

## The Creation of the “Sirena Varunya” in Presenting the Transformable Fashion Concept

Aliyya Raharjanti<sup>1\*</sup> , Adhi Kusumastuti<sup>2</sup> 

<sup>1</sup>Universitas Negeri Semarang, Indonesia, <https://orcid.org/0009-0001-0061-290X>

<sup>2</sup>Universitas Negeri Semarang, Indonesia, <https://orcid.org/0000-0002-8909-2030>

\*Corresponding Author: [raharjantialiyya@students.unnes.ac.id](mailto:raharjantialiyya@students.unnes.ac.id)

---

### Abstract

The Sirena Varunya gown design was created as an exploration of transformable fashion design inspired by the dynamic visual of ocean waves while responding to sustainability issues in contemporary fashion. This study aims to produce a fashion design with high aesthetic value and optimal functionality. The research employed a practice-based research approach using the PPE development model (Planning, Production, Evaluation), which includes conceptual planning, production, and evaluation through a feasibility test conducted by three expert panellists. The feasibility test results indicate that the ‘Sirena Varunya’ design is in the “highly feasible” category, with an average score of 92% across six indicators: design, size, sewing technique, aesthetics, performance, and uniqueness. The uniqueness indicator received the highest score (98%), highlighting the originality and creative strength of the design. Nevertheless, the panellists provided several constructive recommendations, including strengthening beads embellishment attachment, improving the precision of the draping, adjusting the tail structure to prevent folding during movement, and exploring lighter materials to enhance comfort and mobility. Overall, the ‘Sirena Varunya’ design successfully translates ocean-inspired aesthetics into an innovative transformable fashion design while demonstrating strong creative identity and functional consideration.

**Keywords:** transformable fashion, feasibility, couture

---

### INTRODUCTION

The fashion industry is one of the fastest growing creative sectors and has continually demonstrated significant dynamism in aesthetic and product innovation, as well as in its responses to environmental and social challenges. The rapid expansion of the fashion industry presents substantial sustainability challenges, particularly concerning textile waste, pollution, and overconsumption. Based on a systematic review of the life cycle assessment (LCA) of the textile industry, the environmental impact of the fashion industry mainly arises from water use, greenhouse gas emissions, and textile waste, so a more sustainable approach is urgently needed.<sup>1</sup>

Awareness of the negative impact of the fashion industry on the environment has increased in recent year. Sustainability has become a major focus in fashion innovation to produce clothing that is not only visually appealing, but also environmentally friendly and efficient in use. Awareness of sustainability trends creates an urgency for designers to come up with design strategies that can reduce ecological footprint without neglecting functional and artistic aspects.

One design strategy that responds to sustainability pressures is the development of transformable fashion. In the Cambridge Dictionary, “transformable” means “able to be changed”. Transformable fashion refers to clothing designed that has several styles within a single piece. Transformable fashion design allows a single piece to have more than one shape or function through a

---

<sup>1</sup> Komal Dhiwar and Madhura Bedarkar, “Life Cycle Assessment in Fashion Industry: A Systematic Review,” *Discover Sustainability* (Springer Nature, December 1, 2025), <https://doi.org/10.1007/s43621-025-02050-7>.

modular system, detachable connections, or innovative construction techniques.<sup>2</sup> This concept enables a single piece to serve multiple functions or appearance, thereby extending its lifespan and reducing the need for repeated consumption.<sup>3</sup>

One of the root causes of the sustainable fashion industry is increasing consumption and rapid fashion turnover. Transformable fashion can enhance clothing utility, reduce the new production demand, and provide alternatives in sustainability-oriented design practices.<sup>4</sup> Transformable fashion is designed to enhance wearer convenience, as it not only saves space but also reduces costs by allowing a single piece to be worn in multiple styles. A single piece can accommodate multiple functions and styles, thereby potentially reducing the frequency of new purchases and the amount of resulting waste. The application of transformable design also expands creative possibilities within sustainable fashion practices.

Local designers and academics have increasingly recognized the potential of transformable and modular clothing as an adaptive strategy for addressing social-industrial fashion issues. Research on designers' roles in mitigating fast fashion mentions that modular structures and durable designs are effective approaches to reducing waste and enhancing product longevity.<sup>5</sup> If implemented effectively, this concept can help shift fashion production and consumption toward more environmentally friendly direction.

The fast fashion trend with its high production cycle necessitates a design approach that extend product lifespan while minimizing the demand for new manufacturing. The creation of 'Sirena Varunya' began as an innovative solution in response to sustainability issues in the fashion industry. Designed using transformable principles, 'Sirena Varunya' enables for changes in silhouette and function through removable modules and customized construction techniques. 'Sirena Varunya' aims to optimize the utility of a single piece for more than one context, reducing potential waste, and extending its lifespan while maintaining its aesthetic value.

