



Physical Properties Of Packaging Design And Characterization For Dry Food MSMEs In Bogor City

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ABSTRAK

Salah satu UMKM Kota Bogor dengan biji ketapang sebagai produk unggulannya mengemas produknya dengan kemasan toples plastik dan berlabel kertas art paper. Kemasan seperti ini memiliki keluhan dari konsumen seperti membutuhkan banyak tempat pada saat penyimpanan, kemasan yang mudah rusak, kurangnya informasi dan kurang menariknya kemasan produk. Hal ini yang menjadi dasar sehingga diperlukan penelitian guna perancangan kemasan menjadi kemasan baru. Proses penelitian diawali dengan penggalian informasi, mencari referensi, membuat sketsa, pengujian bahan kemasan, mock up bentangan, desain 3D, mock up kemasan dan revisi agar menghasilkan kemasan yang baik. Hal ini bertujuan untuk mempermudah aktivitas pemasaran, menaikkan citra, dan penjualan produk. Dari hasil penelitian didapatkan hasil analisa SWOT berupa kekuatan seperti kemasan menarik dari segi visual, elegan, mudah dibawa kemana-mana, kelemahan seperti kemasan sekunder tidak tahan terkena air dalam jumlah yang sangat banyak, peluang seperti: dapat mempermudah aktivitas pemasaran, menaikkan citra produk. ancaman seperti: persaingan dengan produk yang sejenis di wilayah lain.

ABSTRACT

One of the MSME City of Bogor with ketapang seeds as its superior product packs its products in plastic jar packaging and labeled with art paper. Packaging like this has complaints from consumers such as requiring a lot of space during storage, packaging that is easily damaged, lack of information and unattractive product packaging. This is the basis so that research is needed to design packaging into new packaging. The research process begins with extracting information, looking for references, making sketches, testing packaging materials, mock up layouts, 3D designs, packaging mock ups and revisions to produce good packaging. This aims to facilitate marketing activities, improve image, and product sales. From the results of the study, the results of the SWOT analysis were obtained in the form of strengths such as visually attractive packaging, elegant, easy to carry anywhere, weaknesses such as secondary packaging not being able to withstand exposure to very large amounts of water, opportunities such as: facilitating marketing activities, enhancing product image. threats such as: competition with similar products in other regions.

1. INTRODUCTION

Branding is a tool to market a product. Brands can be seen through several things such as services, ideas, systems, objects, countries, organizations. A brand is something that can be recognized by sellers and buyers, and a brand must also be able to create its own value for sellers and buyers. (Schultz, 2004). Good branding can represent the credibility of a product. So that consumers can realize the advantages of products that have been branded with competing products, and consumers can also feel familiar with these products.

One of the MSMEs in Bogor in 2013 began producing and marketing dry cakes resembling Ketapang seeds made from processed purple sweet potatoes as souvenirs typical of the city of Bogor which have a crunchy texture. The unique thing about this product is that it uses taro flour as the main ingredient in food products. When marketing, this product uses a plastic jar made from PET and is labeled art paper with the aim of making the product airtight and lasting longer. However, only a small portion of the public knows about this product because its sales are only limited to souvenir shops. Apart from the lack of promotion, several other complaints such as impractical packaging, unattractive product packaging and a lack of product information on the packaging make this product less popular with the public. On the other hand, the use of packaging, namely plastic jars, also makes the product impractical to carry everywhere and also makes production costs higher.

Seeing that there is potential that has not been developed by business owners in the way they make product development decisions. To meet this market need, good cake taste and shape alone is not enough, it is necessary to have competitiveness in terms of branding, in this case especially packaging. Packaging is the attractiveness of a product, because the packaging is the first thing consumers will see, so the packaging must be able to give a good impression of the product. (Cenadi, 2000). With increasingly sharp competition, aesthetics is an added value that can function as a very effective "emotional trap" to attract consumers. (Cenadi, 2000).

