

Development of Mukena with Typical Acehese Motifs Using Printing Techniques



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ABSTRACT: Current technological developments greatly support the creation of textile printing on mukena with typical Acehese motifs because, generally, the use of motifs only uses embroidery techniques. This study aims to develop mukena products with typical Acehese motifs using printing techniques and test the feasibility of the product. This research is a Research and Development (R&D) study using the PPE model with three stages: planning, production, and evaluation. This product was validated by one digital expert, cultural expert, and academic expert and then tested on 50 Muslim women aged 25 years and over. The data collection technique used validation sheets and questionnaires. Data analysis with descriptive statistics was used to analyze the data obtained as a percentage. Based on the digital expert test results, the overall assessment aspect obtained a percentage of 90.62% in the (outstanding) category. The results of the cultural expert test were 100% in the (outstanding) category, and the results of the academic expert test were 85.93% in the (good) category. Then, the results of the respondent trial obtained a result of 84.22% in the (good) category. The study results conclude that the mukena product with a typical Aceh motif and printing techniques is worthy of being marketed.

KEYWORDS: Development, Aceh, Mukena, and Textile printing.

1. INTRODUCTION

Mukena is a cloth that Muslim women usually use to carry out the obligation of prayer. Mukena has undergone continuous changes that are increasingly rich in colour, material and three patterns (Mirantika & Marbun, 2016). Mukena is a typical cultural commodity in Indonesia, said to be the result of adjustments made by the ancient saints by the principles of Islam. The principles of Islam state that a Muslim woman must dress cleanly, neatly, reasonably, not excessively, not resembling the clothes of infidel women, not resembling men; the fabric must be thick, not perfumed and cover the genitals (Yuniarti & Si, 2018). As a daily necessity, mukena offered by mukena sellers has several advantages, namely affordable prices for consumers, guaranteed product quality and according to public tastes. Various models and variations of mukena sold in the market are diverse; various types of mukena materials provide a charming appearance, but mukena materials can also be adjusted to needs (Atiqoh, 2011).

The growth and development of culture proceed with human reasoning, both in quantity and quality, so that culture must not be extinct but must live and develop and can even be passed on to future generations. In the fashion world, innovation in fashion or style must be considered because humans tend to get bored quickly with monotonous fashion. Fashion designers and mukena are now looking for innovations to be used as ideas or materials for making or designing clothes and others to attract public attention (Deswita & Dewi, 2018). With the emergence of many new ideas in making mukena, competition for industrial development in creating innovations and creations in mukena is tight. Many business people compete to create mukena fashion, resulting from the demands of the lifestyle created by designers (Deswita & Dewi, 2018).

According to the Islamic view regarding the design of mukena, it covers the genitals, including the head, hair, neck, chest, and entire body except the face and palms. In addition to the parts that must be covered, the silhouette and shape of the clothes must be loose or not shape the body—not shaping the body, including using non-transparent materials (Mutiara Bilqis et al., 2020).

Aceh's distinctive motifs are inspired by the natural wealth, culture, customs and all aspects of Acehese people's lives, which are, of course, by Islamic law and have their meaning and characteristics in each form of motif that symbolizes life and hope (Azizi, 2018). The existing motifs in Aceh are greatly influenced by religious factors in addition to the surrounding nature, both fauna and flora or other natural factors. Among the motifs that we can find include the moon and star motif, the peak of the mosque, leaves, tree trunks, flowers, birds, cats, clouds, the sea, talo, i.e., range and so on (Muhammad Ali, 1985).

Digital textile printing can be applied to all fabric materials using different inks according to the type of fabric available (Sarwinda, 2013). Textile printing is the process of printing images on media. Textile printing can be applied to fabric media such as polyester, canvas, satin, cotton, dry fit, and other fabric types. Technically, there are two ways to print on fabric, including printing

Development of Mukena with Typical Acehese Motifs Using Printing Techniques

on fabric directly (direct printing) and printing on fabric indirectly (indirect printing) using an intermediary medium, in this case usually in the form of transfer paper (Wiranty & Dewi, 2022). Making textile sheets with textures such as embroidery, laser cutting, and others is relatively easy with the digital process. The work is done by machine while still prioritizing design elements and principles; one of the popular digital techniques is digital printing (Febby, 2015).

