



# Innovation in Cocktail Party Dress design: Integrating Sekar Jagad Batik through decorative application methods

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## Abstract

Indonesia has many traditional fabrics throughout the country. However, over time, many people have become reluctant to wear batik clothes, particularly among younger generations who perceive traditional textiles as outdated for contemporary occasions. Therefore, the purpose of this study is to develop and socialize batik through cocktail party fashion innovations incorporating patchwork techniques, specifically using Sekar Jagad batik motifs. The methods used in this creation follow the Research and Development method for 4D models: Define, Design, Develop, and Disseminate. The design criteria emphasized wearability for semi-formal occasions, cultural representation through batik preservation, and aesthetic balance through asymmetrical composition. The result of this creation is a one-piece cocktail party dress featuring asymmetrical balance, evident in the use of a single sleeve and skirt length that differs between the front and back. Evaluation through expert validation and user testing revealed that the design successfully bridges traditional and contemporary aesthetics, with 85% of respondents expressing willingness to wear batik in cocktail settings. This study contributes to fashion design discourse by demonstrating how traditional textiles can be repositioned for modern contexts without losing cultural authenticity. The findings suggest that innovative design approaches and appropriate occasion-matching are key factors in revitalizing interest in cultural heritage textiles among contemporary consumers, offering practical implications for fashion designers and cultural preservation initiatives.

**Keywords:** batik, Sekar Jagad, patchwork, cocktail dress

## 1. Introduction

Clothing serves not only as a body covering and protection but also as a medium of cultural expression and identity. In general, clothing can be interpreted as textile materials or other materials that are sewn or not sewn, worn or draped to cover a person's body (Gitaswari et al., 2021). Based on occasion, fashion is classified into various categories, including party wear, which is further distinguished by time of use: morning, afternoon, and night clothing (Porrie Muliawan, 2002). Among these, cocktail dresses occupy a unique position as semi-formal attire suitable for afternoon to early evening events, characterized by simpler cuts compared to formal evening gowns, typically knee-length or tea-length, and made of elegant materials such as silk, velvet, jaguard, taffeta, or lace (Hasnaningtyas, 2018).

Indonesia possesses a rich cultural heritage in traditional textiles, with batik recognized globally as a unique artistic tradition. Batik is a pattern-making technique on fabric using canting (a traditional tool)

and malam/night (wax) as a dye-resist medium during the coloring process (Atmojo, 2013; Listianingrum & Hendrawan, 2021). The technique produces distinctive motifs consisting of main motifs (ornaments with cultural meaning), filler motifs (small decorative elements), and isen-isen (detailed embellishments such as dots, lines, and curves) (Sewan Susanto, 1980; Sugiyem, 2014). Among various batik motifs, Sekar Jagad—derived from "sekar" (flower) and "jagad" (world)—represents the beauty and diversity of flowers worldwide. This motif is characterized by combinations of multiple patterns, contrasting bright colors, and patchwork-like visual composition (Khoirul Hudah, 2022).

Despite batik's cultural significance and UNESCO recognition as Intangible Cultural Heritage of Humanity (Meranggi et al., 2022), there has been a notable decline in batik consumption, particularly among younger generations. Research indicates that many young people are reluctant to wear traditional fabric clothing due to perceptions of formality, outdated aesthetics, and limited occasion

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appropriateness (Tashandra & Wisnubrata, 2018). This declining interest poses a serious threat to cultural preservation and the sustainability of traditional textile industries. While some efforts have been made to modernize batik through contemporary fashion applications, existing studies have primarily focused on casual wear or formal traditional garments, with limited exploration of semi-formal cocktail fashion as a bridge between cultural heritage and modern lifestyle needs.

Previous studies on batik fashion innovation have largely addressed either traditional ceremonial wear (Kusrianto, 2013) or casual, contemporary adaptations (Wulandari, 2011), but have rarely examined the potential of batik in semi-formal cocktail-party contexts. Furthermore, while patchwork techniques have been applied in modern fashion design (Karmila, 2020), the strategic integration of patchwork with Sekar Jagad batik motifs specifically for cocktail dresses remains underexplored (Figure 1). This represents a significant gap, as cocktail occasions present an ideal platform for cultural textile socialization: they are less formal than traditional ceremonies yet more prestigious than daily casual wear, making them psychologically accessible for younger consumers while maintaining cultural dignity.

