

A Trial Study on Samarinda Identity Element Extraction for the Development of Cake Packaging Design

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Abstract: Gabin biscuits are a typical snack from Samarinda which is usually used as souvenirs. The packaging design of, gabin biscuits, which are also a type of traditional cake, hasn't changed much since its first initiation. So the packaging design needs to be developed according to the times without losing its original identity. From the results of the assignments given to 75 students, the final design was selected to be used as product packaging. In this study using the Method Packaging Structure Design Process, the gabin biscuit packaging develop through several stages, according to predetermined criteria various computer applications to develop such as. The result of this project is a prototype of gabin biscuit packaging that is equipped with graphics that display associated regional icons display regional identity. After being validated in the field by users, good response from consumers were reported, providing potential design directions for gabin biscuits packaging design that can be adapted by the gabin biscuit industry.

1 INTRODUCTION

Packaging designs, especially food packaging designs have been actively researched upon in the last decade. This also includes research on packaging attributes. One of the most studied attributes of food packaging design is related to the visual elements that are embodied in packaging graphics (Hamlin, Gin, Nyhof, & Bogue, 2017).

Samarinda is the capital city of East Kalimantan Province. Which has an area of 718 km², that consists of 10 sub-districts which are divided into 59 villages (Province, 2016). With the establishment of the New State Capital (IKN) on August 26, 2019 in East Kalimantan (Hadi & Ristawati, 2020) which is approximately 70 Km from Samarinda (Putra, 2019), it is expected that Samarinda will become a destination for arrivals with various purposes and interests. As one of the big cities in Indonesia, Samarinda City realizes the potential of its territory to be developed and needs to make a lot of adjustments to increase its various potential resources, one of which is the trade and tourism sector (Samarinda, 2016). One of the supports for tourism from the trade side is the provision of souvenirs in the form of local snacks.

Because visitors need souvenirs from the area as special memories as evidence of having visited the area.

Samodro (Margono, 2018) mention that the variety of selection for customers related to food and drinks are very diverse. Customers prefer to purchase food that are sold to be taken home as souvenirs, not to be enjoyed at the place of purchase. One of the popular food items to be purchased is the a typical Samarinda snacks, the gabin cake, which is namely food that is not taken as a main meal, but is served and consumed between main meals (Tambunan, 2016).

Gabin biscuits originally came from the name of a famous and popular Gabin biscuit brand in the Samarinda region. Gabin cake is now one of the typical Samarinda souvenirs that are commonly taken home when traveling there (Alys, 2018). It is not clear where this specialty food came from. However, in East Kalimantan, people make it as a typical souvenir from Samarinda ("Oleh-Oleh Khas Samarinda," 2020). In Samarinda there are two companies that produce these Gabin biscuits, namely Gabin Ria and Gabin Lido (Liulianto, Tanudjaja, & Salamoon, 2017). As the Gabin cake is a traditional product.

There is potential to develop its packaging design so that it can be accepted within a contemporary context while maintaining the intangible values that are contained within it (Edward, 2020).

A common problem in packaging food snacks for souvenirs is that they have not maximized market allure, and visual displays that are characterized by local culture (Samodro, 2018). The packaging design of such specialty food snacks should portray the local character and identity of the origin. The packaging designs that are produced however, should not maintain in its current predicament, but should be modernized following current technological developments with the spirit of local culture. Packaging with local geographic characteristics has been found to be considered as more attractive and chosen by consumers (Hartanti, Nurviana, & Lukman, 2019).

Natadjaja (2002) states that the function of packaging embeds more than just technical functionality. The packaging design can function as an ambassador representing the area of origin (Mukhtar & Nurif, 2015). The packaging has the capability to be equipped with elements of the culture of the area of origin to represent the cultural background of the area that will be delivered in the package (Kao, Cui, Ren, & Sung, 2016). Simply by looking at the packaging, consumers will know where the product comes from.

As traditional products cannot be easily accepted by modern society, traditional products must be able to adapt to the development and needs of the times. Pilliang states that the new reality has replaced the past reality. So the packaging design of traditional food snacks such as the gabin biscuits needs to be transformed according to the needs of modern society. Traditional products must change and adapt in order to remain relevant to current times (Sutrisno, 2020).

According to Alver (1992) tradition is important for many countries as a counter culture to the dominant culture or globalization, as it gives new life into a national identity, and to be declared as a national identity (Nugraha, 2010).