In this research, an attractive Ketapang seed product packaging design will be designed in terms of color, font and images. Identification of the use of packaging materials is also carried out to make it more practical to carry everywhere and to reduce production costs so that prices are more economical.

2. METHOD

The packaging design process begins with creating an attractive, practical and economical packaging design. The packaging design process begins with selecting materials for packaging. The material chosen was art cardboard. Art cardboard is a type of paper that is commonly used because it is easy to print, the ink prints are clearer, and the price is economical. Before printing, the design of the art carton paper that will be used is tested first (tensile test, tear test and folding test at the materials testing laboratory of the Creative Media State Polytechnic) to find out whether the paper complies with the SNI used for packaging. Next, the packaging design process is carried out, referring to existing design problems.

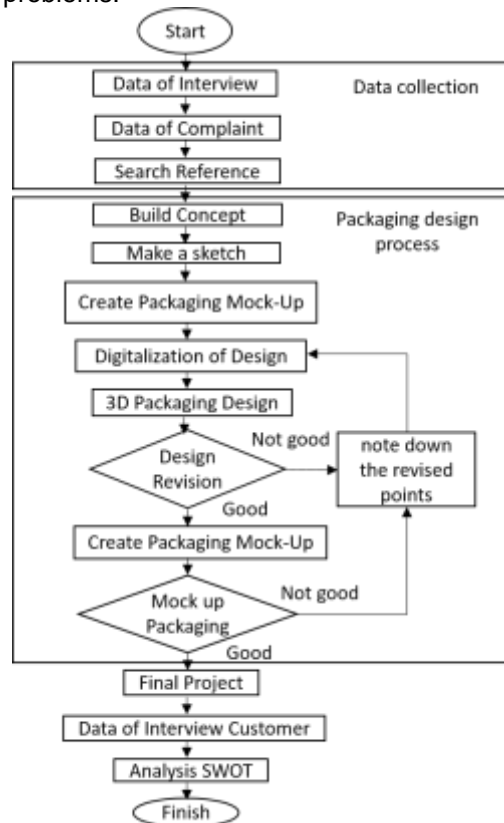


Figure 1. Packaging Design Process

3. RESULT AND DISCUSSION

The author collected data on complaints related to the problem of old Ketapang seed packaging by distributing questionnaires to 43 respondents and obtaining a population of 60. The results of the complaint data that the author collected are as shown in Figure 2. From the description of the problem above, it is necessary to design a new packaging (rebranding) to fulfill packaging functions such as: economic function, distribution function as well as ergonomics, aesthetics and identity factors with the aim that the Risiris ketapang seed product is able to facilitate marketing activities, improve the image and sales of the product so that it can maintain existence in society and be able to compete with other MSME products.

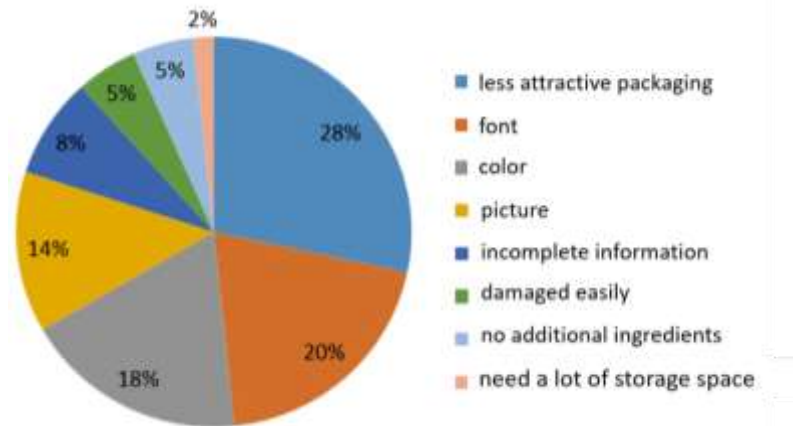


Figure 2. Result of Complaint

Next, the author tested the material, namely art carton, which would be used as packaging material. This material testing aims to determine the maximum strain on the 310 gsm art carton paper used by testing a 15 x 1.5 cm sample of 10 MD sheets and 10 CD sheets (Figure 3) on a Tensile Tester machine as shown in Figure 4. The material to be The test material is subjected to a tensile force until it fractures, at the same time the elongation experienced by the test material is observed (Rahmayanti et al, 2019).

