

Research article

Creative Recycling of Cans and Paper Using Painting Techniques

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ORCIDJoni Agung Sudarmanto: <https://orcid.org/0000-0001-6340-0077>**Abstract.**

Every day, people's appreciation for handmade products is increasing. This is in part due to facilitation from the government of many exhibitions of handmade products that support the development of SME products and provides opportunities for them to stand out. One way to get people's attention is to raise social issues, including environmental issues. The accumulation of waste left over from human consumption is something that must be considered. The 3R principle (reduce, reuse, recycle) is still a good concept to approach the reduction of waste in the community. The innovation of processing waste into reusable objects helps increase the life of objects. This research focused on creating recycled products with a combination of painting techniques. There were nine stages to the methods used in this research, starting from the collection of raw materials to the documentation of marketing processes. To ensure business continuity, the community was also involved in these efforts through the creation of new habits of waste collection: collecting consumables so that they can be repurposed into high-value items.

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1. Introduction

The development of the times brought many changes in the character of society. If in the past people did not really like handmade products, now handmade products are very popular. Consumers have started to appreciate handmade products that raise environmental issues. Handmade products are currently very popular even though the prices offered also tend to be more expensive. Handmade products usually have their own characteristics that will be the product's advantages. When consumers buy handmade products, they indirectly have purchased the work of the producer and support him to continue his next works. Seeing the change in people's perspective, currently there are also quite a lot of handmade product exhibitions in Indonesia that are very popular with the public, for example INACRAFT which is the largest handicraft product exhibition event which is always crowded by the public. [1] stated that there

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was a very significant development from the development of the INACRAFT exhibition. The number of exhibitors that reached 1,650 booths in 2009 was very different from when it was first held in 1999 (102 participants). The average retail business contract reaches Rp. 85,017,272 per participant is also a very fantastic number considering that the exhibition is only held for 5 days.

The development of the times also makes humans more individual. Today's society prefers products that are not marketed and exclusive. Difference is a necessity for today's society. This is also the background of people's preference for handmade products because they are exclusive. People also like products with the concept of customize and co-creation. With the concept of customize and co-creation, consumers can participate in expressing their ideas on the product to be made so that the product can be in accordance with the wishes of consumers.

In addition to the positive things above, the development of the times also still leaves social problems in society, including poverty and unemployment. Another problem resulting from the development of the times is a consumptive culture where humans do not always buy goods based on need, but only from a momentary desire. The purchase motive for emotional goods is something that encourages people to buy for no reason [2]. Consumptive culture produces a negative phenomenon, namely the amount of waste. Garbage pollutes the environment and processing waste into new products has become a hotly discussed issue as an effort to protect the environment. In 2014, Indonesia was ranked second as the largest plastic waste producer in the world after China [3] The more consumption of products from the community, the more waste will be generated. Currently, more than 90% of districts/cities in Indonesia still use the open dumping system or even burn it (Mintarsih, 2015). One of the ways to make these wastes more useful is to process them into new products with higher value.

In this business, the author changes leftover products such as cans and used paper into new handmade-based products to suit current consumer interest in handmade products with a Reuse, Reduce, Recycle concern. In addition, in this effort the author also focuses on processing low-value finished products into new products with higher value. In processing, the author will use painting techniques. The target in this business is to process used cans, used paper and other complementary items such as plates, cutting boards, t-shirts, cloth, books, shoes into new products with modern painting nuances that are in great demand by the public today. This business collaborates with external parties in the form of producers of products to be processed and also collects cans and used paper products from families who have cans and paper that are no longer used.

The thing that should not be left behind is marketing. Marketing is a social and managerial process by which individuals or groups obtain what they need and want through creating and exchanging products and value with other people or groups [3]. Marketing in this business focuses on online marketing through social media or e-commerce websites and exhibitions.

2. Method

Referring to the analysis of the situation and trends that are developing, the following is the method used / business development timeline of the business being pioneered.

2.1. Collecting raw materials and setting product prices

The raw materials collected are used cans, used paper, and several other materials such as cutting boards, cloth, meatballs, shoes, and canvas. Used cans are collected from households that have used cans that are no longer used. The collection of used cans is focused around the production site, namely in Tunggulwulung village. However, in the future, it is possible that the reach will be wider because the aim is to collect waste in various areas

The raw materials collected are not just used goods, the company will also collect materials in the form of shoes, canvas fabric which can be obtained from shoe suppliers in Jatinegara (for plain canvas shoes with good quality), Jakarta and the Tamim area, Bandung for various types of high quality canvas fabrics with various choices. Other raw materials needed are plain wood handicraft products, such as paper towels and pemedangan, which can be obtained easily at several wood craftsmen in the Junrejo area of Batu City. In obtaining these raw materials, the company has also collaborating with 3 companies namely CV. Agung Kreativindo Utama, UD. Tohu Srijaya, and The Pacific store

The raw materials needed in this business are used cans that are not used. These cans will be collected from the community. the public will be educated not to throw away their used cans because these cans can be resold. We will buy these used cans with a price range of IDR. 500 to IDR. 20.000 depending on the size of the can.

