

Improving Batik Depok Motif Design By Implementing Color Trend Forecast In Ajbura Trajumas Indonesia

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Abstract. Today the development of batik designs is an endeavor for many Batik Depok industries to keep up with lifestyle changes and to continue their existence. Batik Ajbura Trajumas, a Small Medium Enterprise (SMEs) in Depok, needs to explore more batik design to improve the lack of variation of the existing motifs since established in 2016. This study aims to design Batik Depok motifs in Ajbura Trajumas, focusing on color implementation of Indonesian Trend Forecasting (ITF) 2021/2022. The design method uses an approach of design thinking phases of the Hasso Plattner Institute (HPI) Stanford model, comprising Empathize, Define, Ideate, Prototyping, and Evaluate. The implementation of trends in Batik Tradjumas produces four color themes of styles, including *The Exploration* (sporty-arty off-beat style), *The Exploitation* (dramatic-style), *The Spirituality* (exotic-classic elegant style), and *The Essentiality* (feminine-casual-style). This research presents innovations of Batik Depok in the form of new motif colors, especially in Batik Ajbura Tradjumas.

Keywords: batik design, batik depok, batik tradjumas, visual elements, indonesia trend forecast.

1 Introduction

Indonesian batik has recognized worldwide as the Masterpiece of the Oral and Intangible Heritage of Humanity by UNESCO on October 2, 2009, the date designated as "National Batik Day" in Indonesia. Batik has been one of Indonesia's proud cultures for its values and presents national identity. Not just in Central Java as the center of history, culture, and batik heritage, other regions today started to develop local "iconic" contemporary-batik motifs with various icons as the representation of local wisdom of the area. The development of regional contemporary-batik motifs is one of the promoted programs by the Indonesian government to improve the quality and quantity of the national creative industry [20]. Depok is one of the areas in West Java that has participated in developing the local iconic contemporary batik since 2007. It started when the Dekranasda of Depok held a batik design competition to select ten batik motifs with specific characteristics of Depok City and got registered patents on January 24, 2008. As part of the creative industry, the development of batik designs today is an endeavor for many Batik Depok industries to keep up with lifestyle changes and to continue their existence. Besides, the creative industries should serve as a hub of innovation

and experimentation [1]. Not only large-scale companies with Research and Development (R & D) divisions, the textile SMEs, including the batik industry, need innovation activities [2]. According to [2], in a study of textile SMEs, some parts of product innovation comprise the introducing trends in the collection and changing the texture and colors of the products.

Batik Ajbura Trajumas is one of Small Medium Enterprises (SMEs) in Depok, established in 2019 by Suharno. The batik techniques used in Batik Ajbura Tradjumas vary from written batik, stamped batik, digital-printing batik, and screen-printing batik, with various names of motifs adopted from the iconic local symbols in Depok city. Based on the preliminary research observation and interview with the owner, the development of motifs design in Batik Ajbura Tradjumas just modified from the request of loyal customers. Thus it needs to explore more batik designs to improve the lack of variation of the existing motifs since established in 2016, besides keeping up with lifestyle changes, continuing its existence, and providing product innovation. According to [3], financial constrain usually become an issue regarding low innovation activities in SMEs.

The idea of implementing trend forecast in designing products is to avoid catching up and getting stuck on the unsold products that are out-of-date by the time it reaches the store. Many creative industries are today more aware of the use of trend forecasts to be the first, more innovative, and to compete with other brands. All big fashion labels will rely on the trend forecast as it projects the future market needs [4]. Some world fashion trend forecasts are Trendstop, WGSN (World's Global Style Network), and Pantone Fashion Colour Trend. Today Indonesia owned one official trend forecast agency called the Indonesia Trend Forecasting (ITF), established in 2018. ITF deals with the research and development of creative ideas to help creative economy actors (including the SMEs) in developing ideas or designs. It researches to explore ideas from the industry of fashion, textiles, interior, and product design as the embodiment of the synergy of creative economy and tourism [5].

This research aims to redesign Batik Depok motifs in Batik Ajbura Trajumas, focusing on color implementation of Indonesian Trend Forecasting (ITF) 2021/2022. The use of ITF in the redesign project will help the SMEs to improve more variants of Batik Depok motifs with the updated trend to avoid catching up and getting stuck on an out-of-date design yet preserve the local wisdom and original motifs of Batik Depok. This research will focus on the Batik Belimbing and Batik Seragam motifs as the case study with the use of four color themes of styles in the ITF 2022 comprising *The Exploration* (feminine-casual-style), *The Exploitation* (dramatic-style), *The Spirituality* (exotic-classic-elegant style), and *The Essentiality* (sporty-arty off-beat style).

