

The Utilization of Patchwork for Interior Decoration in The Form of Macrame Crafts

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ABSTRACT

Fabric itself has an important role in human life so the use of cloth continues to increase every day resulting in an increase in textile waste in the environment. One concrete action to reduce textile waste is to utilize patchwork waste to produce interior decoration products in the form of macrame crafts such as mirror frame and small decorative basket. The research method used is the 5 stages of Design Thinking which includes Empathize, Define, Ideate, Prototype and Test. To produce a product in the form of a macrame craft, it must begin with a recycling process, followed by the stages of sorting, collecting, processing, manufacturing and ending it with the distribution stage of the final product to the general public. The expected result of this activity is the creation of a new product which can be useful for preserving the environment. The final product is also aesthetically appealing and can educate the public about actions to preserve the environment.

Keywords: Patchwork, textile waste, macrame craft

INTRODUCTION

Fabric is one of the staple materials needed by humans for their daily clothing needs. All humans need clothes to wear for their daily life, so it is an undeniable fact that fabric material is so demanded by humans. The greater number of humans, the more number of clothes that need to be produced which resulting to an increased number of fabric production by the textile industries. No wonder that textile waste continues to increase every day since the fabric production also increases in number. If there is no initiative or action done by humans to reduce textile waste and to preserve the environment, then we cannot avoid the negative impacts that can damage the environment around us.

Patchwork is one of the textile wastes that comes from the rest of the production. According to Munir, inorganic waste, such as plastic and fabric, are environmental problems that cannot be denied (Munir, Thooyibah, & Ni mah, 2021). Patchwork is a waste piece of clothes that are no longer used, but can be reuse as the main material for new products. While according to Hamidin, patchwork is those fabrics that becomes waste that comes from those convection factories, or in a simpler language, it is the leftover fabric from places or factories that produced clothes (Hamidin, 2012).

Patchwork comes from waste produced by textile industry workers or tailors. They usually throw away the remaining pieces of clothes because they do not understand how to use the remaining cloth into a product that has a sale value. This textile waste can be processed and utilized into something valuable such as a new interior decoration product if it is done in the right way. To manage this patchwork waste, we will start with the recycling process. Then, it will be followed by the sorting stage, the collection stage, the processing stage, the final stage which is to transform

the patchwork into new products in the form of macrame crafts such as mirror frame and small decorative basket. And finally, ending the whole process with the distribution stage, so that the final product can be reached by the public.

This activity was carried out with the aim of: (1) to provide real solutions to reduce textile waste which is increasing in the surrounding environment, (2) to make product proposals in detail and to explain stages of the process of utilizing patchwork into new product in the form of macrame crafts which will later can be used as interior decoration, and (3) working with local MSME to produce the final product and to help the Indonesian MSMEs economy in general.

The benefit of this activity for the community is to produce new products in the form of interior decorations from textile waste which is patchwork to reduce textile waste and to increase concrete actions in preserving the surrounding environment. Whereas for craftsmen, this activity is to provide new business opportunities and help to improve the local MSMEs economy after the pandemic. And for the nation, this activity can be used as a contribution in reducing waste and a contribution of utilizing the textile waste to be reprocessed into new usable products.

LITERATURE REVIEW

Literature review according to Creswell, is a written summary of a journal, book and a document that describes the theory as well as an information that has been grouped in the literature, that is already exists in the past as well as the present, into topics and documents required for the proposal study. The author summarizes several literature reviews in research conducted to support the theory written in the research (Creswell, 2005).

a. Patchwork

Patchwork is a fabric waste that is obtained from the remaining of clothes cuttings in the process of making clothes, crafts, and other various textile products. Patchwork handicrafts can be made using different variety of fabric. Patchwork can be managed into something that is useful and has economic value if done properly, and it is environmentally friendly (Irawan, Hendarti, & Bisono, 2021).

According to Sulisty, he stated that patchwork is not something that is difficult to find in everyday life. Patchwork can be found from tailors, convection or even the garment industries. Therefore, the shape and size of the patchwork varies. Patchwork can be useless or useful, depending on how it is managed (Sulisty, 2012).

b. Macrame Crafts

Macrame crafts are crafts made of thread or rope using the knot technique, often also called the handmade crafts or handicrafts. According to the Great Dictionary of the Indonesian Language (KBBI), macrame is a form of knot technique craft by working on the beginning and final part thread chains of a woven product by making various knots on the thread chain so that various tassels are formed. Macrame craft is a craft that unites knots consisting of several ropes or threads to produce a masterpiece. This macrame craft can be made into doormats, shopping bags, pillowcases, hangers, wall displays and hangers for pots (Yarza & Dharma, 2021).

c. Textile Waste

According to Munir, inorganic waste, such as plastic and fabric, are

environmental problems that cannot be denied (Munir, Thooyibah, & Ni mah, 2021). This is because these materials are difficult to decompose by microbes and require a very long time.