2.1.1. Doing production with a team

Product production includes the process of sketching and product design which is then applied directly to the media you want to paint in the form of an initial sketch.

2.1.2. Marketing

Marketing is done by using various ways to introduce, offer products to potential consumers so that they are interested, and even buy products. The process and type of product marketing vary according to the intended target market.

2.1.3. Finding and training employees

Employees are taken from housewives who have free time in their daily lives and need additional costs for their daily needs. The search for employees is focused on densely populated urban areas in Malang, especially the Tunggulwulung village which also has a lot of unemployment. Unemployed youths are also focused on becoming employees. Currently, the number of employees of this company is 8 freelance employees and they are paid according to the number of products they produce/work on.

2.1.4. Production of products sustainably and looking for new product ideas

After the products are successfully sold and the flow of production is smooth, the next step is to look for ideas about new products to be produced next. This aims to prevent people's boredom of the product and maintain the image of the product as an innovative and creative product.

3. Result and Discussion

3.1. Product Type and Specification

Products produced in this business are painted cans, painted stool (from used cans garbage), painted copping board, painted court, painted book cover, totebag, keychain and painted shoes.

3.2. Production process

Because in this business, we raise waste utilization products, we will discuss one of the production processes of our products, namely painting cans. The first process is raw material collection. The raw materials needed are in the form of main ingredients, namely cans of crackers, milk, paint, biscuits, or any cans that still have a good physical shape. In addition, other materials that need to be prepared are Acrylic paint, Binder solution, Varnish, Marker pens, brushes of various sizes, fans. The next step is cleaning process. If the can used is slightly dented/damaged, then the next step is to repair the can so that it returns to its original shape. The cans are also cleaned because the cleanliness of the cans will affect the quality of the image/paint that is on it.

3.2.1. Applying Primer

The clean and dry cans are then given daur paint in the form of white wall paint to cover the image on the can and simplify the next process. Even though wall paint is used to coat the cans, the quality is still maintained because later on it will be coated with acrylic paint which makes it stick more.

3.2.2. Design Process

The design process is in accordance with the theme that will be applied in the product. The theme that will be raised is the country theme and also full color cartoons where we mostly make original cartoon characters, not much copying the existing cartoons. The theme is considered very popular at this time.

3.2.3. Sketch on media

Sketching the design results that have been fixed to the surface of the product using a pencil or ballpoint pen. This work is carried out by employees of the outline section.

3.2.4. Coloring

After the outline, the next step is to fill the outline with color. This work can be done by the employee in charge of painting. Filling in color is an easy and learnable step. In contrast to designing which requires special skills and good taste.

3.2.5. Secondary Outlining and finishing

After the color is filled, the initial outline is bolded so that the image appears to be in its original form. This task is carried out by employees who are in charge of providing an outline.

3.2.6. Finishing

Finishing is by spraying a final coating in the form of varnish so that the quality of the applied image can be maintained and does not fade. For the final drying process, we do not use sunlight. The drying process using a fan is proven to be able to maintain the strength of the product because the varnish will seep into the paint, not dry immediately like if it is dried under direct sunlight..

3.3. Marketing

3.3.1. Online and offline marketing

Online marketing through social media websites such as Facebook, Instagram, websites. In addition, online marketing can also be done by joining buying and selling sites such as shopee.com or bukalapak.com. Online marketing is very suitable because it is in accordance with the intended potential consumers, namely netizens. The current trend of buying and selling online is considered very suitable to be applied in this business. The use of paid promote and endorse methods is also very suitable for introducing new products. Offline marketing is in the form of distributing brochures, business cards, or leaflets when we are attending an exhibition so that consumers will remember the product and have information on how to buy the product when they get home.

3.3.2. Join the Association

Currently, Corpies products are included in the ASEPHI (Association of Exporters and Manufacturers of Indonesian Handicrafts) and the local DEKRANASDA (Regional National Crafts Council). This is so that the product has high credibility when one day submits an exhibition or cooperates with other parties. In addition, each city also has an association of craftsmen. In the city of Malang, products can join the Malang City Craftsmen Association (APKM).