Seeing the potential in Acehese crafts today supports the fulfilment of factors in creating new creations and innovations that will be adequately developed and quality maintained so that they can compete with other business people. Seeing the opportunities in the development of current technology greatly supports the creation of textile printing on mukena with typical Acehese motifs because the use of mukena with typical Acehese motifs generally only uses embroidery techniques, so the manufacturing process with this embroidery technique is considered less efficient in terms of time, and less varied in the technique of making Acehese motif mukena products. These problems inspired researchers to “Develop mukena products with typical Aceh motifs using textile printing techniques”. Printed mukena uses motifs and colours adapted to the current era's development, so women are interested in mukena that use typical Aceh motifs.

2. RESEARCH METHOD

This research is a research and development Research and Development (R&D). Research and development (R&D) is a process or steps to develop new products or improve existing products. It can be accounted for by researchers through planning, organizing, implementing, and conducting research (Sukmadinata, 2009). The research and development conducted in this study are based on the PPE (planning, production, and evaluation) model developed by Richey and Klein (Sugiono, 2016), stating “The focus of research and development design can be on front-end analysis planning, production and evaluation (PPE)”. Planning means the activity of making a product plan. This activity begins with a needs analysis carried out through research. Production is the activity of making a product based on the design that has been made. Evaluation is the activity of testing and assessing how highly the product has met the specified specifications (Abdullah et al., 2021). The population of this study were Muslim women aged 25 years and over. The sample of this study was 50 Muslim women in the Al-Hidayat assembly and three experts. The criteria used were to determine the trial subjects. The sampling of 50 Muslim women was carried out using incidental sampling techniques, namely a sampling technique based on coincidence; namely, anyone who accidentally meets the researcher can be used as a sample if the person who was met by chance is considered suitable as a data source (Sugiyono, 2010).

The types of data used in this study are quantitative and qualitative. Quantitative data were obtained from the results of product trials. The results of all quantitative data were converted into qualitative data through descriptive statistical analysis techniques. The instruments used in collecting research data were validation sheets for validators/experts to complete the research data. In addition, a questionnaire was also used for Muslim women respondents.

The questionnaire used in this study used a measurement scale, namely the Likert scale. The Likert scale was used to obtain the results of responses from Muslim women to the mukena product that was developed after the data was collected; the data was analyzed with descriptive statistics, which were used to analyze the data obtained in the form of percentages—the quality criteria for mukena with typical Aceh motifs using printing techniques. The following table sets out the standard aspects of shape, comfort, motif design, colour, size, and interest:

Table 1 Quality Criteria for Mukena with Typical Acehese Patterns Using Printing Techniques

Percentage (%)	Quality	Information
86-100	Very good	No revision needed
66-85	Good	No revision needed
56-65	Pretty good	Revision
41-55	Enough	Revision
0-40	Not good	Revision

3. RESULTS AND DISCUSSION

They are making mukena with typical Aceh motifs using printing techniques. This study aims to describe the process of making mukena using typical Aceh motifs made using printing techniques. This research and development (R&D) study uses the PPE development model. The research process consists of three stages: Planning, Production, and Evaluation.

3.1. Planning

In the first stage, the needs of the mukena are analyzed through its characteristics and the characteristics of textile printing, shapes, colours, and motifs found on the mukena. The next stage is the design process. The parts of the mukena that will be made include:

- a) Mukena Top (Hijab). The top of the mukena is more like an ample/jumbo hijab, with decorations on the face and around the edges using laser cuts. On the face's left and right sides, a rope is usually used to tighten the face hole by tying it to the back of the head. On the surface of the mukena, there is an Aceh motif and a sizeable Aceh door motif in the middle of the

Development of Mukena with Typical Acehese Motifs Using Printing Techniques

back. The colour of the mukena uses mocha and a combination of dark brown and orange. On the whole, motifs using the original colour of the actual object, such as the bunging jataka motif, bungong kala, and several Aceh carving ornaments and the Aceh door using gold;

- b) Mukena Bottom (Skirt). The bottom of this mukena will look like a long skirt. Around the waist is a rubber rope that tightens it so that it does not sag or come off. While on the bottom edge of the skirt using laser cut;
- c) Textile printing. Textile printing is the process of printing images on fabric media. Textile printing can be applied to fabric media such as polyester, canvas, satin, cotton, dry fit, and other fabric types. Technically, there are two ways to print on fabric, including printing on fabric directly (direct printing) and printing on fabric indirectly (indirect printing) using an intermediary media, in this case usually in the form of transfer paper.