According to Rosdiana, inorganic waste such as patchwork, is difficult for the environment to decompose, even though the intensity is quite high (Rosdiana, Yulistianti, & Laila, 2018). This type of patchwork waste can be found quite a lot because many convection industries have begun to bloom lately, both on a small and large scale. However, there are very few people who are aware of this. So far, patchwork waste is only allowed to accumulate and then burned by the convection industries without being reused.

The United States Environmental Protection Agency (US-EPA) reports that 5% of the world's land is covered by textile waste which can't be recycled and described with an increase of 3% to 5% annually (Devanti, 2017). Therefore, the Indonesian government is aggressively campaigning for the 3R movement, namely Reduce, Reuse, and Recycle to reduce environmental pollutions.

d. Interior Decoration

Decorate comes from the word “decoration” which means to decorate or to garnish spaces, while “decoration” itself means ornaments (Echols & Shadily, 2006). From the meaning of the word, it can be taken to an understanding that decoration is related to decorative activities or an activity that aims to beautify something. Interior decoration is related to decorating spaces. Interior decoration generally deals with material finishing such as painting and coating, surface treatment, furniture arrangement and wall covering.

METHODOLOGY & DATA

The implementation phase of this activity uses the Design Thinking research method. In the Design Thinking method, there are 5 stages of approach in designing and producing the interior decoration products in the form of macrame crafts. This is the main objective and focus of this research. The 5 stages are Empathize, Define, Ideate, Prototype, and Test.

The first stage of the Design Thinking method is the Empathize stage. At this first stage is where the process of discovering and studying the existence of the problems that are carried out through several processes to gain an empathic understanding of the problems to be solved by collecting data. In this stage, we also need to pay attention to the needs, so that we can create the best results from this activity. The collection of data is stored and later be used for the second stage.

The second stage is the Define stage. The Define stage is the process of finding and sharpening the existence of problems through data analysis and problem-solving processes. In this second stage, we can discover the needs in detail and it can help to solve problems that have been defined as the main problem.

The third stage is the Ideate stage. The Ideate stage is the process of brainstorming and expressing ideas with various design approach. The ideas that are expressed can be in the form of a schematic design or design transformation. All ideas that have been collected will be accommodated to solve the problems that have been defined at the second stage which is the Define stage.

The fourth stage is the Prototype stage. The Prototype stage is the stage of determining and developing ideas from the ideate stage. In this stage, we are developing the schematic product design sketches into real prototype. The prototype that is produced is the solutions for the problems that are discovered. In the process of producing the real prototype, we need consideration and discussion in terms of color combinations, type of materials used, type of materials that are available in the market, as well as consideration with our MSME partner. In the end of this stage, there are 2 final design sketches that are selected and can be produced by our MSME partner in the form of 2 product samples, so that we can examine their qualities before the official release of the products and as well as we can capture images of the samples.

The fifth stage is the Test stage which is the final stage. In this final stage, we will carry out various kind of promotions so that the public can have easy accesses to purchase our products. These promotions can be done through social media such as Instagram and Facebook, and online sales applications such as Shopee and Tokopedia.

RESULT & DISCUSSION

In this result and discussion section, we will describe in detail all the results of the research data from start to finish, as well as to describe the entire product manufacturing process and the results of the interior decoration products in the form of macrame crafts. The results are presented in the form of drawing sketches and photographs with descriptions.

The discussion includes: (1) Results of exploration and data collection at the Empathize stage, (2) Results of analysis and problem solving at the Define stage, (3) Results of ideation and determination of ideas at the Ideate stage, (4) Results of product realization and development at Prototype stage, and (5) Product documentation and promotion at the Test stage.

a. Empathize Stage

At the Empathize stage, the main thing to do is to explore and to collect data. This process needs to be done to gain an empathetic understanding in finding existing problems, as well as providing the right solutions for the problems found. At this stage begins with the process of exploring the literature. All literature data related to the utilization of patchwork, textile waste, macrame crafts and interior decoration products must be explored and collected.

After doing the exploration process, it is followed by the process of collecting various design references as a reference for making interior decoration products in the form of macrame crafts which later will be given to the local MSME partner. This data collection is needed especially for the third stage which is the Ideate stage.

Followed by the searching process for resources of raw materials of patchwork waste that later will be used as the main material for making interior decoration products. The raw material resources for patchwork waste that has been found is located on Wisma Kedung Asem Indah Street No.30, Kedung Baruk, Rungkut District, Surabaya City, East Java with 60263 as the postal code.

The Empathize stage ends with the process of finding and determining the local MSME partner who will be invited to work together. Selected local MSME partner will assist in the process of managing patchwork waste into new products that are usable in

the form of interior decorations. The selected partner is called "Dhandmadey" which is located at Sumur Welut Street No.57, Sumur Welut, Lakarsantri District, Surabaya City, EastJava with 60215 as the postal code.

b. Define Stage

At the Define stage, the main thing to do is to analyze and to provide solutions to problems that have been found in the previous stage. For this stage, it begins with discovering the advantages and disadvantages of using patchwork waste materials to manufacture interior decoration products in the form of macrame crafts. This is useful to minimize problems that can arise during the product processing process and to maintain the quality of the final product that will be produced in the near future.

