

[Open Peer Review on Qeios](#)

Development of Traditional Packaging Design Innovations in the Present Context Using Technology for Packaging (Case Study: CV. XYZ)

Micky Agustieyanto¹, Adhi Setyo Santoso¹

¹ President University

Funding: No specific funding was received for this work.

Potential competing interests: No potential competing interests to declare.

Abstract

Traditional food diversity is a significant part of Indonesian wealth. However, with the advancement of technology and changes in lifestyle, the traditional natural food packaging company, CV. XYZ, has become outdated. The packaging is often perceived as cheap, dirty, unhygienic, and impractical. Some traditional packaging methods utilize natural ingredients. The role of designers is to preserve the essence of traditional packaging by incorporating technology to enhance its value and address current challenges. This includes exploring innovative technological advancements and unique sales designs to meet the growing demands of the market. By infusing a distinctive design approach, traditional packaging can be transformed into exclusive packaging. Furthermore, a traditional packaging business model canvas is developed to maintain local cultural characteristics while representing the local identity.

Keywords: Traditional packaging, Innovative design packaging, Technology in packaging, Traditional exclusive packaging, Business model canvas.

1. Introduction

Indonesia is a country known for its diverse ethnic groups and cultural richness. This diversity encompasses various traditional systems, technologies, customs, and more. Among these cultural aspects, one fascinating outcome is the diverse range of traditional food types produced by companies like CV. XYZ. This includes the use of specific technology for material processing in packaging creation, as well as traditional cooking methods. Each tribe in Indonesia possesses its unique traditional food types, technologies, and packaging practices. Traditional food holds significant cultural value within specific societies, making it a reflection of their cultural heritage.

Packaging culture originated from the early days of human civilization when they discovered the need for a food storage system. Initially, packaging served the purpose of safeguarding food and goods from the effects of weather and other

natural processes that could cause damage. Additionally, packaging served as a convenient means of carrying goods during travel. As time progressed and society became more complex, packaging began to acquire additional functional value and its role in marketing became recognized as a major factor in market competition.

In Indonesia, there are still abundant sources of natural packaging materials available at relatively low prices. These materials have the advantage of being environmentally friendly as they can decompose naturally through bacterial activity. However, if not properly managed, these natural packaging materials can also contribute to pollution and produce unpleasant odors during the decomposition process. Various traditional packaging materials such as bamboo, wood, and leaves are still widely used. Leaves, in particular, are popular due to their affordability, practicality, and availability. However, it should be noted that leaf packaging is not representative of high-quality packaging and requires careful handling.

As technology and lifestyles continue to develop, traditional packaging for natural foods has been gradually abandoned by the community due to its perception as cheap, unhygienic, and impractical. This shift has led to the widespread use of man-made materials such as paper, plastic, cans, and styrofoam for wrapping and containing food. These modern containers and artificial food packaging create a modern, practical, simple, and clean impression. However, materials like these are difficult to recycle and contribute to environmental pollution. Plastic bags, for instance, serve the sole purpose of transporting products from the market to the home. Once the contents are enjoyed, the plastic is discarded in the garbage. Unbeknownst to many, the combination of food wrapped in aluminum and then coated with plastic creates layered waste.

This research is important based on the phenomenon of the increasing use of plastic packaging for food, particularly in traditional markets. The traditional packaging of CV. XYZ is being replaced by less appealing plastic packaging, which poses a threat to the various traditional packaging methods. The use of plastic packaging not only lacks environmental friendliness but also has the potential to contaminate the packaged products. The reduction in the use of traditional packaging is primarily due to the difficulty in sourcing raw materials and the lack of available guidelines for traditional packaging production. This research aims to provide mothers with various techniques and materials for traditional packaging, as traditional packaging offers advantages such as imparting aroma to the product and better food preservation. It is crucial to disseminate this knowledge to the public, emphasizing the superiority of traditional packaging over plastic packaging.

In the current era, there is an increasing emphasis on environmental issues within the business model. Waste, particularly inorganic waste that takes decades or even centuries to degrade, is a complex problem that concerns both the public and the government. On one hand, the use of inorganic packaging materials cannot be eliminated as consumers seek convenience provided by such packaging. However, the use of inorganic packaging contributes to environmental pollution. Considering the traditional packaging business model as a potential solution, there is a need to develop and market it widely by incorporating innovative and creative ideas to maintain its relevance, increase its value in the market, and ensure its environmental friendliness.