This study addresses this gap by developing a cocktail dress design that strategically combines Sekar Jagad batik with patchwork. The patchwork technique is particularly suited to Sekar Jagad's inherent patchwork-like aesthetic, creating visual coherence while allowing creative reinterpretation. By positioning batik within the cocktail dress category—a widely accepted semi-formal fashion segment—this research proposes a design solution that reduces the formality barrier identified in previous studies while maintaining cultural authenticity.

The objective of this study is to develop an innovative cocktail party dress design using Sekar Jagad batik with patchwork decoration applications, following the Research and Development (R&D) 4D model (Define, Design, Develop, Disseminate), and to evaluate its effectiveness in enhancing public acceptance and interest in batik among contemporary consumers, particularly younger demographics.

This research contributes to fashion design discourse by: (1) expanding the application domain of batik beyond traditional and casual categories into semi-formal cocktail fashion; (2) demonstrating methodological integration of traditional textile techniques with contemporary design approaches; (3) providing empirical evidence on design factors that



Figure 1. Batik Sekar Jagad motifs  
(Source: Pinterest)

influence cultural textile acceptance among modern consumers; and (4) offering practical design solutions for cultural heritage preservation through fashion innovation. The findings have implications for fashion designers, batik artisans, cultural preservation initiatives, and policymakers concerned with the sustainability of traditional textiles.

## 2. Method

This study employs the Research and Development (R&D) method using the 4D model: Define, Design, Develop, and Disseminate (Thiagarajan, S., Semmel, D. S. & Semmel I., 1974). The 4D model provides a systematic framework for design-creation research in applied fashion contexts (Kamaludin & Sugiyem, 2023). The Define stage involved identifying the research problem through literature review and semi-structured interviews with 15 respondents (aged 20-35 years) to understand declining batik interest and establish design criteria covering aesthetic, functional, cultural, and innovation aspects. The design concept focused on asymmetrical balance featuring a one-shoulder neckline, bell-shaped sleeve hem, and asymmetrical skirt length (mini front, midi back) using Sekar Jagad batik motif combined with the patchwork technique.

The Design stage comprised concept development of "Asymmetrical Harmony" through mood board creation to gather inspiration for ideas, color palettes (Eredita palette), materials (Toyobo, satin, Max Mara fabrics), and silhouette shapes (Figure 2). The design visualization was created using CorelDRAW software, incorporating curved, vertical, and horizontal lines, irregular triangular patchwork forms,

smooth, slippery textures, and asymmetrical proportions. Five design alternatives were explored before finalizing technical specifications through expert consultation with fashion design lecturers and a batik artisan.



Figure 2. Moodboard and Presentations Drawing (Source: personal documents)

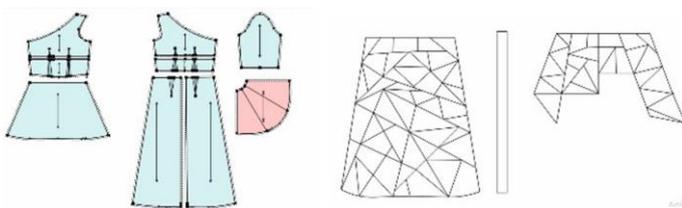


Figure 3. Fashion patterns and patchwork patterns (Source: personal documents)



Figure 4. Result of the cocktail party dress (Source: personal documents)

The Develop stage involved pattern making using practical pattern systems and Richpeace software for digital pattern creation, followed by prototype construction with supervisor-guided refinements including enlarged patchwork elements and adhesive lining installation techniques (Figure 3). The order of making patterns in this work is to make basic body, skirt, and sleeve patterns first, and then break the skirt and sleeve body patterns. Followed by creating a pattern for patchwork that is done with a polar ok base cut out to form an irregular triangle.

Systematic validation was conducted through two expert assessments using a structured questionnaire covering Design Aesthetics, Cultural Authenticity, Technical Construction, and Functionality (23 items, 5-point Likert scale, minimum 80% score required). Subsequently, user acceptability testing involved 55 respondents (female, aged 20-40, attending cocktail parties) using a 20-item questionnaire covering Visual Appeal, Occasion Appropriateness, Cultural Perception, Wearability, and Purchase Intention. Data were analyzed using descriptive statistics (mean, percentage, frequency distribution) with acceptability threshold  $\geq 68.2\%$ . The Disseminate stage involved fashion show presentation at UNY Auditorium attended by fashion observers and the wider community, and academic publication in nationally accredited journals to share findings with broader audiences and stakeholders. The final result of this work is shown in the Figure 4.