3.2. Production

There are two, namely preparation and implementation and implementation. The sites are made of an adult woman's mukena in the preparation stage. The implementation step is to make a flowchart as a flow of the mukena-making process. The flowchart facilitates the work process of designing an Aceh motif mukena with a printing technique.

Mukena design stage:

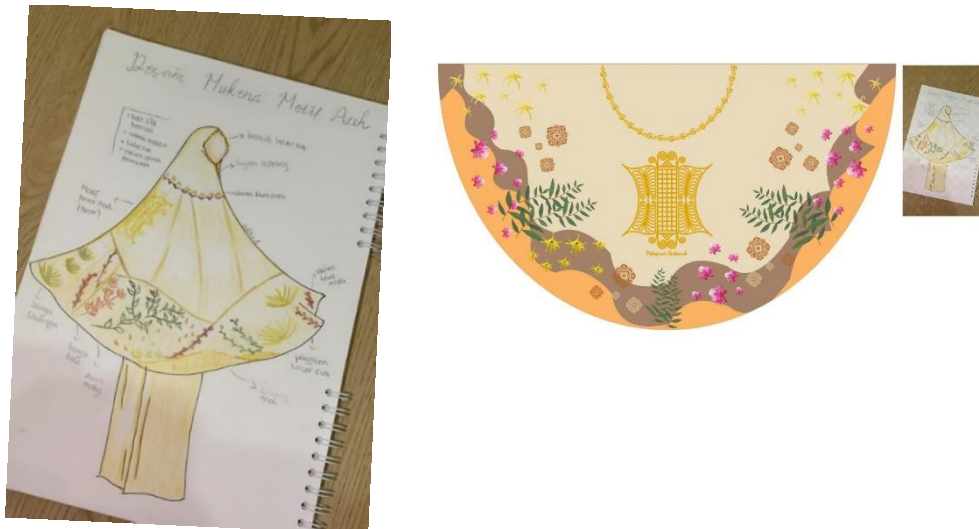


Figure 1. Mukena Design

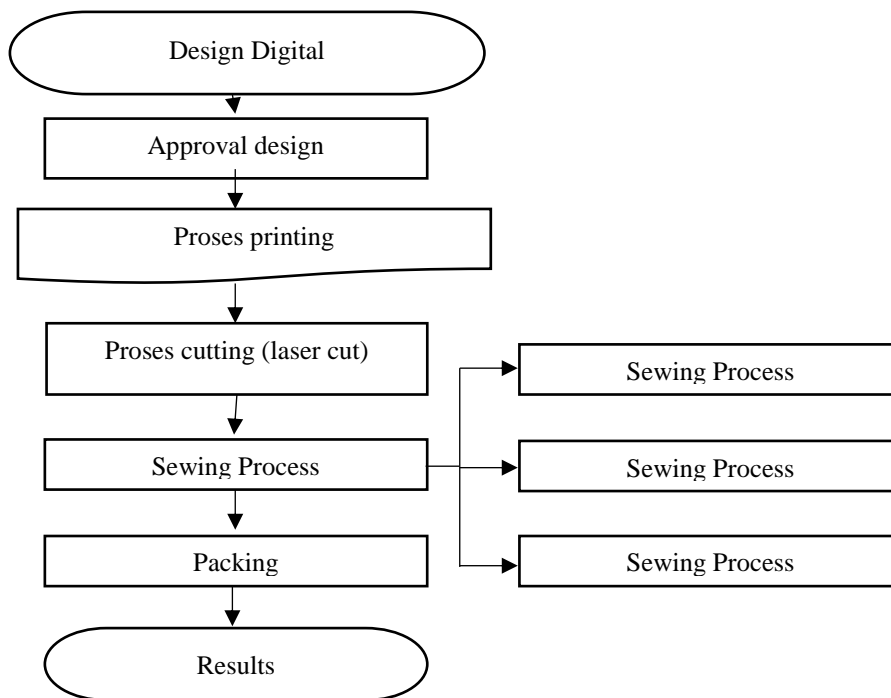


Figure 2. Flowchart

Development of Mukena with Typical Acehnese Motifs Using Printing Techniques



Figure 3. Results of the Mukena that have been produced



Figure 4. Front view of the Mukena result



Figure 5. Results of the Mukena from the Back

3.3. Evaluation

3.3.1 Expert Assessment

Based on the digital expert score calculation results, a percentage of 90.62% was obtained. Thus, the mukena developed is categorized as very good (Does not need to be revised) because it is in the 86-100% percentage range. Based on the cultural expert

Development of Mukena with Typical Acehese Motifs Using Printing Techniques

score calculation results, a percentage of 100% was obtained; thus, the mukena developed is categorized as very good (Does not need to be revised) because it is in the percentage range of 86-100%. Based on the media expert score calculation results, 85.93% was obtained in the good category because it is in the percentage range of 66-85%. More details can be seen in the table of Mukena quality criteria presented (table. Mukena Quality Criteria).

3.3.2. Product Trial by Students

Based on the results of the field trial on Muslim women aged 25 years and above, women in the Al-Hidayat assembly, 50 people responded. The percentage of student response scores was 84.22% in the excellent category (no need for revision) because it was in the percentage range of 66-85%.

3.4. DISCUSSIONS

This study uses a research and development (R&D) method for mukena with typical Acehese motifs using printing techniques. This study applies the PPE model using three stages of development: planning, production and evaluation. At the planning stage, the researcher collected data to solve the problems faced by analyzing needs through the characteristics of mukena and the characteristics of textile printing, shapes, colours and motifs found on the mukena. At this stage, the mukena product that was developed was by the characteristics of the mukena, namely by Islamic law, one of which was using non-transparent materials, in terms of the mukena model using a two-piece mukena, which is a mukena consisting of two parts, namely the top (hijab) and bottom (skirt), on the edge of the mukena there is a laser cut model, the base colour of the