2 Design Method

The design method in this qualitative research uses a design thinking approach to support the problem-solving process and solves it through creativity, user needs, and business strategy. According to the IDEO, design thinking is an approach to innovation that uses the designer's sensibility and methods with a human-centered discovery process followed by iterative cycles. [8]. The basis of the design thinking process [6] includes 1). Problem definition and redefinition, 2). Need finding and synthesis, 3). Ideation, 4). Prototyping, and 5). Testing. This

process is reflective and iterative, it is not a linear exercise with one step systematically following another, nor is it circular. It goes back and forth. Many organizations develop design thinking models. According to [7], There are some organizations serve models of design thinking, including 1). *3Is* by *IDEO*. It comprises three phases (inspiration, Ideation, and Implementation); 2). *HPI (Hasso Platner Institute) Stanford* with five-phase of Empathize, Define, Ideate, Prototype, and Test. 3) *HPI (Hasso Platner Institute) Postdam* with six phases [9] of Understand, Observe, Point of View, Ideate, Prototype, and Test; 4). *The Double Diamond* by *British Design Council*, with four-phase of Discover, Define, Develop, and Deliver. The diamond diagram shows the divergent and convergent stages of the design process 5). *SDT: The Service Design Thinking* model has four phases: Exploration, Creation, Reflection, and Implementation. In SDT, the outcome is a process, not a finished product.

This research uses design thinking phases of Hasso Platner Institute (HPI) Stanford model, with five phases [19] including (1) Empathize, (2) Define, (3) Ideate, (4) Prototyping, (5) Test, see **Figure 1**. The Empathize is the phase to get a deep understanding on the problem to be solved. At this stage, an approach is made to the SMEs or user (customer) or the community and then looks for their needs, problems, and what they really want. **Emphatize** activities can be carried out by going directly to the field (observation) to see the problems that occur or meeting with potential users. At **define** phase, the information that has been collected in the empathize phase will be analyzed and synthesized to identify and determine the core problem. **Ideate** is the phase of finding and collecting ideas or designs to determine a required solution. Determining the right problem at the define phase will greatly help the ideate process. The **Prototype** phase is to produce a prototype that can be tested by both team members and the community outside the team through the test stage. The test results can be used for product improvement, so that appropriate prototypes can be produced and meet user needs. Finally, the **Test**, is the phase of testing and evaluating the prototype to the user (user).

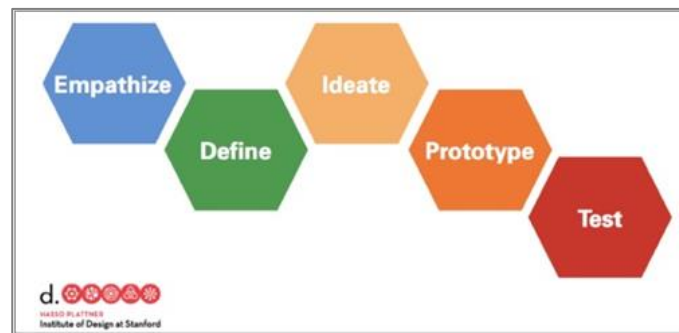


Figure 1. The Hasso Platner Institute (HPI) Stanford Design Thinking Model
(Source: <https://dschool.stanford.edu/>)

3 Result and Discussion

3.1. Batik Motifs

According to [10] and [11], Indonesian ornaments or the archipelago ornaments (*Ragam Hias*) is a form of decorative elements attached to objects, usually has a repetition form (one

or a half repetition), implemented on a craft object or artwork, fabrics or traditional clothes, wood and stone carvings, and traditional home decoration. Indonesian ornaments have various types and shapes with uniqueness and story, as interpretation of the universe that is composed into aesthetic forms. They usually appear in similar forms yet are different, unique and iconic in each region. The stylized motifs are derived from nature and adapted from foreign cultural influences, including China, the Netherlands, India, and Persia. Indonesian traditional crafts or arts usually serve a spiritual and essential meaning in the stylization of decoration. One of the famous Indonesian ornamental crafts is Batik, a traditional cloth made with the wax-resist-dyeing technique, historically from Central Java (Keraton Yogyakarta and Surakarta). The result images from this wax resists-dyeing are called ornament, divided into three functions, primary ornament, secondary ornament, and filler ornament or *isen-isen*.