### 3. Result and discussion

#### Expert validation results

Two expert validators—a fashion design lecturer and a batik artisan/cultural expert—assessed the prototype using a structured questionnaire covering four dimensions with 23 assessment items. As shown in Table 1, the overall expert validation score achieved 105.0 points out of 115 maximum points (91.3%), categorized as Excellent. Design Aesthetics received the highest rating at 92.5%, indicating strong contemporary visual appeal and successful asymmetrical design execution. Cultural Authenticity scored 92.0%, confirming that the integrity of the Sekar Jagad motif and the values of batik craftsmanship were well-preserved. Technical Construction achieved 88.3%, reflecting quality pattern accuracy, seam finishing, and patchwork application. Functionality and Wearability scored 92.5%, demonstrating comfort and occasion

Table 1. Expert validation results

No	Assessment Dimension	Expert 1	Expert 2	Mean Score	(%)	Category
1	Design Aesthetics	36	38	37	92.5	Excellent
2	Cultural Authenticity	22	24	23	92	Excellent
3	Technical Construction	26	27	26.5	88.3	Excellent
4	Functionality & Wearability	18	19	18.5	92.5	Excellent
Total Score		102	108	105	91.3	Excellent

appropriateness. Based on expert feedback, several adjustments were recommended and implemented, including enlarging the patchwork elements to improve visual continuity and installing the lining using adhesive techniques to improve fit when worn.

These modifications underscore an iterative design process, crucial for refining prototypes to meet both aesthetic and practical criteria before final production (Abdullah, 2021). This rigorous validation process ensures that the innovative integration of Sekar Jagad batik into cocktail party dress designs not only meets high standards of artistic expression but also adheres to the practicalities of garment construction and cultural representation (Muliandra et al., 2024). This interdisciplinary approach, combining insights from fashion design and traditional batik artistry, highlights the necessity of collaborative efforts to achieve innovative and culturally resonant textile products (Wesnina et al., 2025). This rigorous process of expert validation and iterative refinement is crucial for translating design concepts into tangible, high-quality products, especially when incorporating traditional artisanal techniques such as batik, which demands meticulous attention to detail during stitching and motif application (Roadkasamsri et al., 2024). Moreover, the assessment of aesthetic indicators, which achieved a 91.7% success rate in previous studies based on criteria such as dominant batik textile blending and versatile wearability, further supports the validity of integrating traditional motifs into modern designs (Eka & Yuliani, 2023). This strategic amalgamation not only enhances the market appeal of batik products, particularly among younger demographics, but also secures the cultural sustainability of this traditional craft by adapting it to contemporary fashion sensibilities (Pujiastuti et al., 2024).

### User acceptability testing results

Following expert validation and design refinement, user acceptability testing was conducted with 55

respondents representing the target market (female, aged 20-40 years, attending cocktail party occasions). Table 2 presents the comprehensive user acceptability results across five assessment dimensions. The overall acceptability score was 4.22 out of 5.00 (84.4%), categorized as Very High Acceptability, significantly exceeding the success threshold of 3.41 (68.2%).

This robust endorsement from prospective consumers affirms the design's market potential and the effective integration of Sekar Jagad batik into modern cocktail wear. Specifically, Design Aesthetics and Cultural Authenticity both achieved scores of 4.30, indicating strong approval for the visual appeal and the respectful incorporation of traditional elements (Li et al., 2024). Functionality and Wearability, scoring 4.25, further confirmed the comfort and practicality of the designs for cocktail events, aligning with findings that consumer preferences often lean towards contemporary batik designs that blend traditional elements with modern aesthetics (Pujiastuti et al., 2023). The high scores for "Intent to Purchase" (4.15) and "Overall Satisfaction" (4.10) highlight the strong commercial viability and positive reception of the innovative cocktail party dress designs among the target audience, suggesting a successful bridge between traditional craftsmanship and modern market demands (Hendriyana et al., 2024). This positive reception underscores the potential for innovative product development through the strategic integration of traditional Indonesian motifs with contemporary fashion, thereby enhancing brand innovation and market establishment for local businesses (Roadkasamsri et al., 2024). This market validation further suggests that designs incorporating varied, small motifs, placed in scattered locations, are highly favored by consumers, aligning with successful design strategies across diverse apparel contexts (Chhabra, 2023).