mukena uses mocha colour with a combination of motifs that use the original colours of the actual objects such as the bungong jaraka motif, bungong kala, and several Acehese carved ornaments and the gold-colored Acehese door, a symbol of Aceh's characteristics, using the textile printing method. The production stage in this study was carried out in 2 steps. Namely, the first step is preparation in making patterns using sizes according to the characteristics of the mukena. The second step at this stage is implementing Mukena products according to the flowchart; the flow starts from digital design, design approval, printing process, cutting process, sewing process, packing and results.

Furthermore, to determine the qualifications of the mukena product, the researcher conducted a product test using an assessment instrument. The product test was carried out by three experts, namely (1) a digital expert from the Denoy Gallery, (2) a cultural expert from the Aceh designer, and (3) an academic expert from the USK fashion lecturer. Furthermore, an online-based trial was conducted on respondents to determine their response to the mukena using typical Aceh motifs and printing techniques.

Based on the digital expert test results, the overall assessment aspect obtained a percentage of 90.62%, which is in the category (outstanding) and does not need to be revised. The results of the cultural expert test, with a percentage of 100%, are in the category (outstanding) and do not need to be revised. The results of the academic expert test, with a percentage of 85.93%, are in the category (good) does not need to be revised. Then, the results of the respondent trial obtained 84.22% with the category (good) with no need for revision. Thus, the developed Mukena product has received a positive response and is worthy of being marketed.

4. CONCLUSION

Developing mukena products with typical Aceh motifs with printing techniques uses research and development methods with the PPE model through three stages: planning, production, and evaluation. Based on the processing and analysis that has been carried out, it can be concluded that the product test has a percentage of 90.62%, based on the results of digital expert tests and 85.93%, based on the results of cultural expert tests in the outstanding category, a percentage of 85.93% of academic expert test results with a suitable category, and a percentage of 84.22% in the excellent category. The study results show that making products with typical Aceh motifs and printing techniques is worth marketing.

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Development of Mukena with Typical Acehese Motifs Using Printing Techniques

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