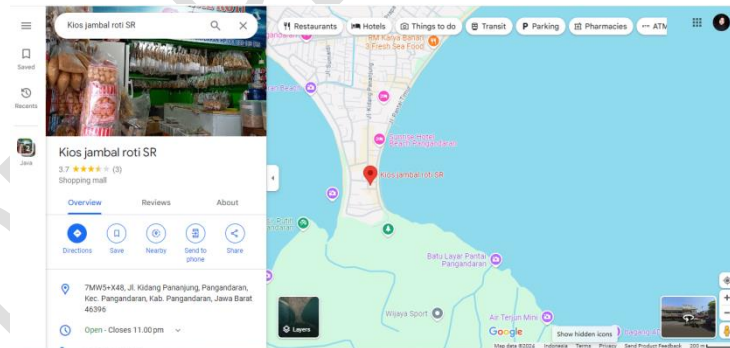


Figure 8. Jambal Roti SR Kiosk Website

## Conclusion

Based on the results of the discussion above, it is concluded that MSMEs Kiosk Jambal Roti Asli SR have carried out various product developments such as the development of production equipment (chest freezer, vacuum, and sealer), packaging development and marketing development. By implementing these developments, this kiosk is not only able to meet consumer needs but also enhance its competitive position in the market.

UNDER PEER REVIEW

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