The Business Model Canvas Packaging Tradisional				
Designed for: Packaging Tradisional Innovation		Designed by: Micky Agustieyanto		Date: 5 Mei 2023
Key Partners <ul style="list-style-type: none"> Influencers to market food with traditional packaging that have been given modern innovations. Exhibition organizers or festivals to market traditional packaging that have been given modern innovations so as to attract customers. 	Key Activities <ul style="list-style-type: none"> Providing friendly, fast and satisfying service. Buy the main raw material for traditional packaging in modern innovation. 	Value Propositions <ul style="list-style-type: none"> Traditional packaging to take home. Traditional packaging is more durable to keep food fragrant and durable. 	Customer Relationships <ul style="list-style-type: none"> Product quality check packaging tradisional innovation. Discounts for food with traditional packaging specifically for exhibitions or festivals. 	Customer Segments <ul style="list-style-type: none"> Student Office employee Vacation visitors
	Key Resources <ul style="list-style-type: none"> Supplier of raw materials for making trusted traditional packaging. 		Channel <ul style="list-style-type: none"> Social media such as Twitter, Instagram, Tiktok dan Youtube. Culinary Festival to market traditional packaging that has been modified with technology. 	
Cost Structure <ul style="list-style-type: none"> Procurement of raw materials for the manufacture of traditional packaging that has been given modern innovation. Budget preparation for marketing and promotion includes opening, promotion, festivals and culinary exhibitions, as well as offers for cooperation. 			Revenue Streams <ul style="list-style-type: none"> Profit sharing system from cooperation if there is already. Initial capital from personal. 	

Table 1. Business Canvas for Innovative Modern Traditional Packaging.

Hermawan Kartajaya, an expert in marketing, has stated that technology has transformed the role of packaging. In the past, people used to say "Packaging Protects What It Sells." However, now it can be said that "Packaging Sells What It Protects." This means that packaging is no longer just a protector or container but must also be able to sell the product. The role of packaging has evolved further, and it now serves as a communication medium. Packaging can communicate a particular image and plays a crucial role in the marketing of products. When products of the same category are placed on the same shelf, it is essential for manufacturers to ensure that their packaging stands out, looks different, and is unique. If a new product fails to create a distinct impression compared to others, it will likely go unnoticed. Consumers often form an initial impression based on the packaging before trying the actual product. Therefore, the packaging of a new product must be competitive with other products on the market. Recognizing the significance of packaging, the concept of its role should encompass the entire marketing process, from product conception to the end user.

In response to the demands of the market and current trends, collaboration between local designers and small and medium-sized enterprises (SMEs) is expected to provide added value. This collaboration aims to boost small and medium businesses, increase exports, foster industrial relationships, and enhance regional industries, ultimately reaching the global market. Traditionally, packaging has been primarily carried out by SMEs or small and medium industries. However, the packaging created is often based on inherited or improvised designs, resulting in traditional food products appearing tacky and lacking effective communication and information through design. For example, snacks are often placed in

plastic bags with minimal labeling or placed in boxes with small labels. This demonstrates the limited knowledge about design among craftsmen and SMEs, resulting in unappealing packaging that struggles to compete in both local and international markets. Currently, there is a growing trend of traditional packaging. Recognizing this phenomenon, some traditional food entrepreneurs are utilizing it to attract attention and boost sales. Traditional packaging with distinctive regional motifs has been used for a long time but had faded with the passage of time. However, it is now experiencing a resurgence in popularity.



Figure 1. Traditional packaging

Until now, modern packaging made from various materials has been widely used. However, in an effort to revive the traditional image of food, artisans have started to explore traditional ingredients for packaging purposes. Traditional packaging typically utilizes natural materials such as leaves, bamboo, wood, rattan, and fibers. By incorporating an attractive packaging design, it can significantly increase the perceived value of the product, ultimately leading to higher sales. Despite being slightly more expensive than conventional packaging, products sold in traditional-patterned packaging enjoy high demand, particularly among souvenir entrepreneurs who value its uniqueness. A well-designed traditional packaging should possess a unique, fashionable, and trendy design while still serving its functional purpose. In this context, the role of designers is crucial as they need to creatively redesign traditional packaging while preserving local and unique cultural identities. Consequently, consumers are not only interested in purchasing traditional food for its contents but also for its distinctive packaging appeal. An innovative design approach can create a desire among buyers to collect such products.