Based on the background outlined above, this study focused on two main issues. This study examined how the concept of transformable fashion is actualized in the 'Sirena Varunya'. This implementation includes the stages of idea exploration, sketch preparation, moodboard and design, and production processes that emphasize transformation mechanism as the core feature. Moreover, this study evaluated the feasibility of the 'Sirena Varunya' based on six indicators: design, size, sewing techniques, aesthetics, fashion performance, and uniqueness. This problem formulation served as the analytical foundation for assessing the extent to which the 'Sirena Varunya' successfully applies the concept of transformable fashion and meets both aesthetic and technical feasibility standards.

## METHOD

This study adopted a practice-based research in which the creative process becomes the main source of knowledge.<sup>6</sup> This study employed the development model by Richey and Klein, known as PPE, which comprised three systematic stages: planning, production, and evaluation.<sup>7</sup> The planning

---

<sup>2</sup> Chunmin Lang and Bingyue Wei, "Convert One Outfit to More Looks: Factors Influencing Young Female College Consumers' Intention to Purchase Transformable Apparel," *Fashion and Textiles* 6, no. 1 (December 1, 2019), <https://doi.org/10.1186/s40691-019-0182-4>.

<sup>3</sup> Mira Marlianti and Hadi Kurniawan, "Konsep Sustainable Fashion pada Perancangan Karya Busana," n.d.

<sup>4</sup> Anika Ansari and Nikhila Rane, "Investigation of Conventional and Natural Treatments: Assessing the Healing Potential of Apple Cider Vinegar, Tulsi, Turmeric, Neem and Lemon Water," *International Journal of Home Science* 11, no. 1 (January 1, 2025): 603–9, <https://doi.org/10.22271/23957476.2025.v11.i1h.1832>.

<sup>5</sup> Chanifathin Nidia and Ratna Suhartini, "Dampak Fast Fashion dan Peran Desainer dalam Menciptakan Sustainable Fashion," vol. 09, 2020.

<sup>6</sup> Hazel Smith and Roger T. Dean, "Practice-Led Research, Research-Led Practice in the Creative Arts," n.d.

<sup>7</sup> Mayang Anggraini Putri, I Dewa Ayu Made Budhyani, and Ni Ketut Widiartini, "Pemanfaatan Limbah Perca pada Pengembangan Busana Ready to Wear Menggunakan Teknik Patchwork dengan Sumber Ide Pandemi Covid-19," *Jurnal Bosaparis : Pendidikan Kesejahteraan Keluarga* 14 (July 2023).

stage focused on the formulating the product design, the production stage is the process of realizing the design into a tangible form, and the evaluation stage was conducted to assess the product's feasibility.<sup>8</sup>

Data collection at the evaluation stage was carried out through a feasibility test to obtain information regarding feasibility based on six indicators: design, size, aesthetics, sewing technique, performance, and uniqueness. The feasibility instrument was arranged in the form of an assessment sheet using a Likert scale method with criteria as shown in Table 1.

**TABLE 1.** Product Feasibility Assessment Criteria<sup>9</sup>

Percentage	Category
81% - 100%	Very Feasible
61% - 80%	Feasible
41% - 60%	Quite Decent
21% - 40%	Less Than Feasible
0% - 20%	Not Feasible

Sources: (Amelia, 2021)

The Likert scale was selected because it is widely used to measure the attitudes, opinions, and perceptions of individuals or groups toward a particular phenomenon.<sup>10</sup> The feasibility test for 'Sirena Varunya' was carried out by three expert panellists. Data obtained from the assessment sheets were analysed descriptively and quantitatively. This analysis aimed to provide an objective overview of the conditions examined through numerical processing.<sup>11</sup>

## Theory

### Haute Couture

Haute couture is the highest category in the fashion industry, characterized by design exclusivity, superior craftsmanship, and highly detailed construction.<sup>12</sup> Haute couture has long been associated with the Chambre Syndicale de la Haute Couture in France, which sets formal criteria for production methods, manufacturing standards, and the required number of collections presented annually.

Haute couture focuses on the handcrafted creation of fashion pieces using high-level construction techniques, premium materials, and a personalized process involving multiple fittings. Unlike mass-produced fashion, haute couture is produced in extremely limited quantities or even as single. Its creation enables the exploration of complex constructions, experimental material manipulation, and traditional techniques requiring exceptional expertise, such as hand beading, embroidery, fabric draping, and various couture finishing techniques. Accordingly, haute couture can be understood as a form of art that integrates creativity, technical mastery, and innovation.

Haute couture in the fashion industry is not solely commercial but also deeply experimental. It functions as a creative laboratory that fosters innovation through the development of new materials, the use of digital technologies, and the integration of construction that cannot be applied in mass

<sup>8</sup> Siti Sarah Ermalena, Sri Wening, and Emy Budiastuti, "Pengembangan Tunik Menggunakan Pengaplikasian Teknik Colet-Boshi Shibori pada Wanita Karir dengan Bentuk Tubuh Pendek Gemuk," *Fashion and Fashion Education Journal* 12, no. 1 (2023), <https://journal.unnes.ac.id/sju/index.php/ffe/index>.

<sup>9</sup> Risa Amelia, Siti Mariah, and Enggar Kartikasari, "Pengembangan Media Pembelajaran Dasar Desain Berbasis Flip Chart Menggunakan Puzzle Di Aekolah Menengah Kejuruan (Development of Design Basic Learning Media Based on Flip Chart Using Puzzle in Vocational Middle School)," n.d.