The primary ornaments represent themes with particular meanings, usage, and placement technique. These primary ornaments are usually decorated and appear with the secondary in smaller and inconspicuous forms. The last is *isen* shown in the form of details, including dots, small objects, and vines or *sulur* [12]. The Batik motifs, influenced by Indonesian culture and nature, are usually derived from natural objects, including the flora or plants, for example, trees, leaves, flowers, branches, and *sulur* (vines); The fauna or animals; Inanimate natural objects, for example, mountains, rocks, water, clouds, water, *etcetera*; Geometrical shapes; The fantasy or mythical [13],[10],[12]. Around the 15-19th century, many Javanese women wore batik cloth paired with kebaya (the traditional clothing) with traditional motifs of *Parang Rusak*, *Larung Ireng*, *Sawat*, and *Garudaan* [18]. Today batik motif is not solely used as a cloth of traditional or modern clothing but potentially applied as a concept of integrating force media of multicultural teaching methods in Indonesian primary schools [17].

3.2. Batik Depok

Batik designThe development of Batik Depok motifs is relatively new. Batik Depok began to appear in 2007, initiated by the Regional National Craft Council (DEKRANASDA) of Depok City. DEKRANASDA Depok conducted the “Depok Batik Design Competition” attended by 223 participants, producing 345 batik motifs, and finally selected three batik motifs from 10 potential winners with specific characteristics of Depok City and got registered patents on January 24, 2008 [14]. According to DEKRANASDA Depok, Batik Depok has specific symbols that contain both national and local content of Depok City, including the colors and motifs. The colors of golden yellow, maroon, orange, blue, dark blue, and beige represent shade, calm, and courage. While in the shape of motifs, the *Sayap* (wing) symbol means protecting and raising the dignity or prestige of the Depok people. The *Belimbing* (star fruit) and *Ikan Hias Memphis* (Memphis freshwater fish) are superior to the flagship of the city of Depok. The *Mega Mendung* (cloud) gives a high meaning of ideals and a cool spirit. The *Jembatan Panus Margonda* (Panus Bridge), *Gedung Tua* (old building), *Gong Sibolong* (instrumental percussion), and the *Topeng Cisalak* (Cisalak traditional mask dance) show that Depok will never leave and will always respect the history and culture of its predecessors.

In Batik making, there are four stages [15] comprising (1) The natural-dyed preparation stage; (2) Batik waxing (using malam); (3) The wax removal or finishing stage. The techniques [16] comprise (1) Batik Tulis, the classic batik technique through writing using a canting tool to wax. The price is the most expensive among batik clothes techniques. (2) Batik Cap or the stamp technique using a metal stamp. This technique is more affordable price than

batik tulis for its faster and simple process. (3) Teknik Campuran is the Mixed Technique using both writing and stamp technique.

3.3. Ajbura Tradjumas

Ajbura Tradjumas is a gallery and workshop of Batik Depok, established in 2016 by Suharno, in Sawangan Salting, Depok. This gallery is also a place for the production of Batik Tradjumas, in which the motifs vary from contemporary iconic Batik Depok to the other regions. Some of the motif designs are from the request of the government of Depok city. The batik techniques used in Batik Ajbura Tradjumas vary from written batik, stamped batik, digital-printing batik, and screen-printing batik, with various names of motifs adopted from the iconic local symbols in Depok city. The motifs comprise *Gong Si Bolong* (a traditional percussion instrument); *Tugu Batu Depok* (the Depok stone monument); *Belimbing Dewa* (a local starfruit); *Ikan Hias Memphis* (freshwater-tropical fish); *Topeng Cisalak* (Cisalak traditional mask dance); *Rebut Dandang* (a traditional-ritual of Betawi wedding); and *Gedung Tua* (the old building). Batik Tradjumas provides elementary school uniforms (Sekolah Dasar), junior high school (Sekolah Menengah Pertama), organization uniforms, and office uniforms. Batik Tradjumas also serves workshops on batik making as an education, see **Figur 2**.