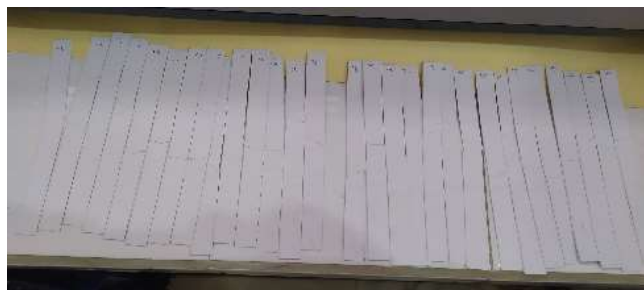


Figure 3. Tensile Test Sample



Figure 4. Tensil Tester Machine

From this test, the maximum strain results obtained on 310 gsm art carton paper on CD were 2.43 kgf/mm and MD were 5.76 kgf/mm. Next, a tear resistance test was carried out which aimed to determine the number of square decimeters of paper sheets whose weight could tear the paper with a size of 6.3 x 5 cm as many as 15 MD sheets and 15 CD sheets using a micro-computer tear strength tester machine. Art cardboard is a type of paper that is commonly used because it is easy to print, the ink results are also clear, and the price is economical. Making packaging from art cartons also takes into account the tear strength, folding strength and compressive strength index values which are in accordance with SNI for packaging.

Furthermore, the packaging design process has stages with certain complexity processes in order to get good design results that are in line with the client's expectations. In making packaging designs, each has its own level of complexity, such as the stages of extracting information on the product, on the brand itself, making sketches, digital design and making packaging mock ups. The process of making a logo until it becomes a packaging design is shown in Figure 5.



Figure 5. Packaging Design Process

The final digital design is complete, the next stage is to create a 3D packaging design so that it can demonstrate the size, shape and other specifications in context with the real product. The near-real scale of the product allows the client to provide a near-perfect representation of the packaging product that will be printed en masse. At this stage, the final design PDF file is then printed using a Konika Minolta C6100 branded A3+ digital printing machine to get good, sharp, long-lasting, non-fading and even color quality, as shown in Figure 6.



Figure 6. Printing Packaging Process

After the packaging is formed, the next stage will be tested regarding suitability to the criteria for good packaging. In terms of safety factors, primary packaging functions to keep the product in good condition for a long time and secondary packaging functions to protect the primary packaging during transportation. From economic factors, the new packaging costs less, namely Rp. 3,925.00/pcs compared to the old packaging which cost Rp. 5,250.00/pcs so that it can save expenses for MSMEs. Apart from ergonomics and distribution factors, the packaging is easy to carry anywhere and then take out the contents, and the packaging can be stacked on top of each other during delivery.

Judging from aesthetic and identity factors, the packaging has a visual design using attractive fonts, layout and colors so that it can attract consumers' attention. The packaging identity was created using a new logo design, a picture of the Bogor Palace, a classic border pattern, and information about Ketapang beans and the city of Bogor, conveying the impression that this product is a souvenir product typical of the city of Bogor, so that the packaging can simultaneously fulfill communication and promotional factors.

4. CONCLUSION

In this research, we have succeeded in designing Ketapang seed product packaging that is attractive in terms of color, font and images. The packaging design for Ketapang seed products is designed to be more practical to carry everywhere. Making packaging from art carton by considering the tensile resistance index, tear strength index, folding strength and compressive strength in accordance with SNI for packaging reduces production costs so that prices are more economical.

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