<sup>10</sup> Bilson Simamora, "Skala Likert, Bias Penggunaan Dan Jalan Keluarnya," *Jurnal Manajemen* 12, no. 1 (November 22, 2022): 84–93, <https://doi.org/10.46806/jman.v12i1.978>.

<sup>11</sup> Sugiono, *Metode Penelitian Kuantitatif, Kualitatif, dan R&D* (Bandung: ALFABETA, 2023), [www.cvalfabeta.com](http://www.cvalfabeta.com).

<sup>12</sup> Han Liu dan Shuiqing Wang, "Reframing Haute Couture in the Contemporary Fashion System," *International Journal of Fashion Design, Technology and Education* 14, no. 3 (2021): 267–275.

production.<sup>13</sup> Although often associated with luxury, several studies indicate that haute couture aligns with sustainability principles that prioritize longevity and artistic value.<sup>14</sup> Its characteristics, such as limited production and high quality, position haute couture as inherently more sustainable than conventional industrial fashion.

### **Transformable Fashion**

Transformable fashion refers to clothing that can be changed. It represents an innovation in the fashion industry that emphasizes functional flexibility and structural adaptability within in one design. This concept offers two or more functions and/or alternative aesthetic styles, such as fashion pieces that can shift into different forms through various manipulation techniques, including wrapping, tying, rolling, twisting, folding, or gathering. Transformable fashion is defined as a design approach that enables changes in structure, style, or function through specific mechanisms, allowing a single piece to adapt to various contexts of use.<sup>15</sup>

The concept of transformable fashion refers to clothing designs that can be modified, disassembled and reassembled, altered in silhouette, or converted into other forms based on the wearer's needs. Pieces developed under this concept is capable of providing a fashion design experience because it can be realized through various form, from the use of fastenings, to interactive technology. Transformable fashion enhances product utility, which positively affects usage by extending the item's lifespan, delaying psychological obsolescence, and postponing disposal.<sup>16</sup>

### **Contemporary Batik**

Batik is one of Indonesia's cultural heritages that has been recognized by UNESCO in 2009 as a Masterpiece of the Oral and Intangible Heritage of Humanity. In general, batik is defined as a patterned textile produced through a wax-resist dyeing technique using hot wax to create distinctive motifs.<sup>17</sup>

In the development of the creative industry, batik has undergone a transformation into contemporary batik. Contemporary batik is a form of design expression that retains traditional batik techniques but with more experimental exploration of motifs, colours, and compositions.<sup>18</sup> Contemporary batik combines traditional techniques with freer visual and technical innovation to suit modern market preferences.

The visual exploration in contemporary batik is reflected through the use of abstract, geometric, figurative motifs, or even motifs that reinterpret natural and cultural phenomena. Its colour palette has also increasingly varied adopting freer approaches such as modern gradations, pastel shades, or contrasting colour combinations that were not previously found in classic batik. Contemporary batik emphasizes aesthetic freedom and artistic value, providing broader room for interpretation.<sup>19</sup> Contemporary batik continues to uphold cultural continuity by integrating traditional values while

---

<sup>13</sup> Adlien Fadlia and Novi Yuniarti, "Digital Couture, The Intersection of Technology and Fashion In The Creations of Iris van Herpen," *ICDAD: International Conference Dialogue on Art & Design*, 2024, [www.senirupaikj.ac.id](http://www.senirupaikj.ac.id).

<sup>14</sup> Zeynep Ozdamar-Ertekin, "Can Luxury Fashion Provide a Roadmap for Sustainability?," *Markets, Globalization & Development Review* 4, no. 1 (2019), <https://doi.org/10.23860/mgdr-2019-04-01-03>.

<sup>15</sup> Lang and Wei, Op. Cit., hlm. 3

<sup>16</sup> Devina Gunawan, Yoanita Kartika Sari Tahalele, and Marini Yunita Tanzil, "Perancangan Pakaian B-Leisure untuk Wanita Karir dengan Konsep Transformable pada Brand Logom," *Moda* 2, no. 2 (July 2020): 65–83.

<sup>17</sup> Muhamad Ardan Zia Hakim, "Corak Batik Mega Mendung sebagai Warisan Budaya Cirebon dalam Fashion Photography," 2019.

<sup>18</sup> Anindita Atika Sari and Apika Nurani Sulistyati, "Perancangan Motif Batik Kontemporer untuk Tekstil Pakaian," *Ornamen: Jurnal Pengkajian dan Penciptaan Seni Kriya* 22, no. 1 (2025): 2685–614, <https://jurnal.isi-ska.ac.id/index.php/ornamen/78>.

<sup>19</sup> Muhammad Harun Rosydi and Fajar Ciptandi, "Visual Analysis of Contemporary Batik Motifs: The Meaning Behind Tribusono Batik," *International Journal of Art and Design Studies (IJADS)* 2, no. 4 (2023): 265–74, <https://doi.org/10.55927/ijads.v2i4.14733>.

adapting to the dynamics of the modern fashion industry.<sup>20</sup> The combination of traditional and modern values makes contemporary batik relevant in the creation of works that are both culturally valuable and innovative.