Figur 2. Batik Depok in Ajbura Tradjumas (source: author)

3.4. Indonesia Trend Forecast 2021/2022: *The New Beginning*

The Indonesia Trend Forecasting (ITF), established in 2018, deals with the research and development of creative ideas to help creative economy actors (including SMEs) in developing ideas or designs. It researches to explore ideas from the industry of fashion, textiles, interior, and product design as the embodiment of the synergy of creative economy and tourism. For the year 2021/2022, ITF provides The Fashion Trend Forecast: *The New Beginning*, with four themes of *Essentiality*, *Spirituality*, *Exploration*, and *Exploitation* [5].

The Essentiality theme depicts the changes in the living activities of urban groups of dominant activities around the home environment. This situation creates the need for a comfortable fashion style yet concerned with function with fewer details. The environment and cleanliness awareness of these urban people are presented in the flora and fauna patterns with a naive and childish style and soft-fresh color. Casual sportswear style combined with romantic femininity appears in this theme. **The Spirituality** describes a change in mindset that is more based on traditional values, culture, and respect for the work process. It is presented in an elegant-classic style with a touch of exotic ethnicity. Natural materials, motifs and traditional, detailed textile work displayed in overemphasized and high quality clothing in neutral and earthy tones. **The Exploitation** depicts the stuffy, optimistic, and quite excessive appearance. Exaggerated elements dominate this theme, both in detail, shape, and application of size. Dramatic in style is seen in the display that combines various elements, motifs with a blend of colors that collide and even seem chaotic. **The Exploration** expresses the hope of a new-better world and ready to travel beyond the present world. Various techno elements in explorer style, unique and eccentric with unusual color combinations, texture play, motifs inspired by digital elements present in the arty off-beat with a sporty style.

3.5. Designing Batik Depok Motif by Implementing Color Trend Forecast 2021/2022

Design method in this research uses a design thinking approach with Hasso Platner Institute (HPI) Stanford model, see **Figure 3**, comprising five phases (1) Empathize, (2) Define, (3) Ideate, (4) Prototyping, (5) Test. The diagram below describes the process of improving Batik Depok motifs by implementing a color trend forecast of Indonesia Trend Forecast 2022 in Batik Ajbura Tradjumas.

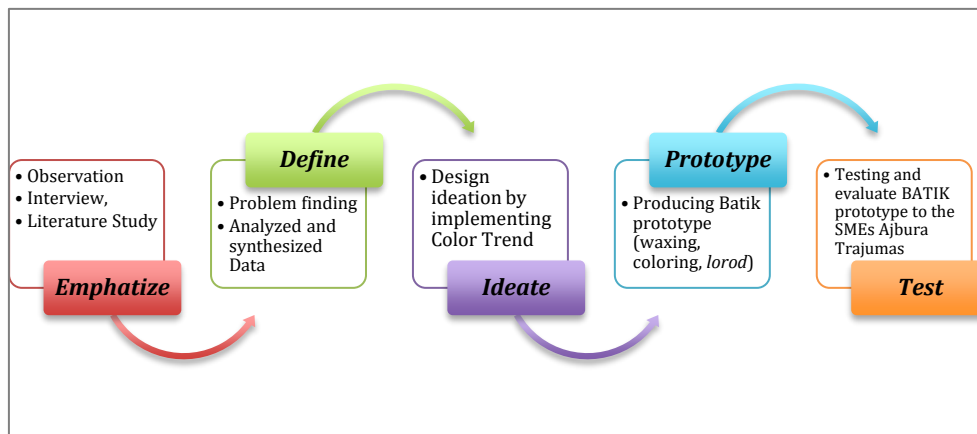


Figure 3. The phases of designing Batik Depok in Ajbura Tradjumas by implementing Color Trend Forecast of ITF 2021/2022 (source: author)

Empathize. This phase is about to find the problem definition and the needs in Ajbura Tradjumas by using observation, literature study, and interview. This phase conducted observation in SMEs Ajbura Tajumas, Sawangan Salting Depok, and an interview with the owner (Suharno, S.E., M.M). While doing the empathize, questions (of interview) should not propose a solution, so it will be more effective for the team to develop new ideas without

being offered a possible solution. Results from this phase will be analyzed and synthesized in the define phase.

Define. This phase is to analyze and synthesize the data from the emphasize phase and determine the core of the design problem in Batik Ajbura Trajumas to find a solution in the ideate phase. The define phase determines that Batik Depok Ajbura Trajumas just modified the batik motif design based on the request of loyal customers. Thus it needs to explore more batik designs to improve the lack of variation of the existing motifs over the last five years, besides keeping up with lifestyle changes and the trend update and continuing its existence while preserving the local Batik Depok origin.