3.3.3. Join the Service, Organization and Private Company

In addition to joining associations, Corpies must also join agencies related to the marketing of SME products. These services can be the Department of Trade and Industry, the Department of Tourism, and the Department of Cooperatives. Through these agencies, products can get information about exhibitions or promotions that are participated in by these agencies and if they are lucky, they can be invited to participate in these exhibitions for free.

3.3.4. Consignment with shop

New products don't require a shop. Because the products we sell are tertiary products/complementary needs, it is better to eliminate the desire to open a shop independently first. Currently, entrusting products to galleries is the right way to sell products to the public. Usually the system used is a consignment with a profit sharing of 30% for shop owners and 70% for product owners. According to Aliminsyah and Padji [4] in the dictionary of financial and banking terms states that consignments are goods sent to be deposited with other parties in the context of future sales or for other purposes, the rights to the goods remain attached to the sender. consignor). The consignee is then responsible for handling the goods in accordance with the agreement. "Craft shops and tourist attractions are the targets we will aim for to consign products.

3.3.5. Join the exhibition

The next marketing strategy is to participate in handicraft product exhibitions. There are many types of handicraft exhibitions so that producers must be smart in choosing the type of exhibition to be followed so that the profits obtained will be many. Handicraft products are worthy of participation in exhibitions such as INACRAFT, CRAFTINA. The exhibition can be attended at your own expense or joined by other SMEs.

3.3.6. Give discounts on special moments

If the consumer orders the product, the consumer can pay an advance for the order and pay it off when the product is finished. To attract potential consumers, discounts are also held at certain events, for example during holidays, independence day, Valentine's

Day and so on. Discounts are also given when consumers have purchased products repeatedly.

3.3.7. Selling the story behind the product

Consumers today are also interested in knowing the story behind the product they are going to buy. Therefore, to attract attention, we will sell a story that the product we make is an innovation regarding waste processing into new products (3R) and is made by housewives and out-of-school teenagers in rural areas.

3.4. Marketing and Sales Strategy

3.4.1. Market trends and growth

Currently, handmade products are very popular. In addition, products that raise environmental issues are also the main attraction for consumers. There are also more and more exhibitions that facilitate craft and handmade products. This shows that people's enthusiasm for handicraft products is already high. this will support handmade products to continue to grow.

3.4.2. Competitive environment

There are several businesses that produce handmade painting products, but we use original and different image themes and mix paint compositions of higher quality so that product quality is guaranteed. Meanwhile, there are not many businesses that use used cans and painted household utensils as gifts and home decor. In addition, their marketing is still relatively small. The theme of the image displayed will also be very different from the theme of the image that we will create so there is little competition. In addition, the variety of products they produce is also not much.

3.4.3. Long term business opportunity

This business has a long-term opportunity because day by day, the community's need for tertiary products will continue to grow. Public awareness to appreciate handmade products will also continue to grow so as to allow handicraft products to continue to grow. The raw materials used are also available in large quantities so that the product

production process will not experience obstacles. Painting skills are also skills that can be taught so that the production process is not constrained by human resources.

3.4.4. Segmentation

The segmentation of this product is the middle and upper middle class who like handmade products and have a great appreciation for artistic products. The main target in this effort is women. This is because the theme of the products we make is very suitable for women's tastes. In addition, women are more consumptive in terms of buying tertiary products.

3.4.5. Target Market

Products from Corpies will be marketed to potential consumers who shop at middle to upper class places and often visit exhibitions. In addition, potential consumers who are netizens will also be the target market of this product.

3.4.6. Positioning

According to Philip Kotler [4] Positioning is the act of designing the company's offer so that it occupies a distinct and value placed in the target customer mind. Corpies is positioned as a product that emphasizes the elements of creativity and innovation in it. The use of environmentally friendly materials and based on 3 R (Reduce, Reuse, Recycle) will be the hallmark of this product. Innovative images will also be highlighted where products always use raw materials or unusual materials to create new products. The product will also include the story behind the manufacture of the product so that it can be a special attraction for consumers who buy it.

4. Conclusion

The Corpies business in the village of Tunggulwulung has very potential business development prospects because it is in line with the growing trend of handmade products in Indonesia. The results of the various products and the stories embedded in the product that the product is the result of processing waste are added values that make this product more attractive. Processing waste into new products that have high value is one solution to continue the use value of a product. This business also involves

the local community and provides skills that can be used for the future. One of the expected impacts is the creation of a painting center in the village of Tunggulwulung which can raise the economic level of the community.

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