2. Analysis of Uncertainties

The analysis of uncertainties regarding the company CV. XYZ is based on the initial survey conducted with food vendors who use traditional packaging. The aim is to identify areas for innovation in packaging development. The analysis reveals several general facts that lack certainty:

Analyzing the uncertainties that can threaten the company's business models in the industry or business continuity in the social-cultural sector, due to the lack of technical professional skills and design in the existing workforce, leads to the

production of products that are not well packaged and attractive. There is a lack of ability to produce diverse traditional food packaging that aligns with market tastes because of inadequate related knowledge and scientific insight. Additionally, there is a lack of guidance in the problem of traditional food packaging design from authorized institutions such as universities. Local youth are potential human resources to alleviate poverty and unemployment, especially in the face of the current economic crisis. Analyzing the uncertainties that can threaten the company's business models in the economic sector, small industries that provide food products with weak traditional packaging lack capital to develop their business extensively. The research area has great potential in developing its business since it is located in a busy trading route.

Traditional food packaging products and designs are limited in their creativity and development. The relatively lower quality of traditional food packaging products decreases their competitiveness. This is primarily due to the lack of professional skills and expertise of the existing workforce, as well as the absence of specialized training in design. The equipment and infrastructure used are relatively simple, which limits the production to match their technological capabilities. The quality of traditional food packaging products is manually produced.

Analyzing the uncertainty of new competitors utilizing traditional food packaging technology in the digital era necessitates incorporating technology into business strategies. It is well-known that the digital world and technology are inseparable, particularly in the current modern era where technology is indispensable. If competitors have already embraced technology, it becomes imperative to swiftly follow suit. Technology, in fact, is not a source of confusion; rather, it is designed to assist and streamline human work processes. Utilizing digital marketing, including social media, is crucial. Digital marketing involves promoting a brand or product/service through electronic or digital media. If you are unable to employ digital marketing, you can consider utilizing the services of an e-commerce company or a digital agency to aid in business development.

3. Analysis of Impact from the Uncertainties

Conducting an analysis of the potential impact on CV. XYZ from uncertainty involves identifying the environmental components that may be affected and compiling a list of potential environmental impacts, specifically from the social-cultural sector's perspective. The lack of design skills leads to a deficiency in creativity when producing visually appealing traditional food packaging. In the local environment, institutions and students themselves should focus on learning how to create unique and captivating food packaging. This way, the surrounding environment can gain valuable information and creative insights to enhance traditional food packaging with the latest and innovative design approaches. The environmental impacts will influence young individuals as creative and innovative human resources, contributing to increased income generation, poverty alleviation, and a reduction in unemployment within the community.

Analyzing the potential impact of uncertainty involves identifying the environmental components that may be affected. The results can be compiled into a list of potential environmental impacts that pose a threat to the company's business models in the economic sector, particularly in emerging or small-scale industries that have the capital to expand their operations. This development can have a significant impact on the economic value of the surrounding environment, especially

considering the research area's potential for developing innovative traditional food packaging businesses with unique designs. Additionally, the strategic location along a bustling trade route facilitates accessibility, thereby increasing the economic value generated.

Analyzing the potential impact of uncertainty includes identifying the potentially affected environmental components and compiling a list of potential environmental impacts that may pose a threat to the company's business models in the packaging design sector, particularly in relation to the traditional models that are currently maintained. The environment surrounding traditional food packaging, which has been produced and passed down for generations, often limits design possibilities to the existing models. However, through innovation and creativity, it is possible to develop unique designs that align with contemporary trends and are accepted in modern settings. By utilizing the artistic value of the environment to create attractive designs, traditional food packaging can experience rapid development. Incorporating modern tools and techniques adds to the appeal of traditional packaging designs. In the current era, the quality of traditional food packaging products, once exclusively crafted using traditional methods, can be enhanced by embracing modern practices.

Analyzing the potential impact of uncertainty involves the process of identifying environmental components that may be affected. The results can be compiled into a list of potential environmental impacts that threaten the company's business models in the face of new competitors in the industry utilizing traditional food packaging technology. It is evident that in the modern era, the digital world and social media are intertwined and cannot be easily separated. Therefore, it is essential to embrace technology. Furthermore, if competitors have already adopted technology, it becomes crucial to carefully consider the technology utilized in creating traditional food packaging. Incorporating the latest machinery can help attract consumers. It is important to recognize that technology, when utilized appropriately, serves to assist and streamline human work processes. In the business environment, digital marketing can be implemented through e-commerce platforms.

4. Design of the Changes

After formulating a change strategy to ensure the business's sustainability, it is important to design the changes for the company CV. XYZ. Several strategies can be implemented to launch effective marketing campaigns for traditional food packaging products. These marketing strategies aim to increase sales turnover and include the following:

1. Utilizing attractive traditional products

Packaging plays a vital role in the marketing strategy of traditional food packaging products. It is crucial to have attractive packaging that entices potential customers to purchase or try the products. Even if the products have excellent taste, unappealing packaging may deter prospective customers from showing interest in buying them. Therefore, employing attractive product packaging is an effective strategy to attract customers.