### **Sirena Varunya**

The 'Sirena Varunya' fashion design is a conceptual representation inspired by ocean aesthetics and mythological elements. Etymologically, the word 'sirena' refers to the term siren or mermaid, which originated in European and Mediterranean mythology and has since been widely used in various popular cultural representations. The figure of the siren in the fashion industry is often used to express dramatic silhouettes that combine body curves and volume expansion at the bottom.

The word 'sirena' reflects the main inspiration behind the mermaid silhouette, especially the fit and flare silhouette that accentuates the curves of the upper body and widens at the bottom. 'Varunya' is adapted from the word 'varuna', a term in Sanskrit linguistic tradition related to the concepts of water, the ocean, and the ruler of the seas. In Hindu mythology, 'varuna' symbolizes the power of water, the depth of the sea, and the principle of order in nature. In naming works, phonetic modifications are commonly made to create a new identity that still has its roots in meaning.<sup>21</sup> 'Sirena Varunya' uses the narrative of the ocean as a source of inspiration. Elements of motif development, variations in curved lines, repeating patterns, and layered compositions are used to depict the dynamics of the sea.

The colour palette is a crucial element in establishing the identity of a fashion design. The colours used reflect the nuances of the sea, such as blue, white foam, or soft gradations that mimic the depth of the ocean. In developing the silhouette, waves inspire flowy contours, drapery, and layering that create a soft and organic visual impression. In addition, the choice of materials plays an important role in creating the impression of ocean waves, such as chiffon, organza, satin, tulle, and crepe, because their ability to fall like flowing water. Pleating techniques, ripple textures, layered transparencies, and volume play are also used to highlight the visual dynamics of ocean waves.

## **RESULT AND DISCUSSION**

### **Planning of 'Sirena Varunya'**

#### **Exploration of Ideas and Sketching**

The idea exploration stage is the initial foundation of the design process, where concepts, themes, and visualizations begin to be developed in depth. Theme of this design is "Wave in Motion," with ocean waves as the main source of inspiration.

The sea is seen as a symbol of vast natural beauty, mystery, and dynamic, embodying both aesthetic and philosophical significance that can be interpreted through clothing. The choice of waves as the main element is inseparable from its organic, flowing, and expressive visual nature, providing ample opportunities to explore silhouettes, surface details, and fabric textures. The ever-changing movement of waves reflects the values of flexibility that are in line with the concept of transformable fashion. Waves also reflect the dynamics of emotion and unexpected elegance, which are expected to be reflected in dramatic yet harmonious designs.

In fashion design, wave elements are often expressed through details such as ruffles, drapery, layering, pleats, and asymmetrical cuts, which depict the gentle movement of seawater. In addition, ocean colours such as deep blue, light blue, and silver also inspire the colour palette of 'Sirena Varunya' design. The initial sketches were developed based on visual imagery of ocean waves and textural interpretations through material manipulation techniques such as stacking and folding, transparent layering, and volume play.

#### **a. Moodboard and 'Sirena Varunya' Design**

The moodboard is based on the collection theme, "Wave in Motion" which focuses on the artistic interpretation of ocean waves. The visual elements on the moodboard include waves, water textures,

---

<sup>20</sup> Aida Roihana Zuhro, "Transformasi Artistik: Dinamika Desain Batik dalam Konteks Sosial-Modern," *Aksa Jurnal Desain Komunikasi Visual* 8, no. 1 (2024): 74–89, <http://jurnalaksa.stsrdvisi.ac.id>.

<sup>21</sup> Mohd Fauzi Harun et al., "Semiotic and Cultural Analysis on Local Product Brand Name," *International Journal of Academic Research in Business and Social Sciences* 13, no. 1 (January 16, 2023), <https://doi.org/10.6007/ijarbss/v13-i1/15884>.



colour palettes, fabric surface details, and references from designers who have explored ocean theme. Inspirational images were sourced from platforms such as Pinterest. To convey the intended atmosphere and character of the design, Figure 1 presents the moodboard containing the primary visual references.



FIGURE 1. 'Wave in Motion' Moodboard

The main concept of the design is to create transformable fashion that enables immediate changes in shape on stage, enabling two different looks to be presented in a single performance.

#### a) First Look (Before Transformation)

In the first look, presented in Figure 2, 'Sirena Varunya' was designed to highlight an elegant silhouette that reflects both the calmness and softness of ocean waves. The top of the gown featured a fitted bustier, complemented by an organza strap opening at the back that gives a light and transparent impression. The bustier was paired with butterfly sleeves constructed through layering and ruffles as a visual interpretation of the waves that were the main inspiration.

The lower part of the gown featured a long dress with a semi-circular skirt pattern and a train at the back. The front of the skirt enriched with drapery accents that flow from the hip to the waistline, adding visual dimension and providing a soft yet striking artistic touch.