Ideate. The design ideation process creates digital sketches to determine the color based on the color trend of Indonesia Trend Forecasting (ITF) 2021/2022 with four themes named Essentiality, Spirituality, Exploration, and Exploitation. The digital sketch in the ideate phase also creates combination forms of decorative motifs often found in Batik Depok: Belimbing Dewa (the starfruit motif) and Motif Seragam (the uniform motif), see **Figure 4**.

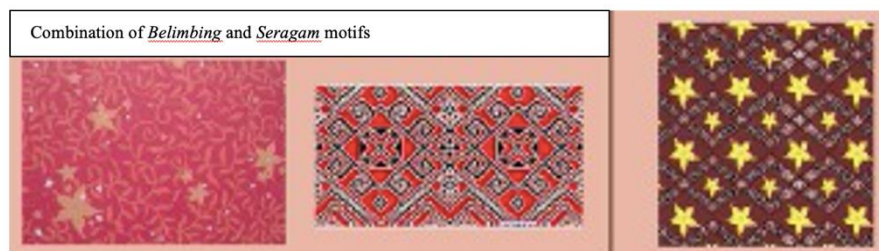


Figure 4. The ideate phases of combining two Batik Depok: *Belimbing Dewa* and *Motif Seragam* (source: Author)

The following tables are the color derivatives of the color trend forecast of ITF 2021/2022 on the Batik Depok motifs of Ajbura Trajumas. The four color themes comprise The Exploration with feminine-casual style; The Exploitation with dramatic style; The Spirituality with exotic-classic elegant style, and The Essentiality with sporty-arty off-beat style, see **Table 1**.

Table 1 Implementation of Color Trend Forecast on Batik Trajumas (Source: Author, [5])

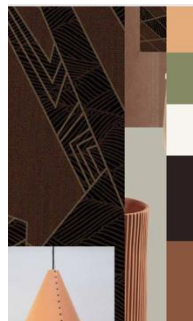
Color theme	Image board	Motif design	Description
<i>The Essentiality</i>			Using casual-feminine romantic style with soft and pale color. The color presents simple, cozy, and homey image.

The Exploitation



Using dramatic style with contrast color (dark blue and light yellow). The *exploitation* presents electrified and excessive appearance.

The Spirituality



The color is more based on traditional values with combination of earth and natural colors. It is presented in an elegant-classic style with a touch of exotic ethnicity.

The Exploration



Using arty off-beat style with a sporty style with combination of natural and digital color image. The color presents in monochromatic scale.

Prototyping. The prototype phase is about applying shapes and (especially) colors based on digital sketches on batik cloth in Ajbura Trajumas, using the mix technique of *batik tulis* (writing techniques) and the stamp. The dyestuffs will be prepared and formulated, then tested to get the required color. The final process of prototyping is applying color concoction to the batik cloth, see **Figur 5**. The prototype phase results batik design with four different color based on the [5].



Figur 5. The preparation of Batik color dyestuffs in prototyping phase (source: author)

Test. The test is about evaluating the prototype of the batik clothes to the owner of SMEs Ajbura Trajumas using interviews and polling. The results shows that implementation of color trend forecast in the prototypes has reached the needs and suitable as the solution to the design problem, from the variations and combination of colors, the shapes, the color image, and the formulated dyed stuff. The next recommendation of the design thinking phase is the ideation to explore more motifs designs, regarding the shapes, by implementing the Indonesia trend forecast.

4 Conclusion

Implementation of Indonesia Trend Forecasting 2021/2022 with a design thinking approach in Batik Ajbura Trajumas could be an alternative solution to improve product innovation while catching up with the ongoing trend and preserving the local wisdom and original motifs of Batik Depok. This research presents innovations of Batik Depok in the form of new motif colors with four color theme of Batik motif design based on the ITF 2021/2022. The color themes comprise (1) The Exploration theme with the sporty-arty off-beat style produces the combination of a natural and digital color image, expressing modernity. (2) The Exploitation theme with the dramatic style produces a contrast color (dark blue and light yellow), expressing an optimistic and fun image. (3) The Spirituality theme with the exotic-classic elegant style produce a combination of earth and natural colors; and (4) The Essentiality theme with the feminine-romantic style produce soft and pale color expressing simplicity, a cozy, and homey image. The recommendation for the following research is to redesign the motif shape based on the trend forecast.

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