Referring to the notion of tradition, gabin biscuits including traditional cakes, which are cakes that have been passed down from previous generations, continue to be manufactured with not much change until now (Yana, Dienaputra, Suryadimulya, & Sunarya, 2020). It can be seen from the packaging of gabin biscuits from the past until now there has not been much development (see Figures 1 and 2). Wrapped in transparent plastic. The brand and description of the contents are screened on the plastic

packaging or printed on the paper that is inserted into the package. This gabin cake will be the object of research to develop its packaging. As a regional specialty, the packaging must be able to display regional identity, so that consumers will know where this product comes from.



Figure 1: The packaging of the cake made by Lido.



Figure 2: The packaging of the cake made by Lido.

From a visual perspective, the gabin cake packaging is considered to have less appeal. It is also difficult to open the package, and consumers have to use various ways to open it, including by biting, using a pen, motorcycle key and/or other sharp-angled objects. Often consumers have to find rubber bands to tie the packaging that still contains its remaining contents.

Figure 3 is a packaging of gabin biscuit from one area in East Java. The packaging has graphic information that conveys enough information in it so that consumers understand its contents. This includes brand, industrial location, contact, nutritional content, amount of content, industry standard, and expiration date. The packaging is also equipped with attractive graphics, including colours, text and images. For a simple box shape, that prioritize functionality.



Figure 3: Packaging of gabin cakes produced in other regions.

2 MATERIAL AND METHODS

The packaging design activity is part of a students assignments. In the conceptual design stage, 75 students generated packaging designs for traditional snacks. From the total amount of students, 6 students chose to develop the packaging design for gabin biscuits. Each of these students 5 packaging designs concepts. From the 30 designs collected, 5 designs were selected be expanded developed into several development alternatives. The designs develop at this stage are analyzed according to the design criteria that have been determined to brought forward and be realized in the final design

The Packaging Structure Design Process method (see Figure 4) is used in the process of designing the food packaging designs, where the packaging designs are generated in various stages using computer applications. The use of computers provide the advantage of shortening the design period, increasing efficiency, precision, saving resources and material input. This method was introduced by Wei Yu from Jiangxi University of Applied Science, Nanchang City, Jiangxi Province, China and Pradeep Kumar Singh from ABES Engineering College, Ghaziabad, Uttar Pradesh, India. In this method, a CAD application is used for the technical design in the form of a cutting plane for precision. After the technical design is obtained, it is followed by the graphics processing applications which include graphic applications (vector), and image processing applications (bitmap). The CorelDRAW and Adobe Illustrator software is used for the vector processing applications, while the Adobe Photoshop software is used for the bitmap processing application.

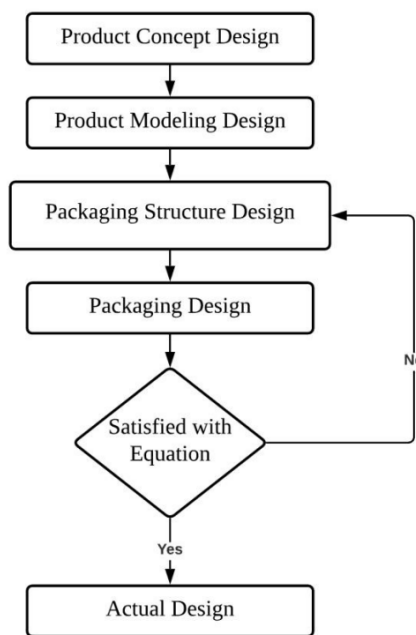


Figure 4: Flowchart Packaging Structure Design method (Yu & Sinigh, 2021).

With the Packaging Structure Design Process method, the experience of the design process is obtained as a student learning stage in completing the project in designing packaging. Includes exploring ideas embodied in design sketches. Furthermore, it was developed into several development designs which were refined into the final design. In the design process, students learn to use computer applications, namely AutoCAD for layout, CorelDRAW or Adobe Illustrator for graphic design and Adobe Photoshop for image editing.

3 RESULT AND DISCUSSION

Packaging design assignments were given to 75 students. Of these, 6 students chose to design for gabin biscuit packaging. The 6 students started their project by making initial sketches. The sketches are discussed according to the packaging attributes that have been determined by making several development designs. This development design is discussed in order to meet the specified design criteria. From the process of several stages that have gone through the results of the discussion, one final design is chosen for packaging gabin biscuit. The final design is stated in the design specification which. Includes size, material, graphic specifications, capacity, cutting plane, system, and function.