FIGURE 2. 'Sirena Varunya' Design Before Transformation

#### b) Second Look (After Transformation)

In the second look, 'Sirena Varunya' transformed into a more defined silhouette with a glamorous appeal. The bustier was extended beyond the front waistline, creating the visual illusion of a slimmer waist. The bustier lower edge was connected to a peplum made from batik with Kencana Padjajaran pattern. The peplum embellished with sequins and pearls along the hem, as well as additional strands that represent the sparkle of seawater.



FIGURE 3. 'Sirena Varunya' Design After Transformation

The lower part of the gown featured a form-fitting mermaid silhouette, constructed from bridal satin combined with pleated tulle to add texture. The transformation was achieved by releasing a hook on the left side of the skirt, which is connected to a hidden button on the right side of the bustier's waistline. The A-line skirt used in the first look is repurposed as a long train in the second look. Figure 3 illustrates 'Sirena Varunya' in its fully transformed state. This transformation was designed to be performed directly on stage.

#### **Production of 'Sirena Varunya'**

The main material used in the 'Sirena Varunya' was bridal satin, a type of satin fabric with a smooth texture, excellent drape, and a shiny surface that gives a luxurious and elegant appearance. Bridal satin is generally made of polyester or synthetic fibre blends. Bridal satin is well-suited for constructing bustiers that require precise shaping. As an accent to add dimension and texture, pleated tulle is used. Pleated tulle is lightweight, transparent, and flexible, making it suitable for representing ocean waves. The pleats on the tulle create a layered effect that reinforces the 'flowing' impression that is the main characteristic of "Wave in Motion" theme.

The lining material used in the 'Sirena Varunya' was asahi fabric, a lining material that is lightweight, cool, and soft that enhances wearer comfort. Lining of the A-line skirt used shimmer satin, a type of satin with strong light reflection. Under stage lighting, shimmer satin generates a sparkling effect beneath the piece, enriching the overall visual dimension.

The production of 'Sirena Varunya' begun with precision pattern making. Patterns form the basis for determining the shape, proportions, and structure of the fashion piece to be constructed, including functional and aesthetic transformation requirements. The patterns were constructed manually, drawn directly onto pattern paper based on the measurements of the model's body.

The next stage in realizing the fashion design was the production of a prototype, which serves as an initial sample to test pattern accuracy, silhouette proportions, comfort, and the functionality of the transformation mechanism. As shown in Figure 4, calico fabric was used to construct the prototype. The use of calico allowed for adjustments to construction or shape errors without wasting the main material.



FIGURE 4. 'Sirena Varunya' Prototype

Through prototype, observations were made to ensure that the pattern pieces are able to form the body contour according to the design. Specifically, a hook mechanism, comprising hidden buttons and connecting straps, was installed to evaluate the effectiveness of transforming the silhouette from A-line to mermaid. The hook mechanism must have sufficient strength while remaining concealed from the outside. The final pattern was refined based on observations of the prototype, then transferred to the main materials of the 'Sirena Varunya'. The fabric was cut according to the grain and pattern markings. This process must be done with precision so that there are no differences in size between the pieces, which could affect the final silhouette of the design. The next step was to assemble the piece.

Starting with the bustier as the core structural element of the piece, the bustier was sewn using high-precision techniques to ensure a perfect fit, with an attached lining to enhance comfort and maintain structural stability. Peplum was attached at the lower edge of the bustier. The butterfly sleeves were crafted manually using layering and ruffle techniques, with multiple layers of pleated tulle. The lower part of the 'Sirena Varunya' produced in two stages: an A-line skirt with a semi-circular pattern and a mermaid skirt. The hook mechanism was precisely positioned to ensure that silhouette changes during the transformation look natural and maintain the aesthetic harmony of the dress.

The main decoration was applied to the peplum in the second look. The peplum was selected as the focal point because it serves a dual purpose: emphasizing cultural identity through batik and to create a strong visual impression through the detailed decorative elements. The embellishments were executed using hand-sewing techniques. The decorative elements consisted of various types of sequins and pearls in a variety of colours, including white, grey, dark and light blue, silver, and transparent. The use of transparent sequins was intended to capture and reflect light, producing a sparkling effect reminiscent of sunlight glinting on the sea surface. Synthetic pearls were interspersed to add visual depth and enhance elegance. Sequins were arranged to hang down on the peplum, resembling dripping water.

The production process ended with the finishing process, ensuring accurate measurements and trimming. After the finishing process, a transformable fashion design 'Sirena Varunya' was complete. Figure 5 presents the first look of 'Sirena Varunya' before the transformation. The transformation was achieved by releasing the hooks, resulting in the second look, as shown in Figure 6.





FIGURE 5. 'Sirena Varunya' First Look



FIGURE 6. 'Sirena Varunya' Second Look

### Evaluation of 'Sirena Varunya'

A feasibility test was conducted to evaluate the 'Sirena Varunya' fashion design across six criteria: design, size, sewing technique, aesthetics, performance, and uniqueness. This feasibility test involved three experts in the field of fashion.