After the analysis process, it will be followed by the problem-solving process which is carried out together with gathering all the information related to patchwork to find the most appropriate solution idea. The solution ideas that have been collected will later be filtered and one of them will be selected as the best solution idea. Finally, the chosen solution idea is to process the patchwork waste into a shape like macrame ropes.

c. Ideate Stage

At this Ideate stage, the main thing to do is ideation and determination of ideas for the final product design. The goal is to get through the brainstorming process. During the brainstorming process, the ideas that have been put forward will be collected, then they will be considered for the design that will be made by the local MSME partner.

For the product design ideation process, it is presented with a schematic design. Schematic design is a rough sketch to design products that will be produced later. Several design solution ideas in the form of design schematics have been drawn with different types and variations, so that they can be evaluated from the advantages and disadvantages side of each design in order to determine which solution ideas are the most suitable to be used for the final products and which solution ideas are the most suitable for public market sales.



Picture 1. Alternative designs (mirror frame)

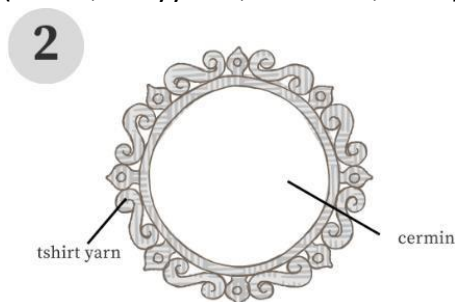
Based on the data found at the Empathize and Define stages, the followings are some of the considerations that are considered as useful for the final wall decoration product to be made in the Ideate stage: (1) Using supporting materials such as rattan hoops, gold-colored metal plates, and several other additional supports such as mirrors, (2) Utilizing patchwork material that used knot technique into an unique and interesting macrame-shaped product, (3) Trying to conduct research on the forms of macrame-shaped wall decorations on the market so that there is no significant resemblance to

the product we want to produce, and (4) Look for some references of design forms that are rarely found on the market so that the resulting product can later be more attractive than what has been sold by other competitors.

d. Prototype Stage

At the Prototype stage, the main thing to do is to develop the product and continue it with the product realization process. This is useful for determining and developing the selected solution idea at the Ideate stage into real product samples before the product is produced in large quantities.

After consideration in terms of materials used, the available materials, and the consideration with the local MSME partner, it can be determined that from the results of the previous stage of ideation there will be 2 final designs used. The first design was taken from several solution ideas created at the Ideate stage, while the second design was taken from the results of consideration with our MSME partner which is Dhandmadey. The first design used is the idea solution number 2, which is a wall mirror frame and the second design is a small decorative basket which is considered as a multifunctional object. (Munir, Thoyyibah, & Ni mah, 2021).

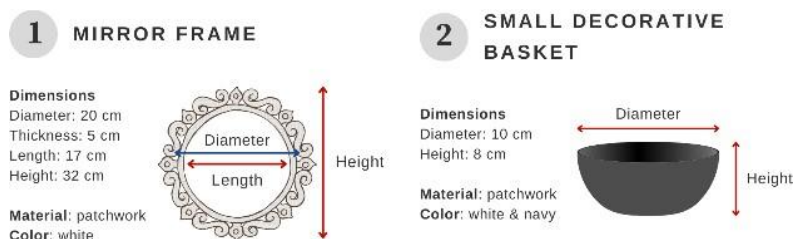


Picture 2. The chosen design (mirror frame)

After determining the final design, it will be followed by the making of 2 product samples to examine the product quality in real terms. This is intended so that the final product produced is not defective and so that we can produce the best results that will be presented to the public.

e. Test Stage

At this Test stage, the main thing to do is to photograph and to document the final product results, and followed by the product promotion process. The goal is to have great product photos which will later be useful for promotional catalogs and the promotion process itself functions as a channel to introduce the product to the general public.



Picture 3. Final products details in size and dimension



Picture 4. Final products made by the local MSME Dhandmadey

Before carrying out the product documentation and promotion process, it is necessary to carry out a final check on the product and ensure whether the product is truly usable and suitable for sale or not, as well as if it is suitable for the marketing.

The promotion system is carried by using social medias such as Instagram ads and Facebook ads, and using online sales applications such as Shopee and Tokopedia. This will greatly assist the product marketing process to the public.

CONCLUSION

Based on the results and discussions that have been collected, it can be concluded that textile waste, especially patchwork waste, often causes many environmental problems. Waste accumulation occurs because many textile or convection industries do not really paid attentions to the outcome of the fabric waste produced. Majority of them only allow patchwork waste to accumulate and then just to be disposed of or burned. Therefore, we propose this kind of activity that can help reducing textile waste and preserving the surrounding environment. This activity of utilizing patchwork waste is carried out to reduce the amount of textile waste that exists in the environment today, as well as to produce interior decoration products in the form of macrame crafts that are usable and useful for the community. And this activity is also useful for educating the public about the importance of concrete action in preserving the environment.

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