2. Promoting through social media

If you do not have a physical store, you can utilize social media platforms to market your products online. Implementing a marketing strategy for traditional food packaging products through social media is cost-effective, as it eliminates the

need for renting a physical space.

3. Creating unique and captivating promotions

Designing distinctive and appealing promotions will incentivize prospective customers to visit your store and make purchases. It is essential to develop promotions that pique curiosity and generate interest, encouraging people to visit your establishment.

4. Collaborating with delivery service providers

Incorporating delivery services is crucial in today's trend of ordering food through mobile applications. By allowing customers to order food via their devices, the products can be conveniently delivered to their homes.

5. Organizing giveaways with celebrities/influencers

Another effective food product marketing strategy is to conduct giveaways. Collaborating with celebrities or influencers can serve as a platform to distribute traditional food packaging products for free, with the condition that they promote the products.

6. Establishing a company website

Having a website is essential for implementing marketing strategies for traditional food packaging products in the digital age. In the business context, a website serves as a virtual storefront, while social media functions as a platform to promote the products.

5. Execution Plan for Change Project

By implementing the change strategies mentioned earlier for CV. XYZ, the execution plan aims to effectively enhance marketing techniques for traditional food packaging products, ultimately increasing turnover by attracting consumers.

1. Utilizing attractive traditional products

The project plan for implementing changes involves aligning packaging with the target market. For instance, if the target market consists of young people, packaging can be designed with vibrant colors and modern styles that resonate with their current preferences. This approach will generate interest and relevance among the target audience. Prior to this, it is advisable to conduct segmenting, targeting, and positioning strategies to identify specific target markets for food products and their profiles.

2. Promoting through social media

The execution plan recognizes that social media is a crucial aspect of business operations in the digital era. To enhance the visibility of the traditional food packaging business, it is important to embrace current trends. Leveraging social media platforms allows for easier interaction with potential customers, enabling the creation of various programs or offers to attract potential buyers.

3. Creating unique and captivating promotions

The execution plan for promotion changes aims to prevent product accumulation by ensuring sufficient product awareness. If a product is unknown to many, sales will naturally be limited. Therefore, it is essential to provide attractive offers and incentives that entice customers to take action. Examples include "Buy 2, Get 3 Free" or "Free

item on your birthday." These promotions should align with the value of the product and complement the overall food product marketing strategy. Additionally, it is beneficial to familiarize oneself with the 4P marketing strategy, which encompasses price, product, place, and promotion, to gain a comprehensive understanding of effective marketing approaches in business.

4. Collaborating with delivery service providers

In the execution plan for change, one effective marketing strategy for traditional food packaging products is to partner with established companies like Shopee Food, Grab, or Gojek to carry out food product marketing campaigns. Working with a delivery service provider offers the advantage of selling products without the need for a physical store or shop.

5. Organizing giveaways with celebrities/influencers

As part of the execution plan for change, collaborating with celebrities or influencers can serve as a medium to distribute your products for free, with certain conditions. They can promote the giveaway to their followers or friends, generating more exposure for your products. The winners will receive the products, becoming testimonials for your brand and helping increase awareness among a wider audience.

By implementing this marketing strategy for traditional food packaging products, you can easily collect data from prospective customers, such as phone numbers, WhatsApp contacts, and email addresses. These data can be used for promotional purposes, ensuring that you approach potential customers strategically and avoid spamming them.

6. Creating a company website

In the execution plan for change, it is crucial to develop a company website as a central hub for information about traditional food packaging products. This website will support the marketing efforts by providing a platform for customers to explore your business offerings. A well-designed website significantly influences consumer trust, as a professional and credible online presence enhances your brand image. Having a website also builds confidence among consumers, as it serves as a key reference point for your business. Imagine if a prospective customer asks for your business website, and you respond that you don't have one. This could lead to a lack of trust, as consumers tend to prefer brands or products that have an online presence.

6. Conclusion

With the advancement of technology and changing lifestyles, traditional packaging for natural foods is being phased out due to its perception as cheap, unclean, unhygienic, and impractical. It is being replaced by man-made materials such as paper, plastic, cans, and styrofoam, which create a modern, practical, simple, and clean image. However, these materials are difficult to recycle, leading to increased waste and environmental pollution. In light of these challenges, it is crucial to find a solution that preserves and enhances traditional packaging, using natural materials in a more refined and appealing way. CV. XYZ, as a producer of traditional food, should strive to create unique packaging that showcases its regional identity.