Before collecting data, the assessment instrument sheet must undergo validity and reliability testing. Instruments that have been proven to be valid and reliable will ensure that the data collected has an adequate level of accuracy and consistency. Fulfilling these two criteria is a fundamental requirement for obtaining accurate, credible, and accountable research results.<sup>22</sup> This study used content validity by applying the Content Validity Index (CVI) and measured using Aiken's V validity to calculate the Content Validity Coefficient based on the results of the instrument validator on the extent to which the listed indicators can represent. Validity calculations were performed using the CVI formula in equation (1).<sup>23</sup>

$$V = \frac{\sum S}{n(c-1)} \quad (1)$$

Description:

- V = Validity index
- $\sum S$  = Total agreement score
- n = Number of validators
- c = Number of assessment categories

<sup>22</sup> Sugiono, Op. Cit., hlm. 6.

<sup>23</sup> Nur Hidayah and Muhtarom, "Validity and Reliability Test of Teaching Materials Using Aiken's V Formula and SPSS 22," *Schola* 1, no. 2 (2023): 75–82, <https://journal2.upgris.ac.id/index.php/schola/>.

The results of the instrument validity test were then classified based on Aiken's V interpretation guidelines as reviewed in Table 2.

	Interclass Correlation	TABLE 2. Instrument Validity Test 95% Confidence Interval		F Test with True Value o			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	.926	.835	.948	45.365	29	174	.000
Average Measures	.978	.956	.972	45.365	29	174	.000

Sources: Output SPSS

Based on the calculations in Table 2, a validity test value of 0.926 was obtained. This value indicates that the instrument is in the high category and is valid.

Reliability was tested by analysing the consistency between items in the assessment instrument using specific techniques.<sup>24</sup> An instrument is considered reliable if it is able to produce consistent data when used at different times. Reliability calculations for data consistency are performed using the Interclass Correlation Coefficient (ICC) formula, with the ICC reliability coefficient presented in Table 3.

TABLE 3. Interpretation of Reliability <sup>25</sup>	
ICC	Interpretation of Reliability
< 0.50	Poor
0.50 – 0.75	Moderate
0.75 – 0.90	Good
0.90 – 1.00	Excellent

Sources: (Królikowska et al., 2023)

The following are the results of the reliability test obtained through calculations using the Interclass Correlation Coefficient (ICC) formula using SPSS, as shown in Table 4.

TABLE 4. Reliability Test	
ICC	Decision
0.942	Reliable

Sources: Output SPSS

Based on Table 3 and Table 4, the reliability test of the instrument yielded a coefficient of 0.942. This value was > 0.50, indicating a very good level of reliability and can be used for further testing.

Data collection using assessment instruments presented six indicators: design, size, sewing technique, aesthetics, performance, and uniqueness, which were further specified into 30 sub-indicators with 180 questions for expert panellists. The feasibility test of the 'Sirena Varunya' will obtain data in the form of numbers calculated into an equation (2).<sup>26</sup>

$$N = \frac{\text{Score Obtained}}{\text{Maximum Score}} \times 100\% \quad (2)$$

Sources: (Kamaliah & Prasetyo, 2024)

The data are presented as a frequency distribution to illustrate assessment trends for each indicator. Each indicator is assessed using a Likert scale with the following scoring criteria: (5) Very

<sup>24</sup> Sugiono, Op. Cit., hlm. 6.

<sup>25</sup> Aleksandra Królikowska et al., "Improving the Reliability of Measurements in Orthopaedics and Sports Medicine," *Knee Surgery, Sports Traumatology, Arthroscopy* 31, no. 12 (2023): 5277–85, <https://doi.org/10.1007/s00167-023-07635-1>.

<sup>26</sup> Aulan Nisa Ulil Kamaliah and Abdul Rahman Prasetyo, "Jurnal Pendidikan Dan Penciptaan Seni Pengembangan Media Kartu 'Juragan Kuliner Nusantara' Untuk Meningkatkan Minat P5 Kewirausahaan Siswa SD Development of the Card Game 'Juragan Kuliner Nusantara' to Foster Elementary School Students' Interest in P5 Entrepreneurship," *Jurnal Pendidikan Dan Penciptaan Seni* 5, no. 1 (n.d.): 77–95, <https://doi.org/10.34007/jipsi.v5i1.756>.

Feasible, (4) Feasible, (3) Fairly Feasible, (2) Less Feasible, and (1) Not Feasible. Table 5 presents the frequency distribution of each indicator of the feasibilities of the 'Sirena Varunya' fashion design.

**TABLE 5.** Average Percentage of 'Sirena Varunya' Fashion Design

<b>Feasibility of 'Sirena Varunya' Fashion Design</b>						
<b>No</b>	<b>Indicator</b>	<b>Item</b>	<b>MIN%</b>	<b>MAX%</b>	<b>MEAN%</b>	<b>Category</b>
1	Design	5	88%	100%	94%	Very Feasible
2	Size	5	88%	96%	92%	Very Feasible
3	Sewing Technique	5	80%	96%	88%	Very Feasible
4	Aesthetics	5	92%	96%	94%	Very Feasible
5	Performance	5	80%	92%	86%	Very Feasible
6	Uniqueness	5	96%	100%	98%	Very Feasible
<b>Overall Average %</b>					<b>92%</b>	<b>Very Feasible</b>

Sources: Output Microsoft Excel

Based on the feasibility test results, the 'Sirena Varunya' fashion design received a very good rating with a total average percentage of 92%. This achievement showed that all indicators assessed, including design, size, sewing technique, aesthetics, performance, and uniqueness, have met high quality standards in accordance with fashion feasibility criteria. The consistent percentage range of 86%-98% indicated consistent quality across all indicators.