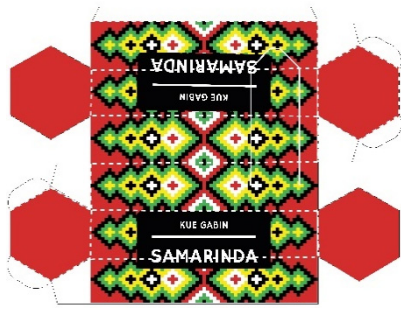


Figure 5: Initial design.



Figure 6: Initial design.



Figure 7: Final design and graphic layout.

The final design is realized in product modeling with AutoCAD applications. From the product modeling, the packaging structure is described in the form of a cutting plane and a connecting system. Cutting planes and connection systems are drawn with the AutoCAD application for precision. In the packaging structure design stage, a graphic display is applied. Because there is already a folding/cutting pattern, so that it becomes a guide in placing the prepared graphics in other tasks.

In the product prototyping process, before being implemented to the final product, a dummy is made using other media. The dummy function as a model

study, because modeling with three-dimensional products is actually not the same, so it needs revision. The dummy is used as a presentation medium to consumers about the condition of the packaging to be produced. Furthermore, the dummy was evaluated for the level of satisfaction of customers who ordered packaging. The dummy underwent adjustments until it was ready for production. If the results did not meet the criteria, then the design stage returns to the packaging structure design stage. When the criteria have been met, the next step is toward the actual design, which is the realization of operational real products that are ready for mass production.

The final design of this packaging is basically a cube that is cut off the front side (see Figure 8). The beveled side of the piece is given a transparent material so that buyers can see its contents. This gives the buyer certainty of the condition of the product to be purchased. The length, width and height of packaging are 17 cm, 14 cm and 18 cm, respectively, and is capable of accommodating 38 gabin biscuit.

The system opening of the packaging is on the front side, and from the bottom to the top. When the position is opened, the packaging can show the contents and the layout of the contents. So that the packaging also acts as a container to display the contents or as a display case.

The colors used are identical to Samarinda tradition, namely red, black and white. These colors are taken from the colors of the Samarinda Sarong with Hatta striped motifs. This type of Samarinda sarong weaving motif was established as the identity of the City of Samarinda starting in 2013 (Rifayanti, Kristina, Doni, Setiani, & Welha, 2017). It was inaugurated by the Minister of Education and Culture as a cultural work Sarong Weaving of Samarinda as an object of Indonesian cultural heritage from the Province of East Kalimantan 2016 determined with registration number 2016000401 dated January 1, 2016 (WBTB, 2016). The motivebox-shaped, with large and small variative sizes forming plots intersecting each other (Samsir & Nurwati, 2018) applied to the side of the packaging.

The illustrations shown are taken from the icons of Samarinda which after being analyzed can show the identity of Samarinda, because not all of them can be displayed in packaging. Namely the twin bridges (Mahkota 4) bridge, pesut fish, Mahakam river, gabin biscuit, tambangan ships, and the motif of the samarinda sarong. The illustration depicting East Kalimantan is shown as Samarinda's position in the area, namely the Dayak shield and the tendril motif.

Packaging and product information is displayed via text. Namely the type of gabin biscuit, nutritional

content, information on the industry of the maker, contact person, filling capacity, barcode and the several standards it fulfils.

The packaging of this product is a secondary packaging. As it accommodates the gabin biscuits which are wrapped in plastic. As the secondary packaging, its main function is as a display of products in the storefront with an attractive shape as a point of view, so that it increases the possibility of attracting the attention of consumers, and in turn, this expected to influence their choice in purchasing the traditional snack.

A limitation of the test results from the field is caused by the fact that, the product is displayed together with other products. However, the results of interviews with sellers, consumers indicate that they are interested in the packaging because of the shape of the packaging and its graphic appearance. The packaging is thus expected to influence consumers choice purchasing the products. Consumers also able to get information from the packaging. Including the type of gabin cake, nutritional content, filling capacity, information about the producer, expiration time and standardization owned.



Figure 8: Prototype product.

4 CONCLUSIONS

From the results of observations in the field, the existing gabin biscuit packaging needs development. As a traditional cake, the packaging needs to be developed according to the times without removing its original identity, so that it can be used as a souvenir from the Samarinda area for visitors who go there.

The result of this process is that students are able to design packaging with directed stages. Students are able to implement their computer application skills, namely AutoCAD, CorelDRAW, Adobe Illustrator and Adobe Photoshop in working on real products.

The design packaging received a positive response from buyers, from its shape and graphics so that it influenced consumer selection to choose it. So that the results of this design can be used to help industry players (UMKM) in increasing their production.

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