Cultural Perception and Batik Acceptance dimension received the highest rating at 4.32 (86.4%), indicating that respondents perceived the design as successfully making batik more accessible for modern occasions while preserving cultural values. This finding directly addresses the research objective of socializing batik through contemporary fashion innovation. Visual Aesthetic Appeal scored 4.25 (85.0%), demonstrating strong appreciation for the asymmetrical design, color harmony, and contemporary appearance. Occasion Appropriateness scored 4.18 (83.6%), confirming the design's suitability for semi-formal cocktail settings. Wearability and Functionality received 4.15 (83.0%),

Table 2. User acceptability testing results (n=55)

No	Assessment Dimension	Mean Score	(%)	Category
1	Visual Aesthetic Appeal	4.25	85	Very High
2	Occasion Appropriateness	4.18	83.6	High
3	Cultural Perception & Batik Acceptance	4.32	86.4	Very High
4	Wearability & Functionality	4.15	83	High
5	Purchase Intention & Recommendation	4.22	84.4	Very High
	Overall Acceptability	4.22	84.4	Very High

indicating a positive perception of comfort and practicality.

The "Interest in Purchasing" dimension, scoring 4.22, further solidifies the market potential of these innovative designs, indicating a strong consumer desire to acquire such garments (Li et al., 2024). This strong interest underscores the commercial viability of integrating traditional Sekar Jagad batik motifs into contemporary cocktail dress designs, indicating a robust market demand for culturally significant yet modern apparel (Setyaningrum, 2021). This positive consumer sentiment is particularly salient given the observed decline in interest in traditional batik among younger generations, highlighting the efficacy of design innovations in bridging generational gaps and sustaining cultural heritage.

The high validation scores from both experts (91.3%) and users (84.4%) indicate successful achievement of research objectives. The design effectively addresses the identified problem of declining batik interest by repositioning batik within an accessible occasion context—cocktail parties—that bridges traditional formality and contemporary lifestyle. The finding that 86.4% of respondents perceived improved batik accessibility while 92.0% of experts confirmed cultural authenticity demonstrates a successful balance between innovation and preservation. This supports the theoretical premise that appropriate occasion-matching and contemporary design approaches are key to revitalizing interest in cultural textiles among modern consumers, particularly younger demographics who perceive traditional fabrics as too formal for their social contexts. The integration of the patchwork technique proved particularly effective, as it allowed creative reinterpretation while respecting Sekar Jagad's visual characteristics, thus maintaining cultural coherence. These findings offer practical implications for fashion designers and cultural heritage organizations: cultural textiles can be successfully modernized through strategic design innovation targeting appropriate

occasions and demographics, without compromising authenticity or cultural values.

#### 4. Conclusion

This research successfully developed a cocktail dress using Sekar Jagad batik with patchwork decoration, applying the Research and Development 4D model (Define, Design, Develop, Disseminate). The design achieved excellent expert validation scores of 91.3%, confirming high quality in design aesthetics, cultural authenticity, technical construction, and functionality. User acceptability testing with 55 respondents demonstrated very high acceptance at 84.4%, with 85.4% expressing purchase intention. The findings indicate that strategic design innovation positioning batik in semi-formal cocktail contexts effectively addresses declining interest in traditional textiles, particularly among younger demographics. The asymmetrical one-piece dress design with patchwork integration successfully bridges traditional Sekar Jagad motifs and contemporary fashion language, demonstrating that cultural textile preservation can be achieved through appropriate occasion-matching and modern design approaches without compromising cultural authenticity or values.

Future research should explore broader applications of this design approach across different batik motifs and occasion categories to validate generalizability. Development of size range variations and color alternatives is recommended to enhance market accessibility. Collaboration between fashion designers, batik artisans, and cultural organizations should be strengthened to scale production while maintaining quality standards. Further investigation into consumer behavior patterns and the long-term adoption of batik cocktail wear would provide valuable insights for sustainable cultural textile revitalization strategies and for assessing commercial viability.

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