#### **a) Design**

Table 6 presents the frequency distribution of expert panellists' evaluations of the design indicators for the 'Sirena Varunya' fashion design.

**TABLE 6.** Frequency Distribution of Design Indicators

<b>Design</b>				
<b>No.</b>	<b>Score</b>	<b>Category</b>	<b>Percentage</b>	<b>Average</b>
1	81% - 100%	Very Feasible	100%	94%
2	61% - 80%	Feasible	0%	
3	41% - 60%	Fairly Feasible	0%	
4	21% - 40%	Less Feasible	0%	
5	0% - 20%	Not Feasible	0%	
<b>Total</b>			<b>100%</b>	

Sources: Output Microsoft Excel

In fashion design practice, designer quality is one of the main determinants of a design's success, influencing perceptions of value, visual appeal, and the psychological connection between the piece and its wearer.<sup>27</sup> Based on Table 6, which presents the evaluations of three expert panellists on the design indicators of the 'Sirena Varunya', the design fell into the highly feasible category. All panellists (100%) rated the design within the 81–100% range, with an average score of 94%, corresponding to the very feasible category. No ratings were given in the feasible, fairly feasible, less feasible, or not feasible categories. These rating percentages indicated that this design has achieved a strong visual character and was able to provide the aesthetic impact expected by the expert panellists.

In contemporary fashion design, design served not only as an aesthetic element but also as a conceptual structure that unifies creative ideas, user needs, and industry demands. A design's success depends on its ability to merge visual concepts with relevant innovations, especially when the design is developed in the context of culture, performance, or specific artistic needs.<sup>28</sup> The assessment in the highly feasible category shows that 'Sirena Varunya' was able to fulfil these dimensions through the application of design elements that are not only visually appealing, but also maintain thematic

<sup>27</sup> Faheem Gul Gilal et al., "The Role of Product Design in Shaping Masstige Brand Passion: A Masstige Theory Perspective," *Journal of Business Research* 152 (November 1, 2022): 487–504, <https://doi.org/10.1016/J.JBUSRES.2022.08.008>.

<sup>28</sup> Dongmin Han, "Modern Fashion Design Trend and Integration Innovation from Cross-Cultural Perspective," *Journal of Education, Humanities and Social Sciences MAMEE* 51 (2025).

coherence and stage functionality, which are integral parts of the design.

Designers play a key role in ensuring that all visual aspects of a design function as the identity and distinguishing feature of a fashion product. A structured creative process, involving exploration, visual character development, and symbolic interpretation, produces designs that not only satisfy aesthetics but also build the cultural and narrative value of a work.<sup>29</sup> The high ratings from expert panellists showed that the 'Sirena Varunya' fashion design fulfilled these elements through a design process that reflected the character of the collection and the clarity of creative ideas.

#### b) Size

Table 7 presents the frequency distribution of expert panellists' evaluations of the size indicators in the 'Sirena Varunya' fashion design.

**TABLE 7.** Frequency Distribution of Size Indicators

Size				
No.	Score	Category	Percentage	Average
1	81% - 100%	Very Feasible	100%	92%
2	61% - 80%	Feasible	0%	
3	41% - 60%	Fairly Feasible	0%	
4	21% - 40%	Less Feasible	0%	
5	0% - 20%	Not Feasible	0%	
Total			100%	

Sources: Output Microsoft Excel

The expert panellist' assessment of the size indicators in the 'Sirena Varunya' fashion design showed that the proportions and suitability of the sizes meet good standards of feasibility. All three panellists (100%) gave ratings in the range of 81% - 100%, placing the 'Sirena Varunya' fashion design in the very feasible category for size indicators, with an overall average score of 92%. These results indicated that the expert panellists assessed the size of the clothing to be in proportion to the body, comfortable to wear, and well-balanced in terms of length, width, and shape.

Accuracy of measurements is a fundamental aspect of the design process, as it ensures that each piece follow body contours, provide comfort, and maintain the intended aesthetic form. This aligns with the scientific principles of pattern construction, which emphasize that the proportional balance of length, width, and anatomical points is critical for achieving both form and function in a design.<sup>30</sup>

The high feasibility scores indicate that 'Sirena Varunya' adheres to proportional standards in fashion design, including the accuracy of horizontal and vertical lines, body measurements, and the piece's length relative to the design's characteristics. According to pattern construction theory, structural points such as shoulders, chest, waist, hips, and overall body length must be arranged with consideration for balance and harmony. Harmonious proportions are one of the main determinants of design quality, especially in pieces that emphasize a specific silhouette, as inaccurate measurements can compromise shape stability and wearer comfort.<sup>31</sup>

Proportional sizing contributes significantly to the visual perception of a design. Imbalanced proportions, whether excessive or insufficient, can alter the design's character, disrupt visual harmony, and reduce wearer's comfort level. The principles of proportion and scale in design ensure that clothing remains stable, comfortable, and aesthetically pleasing throughout various stages of transformation.<sup>32</sup> In the 'Sirena Varunya' transformable design, precise sizing was essential to maintain the piece's structural integrity during shape changes.