The success of marketing traditional food relies not only on the quality and safety of the food itself, but also on effective promotion and the use of a business model canvas. It is important to improve the flexibility and uniqueness of the

packaging to make it visually appealing and captivating. The success of CV. XYZ depends on the aesthetic considerations given to the packaging design from the initial planning stage. The aesthetic value should encompass the harmonious integration of shape, graphic design, and the essence, characteristics, and nature of the products being produced. So, when it comes to traditional food, the packaging plays a significant role in representing a specific region. Collaboration between designers and SMEs, such as CV. XYZ, is crucial to add value and support the growth of small and medium businesses, increase exports, foster industrial relationships, and enhance the local industry's presence in the global market. Traditional packaging, which predominantly utilizes natural materials, can benefit from paper as an environmentally friendly and recyclable alternative. Paper can also be creatively used to evoke natural elements, such as incorporating structures and motifs resembling bamboo weaves, wood fibers, corn fibers, and so on.

CV. XYZ, as a traditional packaging company, should consider several aspects that align with current conditions. As designers, it is our responsibility to uphold the significance of traditional packaging and strive to increase its value. We need to ensure that traditional packaging for traditional food remains aesthetically appealing and functional, moving away from being perceived as cheap, unclean, and monotonous. Designers play a crucial role in creating dynamic traditional packaging that is innovative in various aspects, considering the competitive market and the need for uniqueness and high marketability. By infusing a unique design touch, traditional packaging can become an exclusive and distinctive product. Additionally, traditional packaging should preserve the characteristics of local culture while representing its identity. Environmental friendliness is also a vital consideration, given the growing concern over waste management. Traditional packaging should be easily recyclable to address these environmental concerns.

Acknowledgement

This work is a part of Erasmus+ CBHE Building Universities in Leading Disaster Resilience (BUILD) project activities from Work Package 2.3. Enhancing Disaster Management Curricula during 2019 – 2023.

References

- Agustina, W. (2009). *Desain Kemasan dan Label Produk Makanan*. Jurnal Kumpulan Modul Pelatihan. UPT B2PTTG-LIPI Subang. (Packaging Design and Food Product Labels. Journal of Training Module Collection. UPT B2PTTG-LIPI Subang.)
- Cenadi, Christine Suharto. (2018). *The Role of Packaging Design in the World of Marketing*. Jurnal, Vol. 2, No. 1, January 2000: 92-103.
- F.G. Winarno (Ed.). (2010). *Kumpulan Makanan Tradisional I*. Pusat Kajian Makanan Tradisional, Perguruan Tinggi Departemen Pendidikan dan Kebudayaan, Jakarta. (Collection of Traditional Foods I. Center for Traditional Food Studies, Higher Education, Ministry of Education and Culture, Jakarta.)
- Hermawan Kartajaya. (2018). *Teknologi Telah Membuat Kemasan Menjadi Berubah Peran*. Jurnal Art 2. Institut Teknologi Bandung. (Technology Has Transformed the Role of Packaging. Art Journal 2. Bandung Institute of

Technology.)

- Joedawinata, Ahadiat. (2015). Penelitian Interdisiplin tentang Seni Rupa Tradisional Nusantara dalam Menghadapi Persaingan Global. Konferensi Tahun Kria & Rekayasa. ITB Bandung. (Interdisciplinary Research on Traditional Nusantara Fine Arts in Facing Global Competition. Kria & Rekayasa Year Conference. ITB Bandung.)
- Ni Luh Desi In Diana Sari. (2020). Jejak kemasan jajanan tradisional. Riset Kajian Kuratorial. Penelitian. CTH Desain Industri. (Trace of traditional snack packaging. Curatorial Study Research. Industrial Design Department. CTH.)
- Ratih F, Mokhamad AS. (2019). Model Bisnis Kanvas sebagai Solusi Inovasi bagi Bisnis Kecil. Jurnal Ilmu Manajemen dan Bisnis, 10(2), 197–203. (Canvas Business Model as an Innovation Solution for Small Businesses. Journal of Management and Business Science, 10(2), 197-203.)
- Sabana, Setiawan. (2007). Nilai Estetis Pada Kemasan Makanan Tradisional Yogyakarta. Jurnal Vis. Art. Vol. 1 D, No. 1, 10-25. ITB Bandung. (Aesthetic Values in Traditional Food Packaging in Yogyakarta. Visual Arts Journal. Vol. 1 D, No. 1, 10-25. ITB Bandung.)
- Widihardjo. (2012). Pengembangan Kria melalui Pemberdayaan Masyarakat Pengrajin. Jurnal Konferensi Tahun Kria dan Rekayasa. ITB Bandung. (Development of Crafts through Empowerment of Artisans. Kria and Rekayasa Year Conference Journal. ITB Bandung.)