Although the assessment results indicated very high feasibility, the expert panellists provided constructive feedback for design refinement. The primary concern was regarding the position of the waistline, which was considered to be extremely low, creating visual imbalance in the body silhouette. In pattern construction, the waistline serves as a key axis, balancing the upper and lower parts of the fashion piece. Incorrect placement can affect perceptions of leg length, torso proportions, and overall

<sup>29</sup> Moe Sakaue, Daijiro Mizuno, and Kazutoshi Tsuda, "The Designer's Role in Fashion System Transitions: A Critical Review of Transition Design," *International Association of Societies of Design Research Congress*, October 5, 2023, <https://doi.org/10.21606/iasdr.2023.826>.

<sup>30</sup> John Hopkins, *Fashion Design: Principles and P.* (London: AVA Publishing, 2021).

<sup>31</sup> Winifred Aldrich, *Metric Pattern Cutting for Women's Wear*, 7th ed. (London: Bloomsbury, 2020).

<sup>32</sup> Simon Seivewright, *Basics Fashion Design: Research and Design*. (London: Bloomsbury, 2019).

body shape. The panellists recommended that the curve at the waist be adjusted more subtly to prevent a steep drop, thereby improving visual proportions.

### c) Sewing Technique

Table 8 presents the frequency distribution of expert panellists' evaluations of the sewing techniques indicators in the 'Sirena Varunya' fashion design.

**TABLE 8.** Frequency Distribution of Swing Technique Indicators

<b>Sewing Technique</b>				
<b>No.</b>	<b>Score</b>	<b>Category</b>	<b>Percentage</b>	<b>Average</b>
1	81% - 100%	Very Feasible	67%	88%
2	61% - 80%	Feasible	33%	
3	41% - 60%	Fairly Feasible	0%	
4	21% - 40%	Less Feasible	0%	
5	0% - 20%	Not Feasible	0%	
Total			100%	

Sources: Output Microsoft Excel

The expert panellist's assessment of the sewing technique indicators in the 'Sirena Varunya' shows that the construction quality is at a very feasible level. Two of the three panellists (67%) rated the sewing techniques within the 81–100% range, resulting in an average score of 88%, categorizing the sewing technique as very feasible. A panellist (33%) rated the techniques as feasible (61–80%), indicating that while the sewing technique generally meets standards, certain aspects still require refinement.

The assessment results indicated that the construction techniques applied are in accordance with the basic principles of sewing techniques, which emphasize precision, neatness, structural strength, and consistency in stitching. Sewing quality is a critical factor in evaluating the quality of a fashion piece, as it is directly related to durability, comfort, and visual appeal.<sup>33</sup> Neat and precise construction is also an indicator of technical competence in fashion production, requiring high standards for seams, edge finishes, and decorative elements.<sup>34</sup>

The expert panellists noted that some beadwork embellishments were not securely attached and recommended reinforcement to ensure durability during movement when the fashion piece is worn. In apparel construction, hand-sewn embellishments require precision and multiple layers of reinforcement, as small decorations tend to come loose if not secured with proper knots.<sup>35</sup> Additionally, the drapery on the first look was also deemed to need refinement, since effective draping not only enhances aesthetics but also requires structural control to achieve a precise and stable silhouette.<sup>36</sup>

### d) Aesthetics

Table 9 presents the frequency distribution of expert panellists' evaluations of the aesthetics indicators in the 'Sirena Varunya' fashion design.

<sup>33</sup> Rida Antika, Midrawati Hasibuan, and Wita Ferwati, "The Influence of Service Price and Sewing Quality on Consumer Decisions at Din Tailor Business on Jalan Rantau Lama," *International Journal Of Humanities Education And Social Sciences (IJHESS)* E-ISSN, vol. 4, 2025, <https://ijhess.com/index.php/ijhess/>.

<sup>34</sup> Esra Zeynep Yıldız and Oktay Pamuk, "The Parameters Affecting Seam Quality: A Comprehensive Review," *Research Journal of Textile and Apparel* 25, no. 4 (2021): 309–29, <https://doi.org/10.1108/RJTA-05-2020-0044>.

<sup>35</sup> Aqilah Putri and Dina Ampera, "Analysis of Embroidery and Sequin Decoration Results on Party Dresses by Fashion Designer Riki Damanik," *Edu Cendikia: Jurnal Ilmiah Kependidikan* 5, no. 01 (2025): 247–53, <https://doi.org/10.47709/educendikia.v5i01.5630>.

<sup>36</sup> Jeong Hwa Kim and Jung Soon Lee, "Investigating Parameters Affecting the Real and Virtual Drapability of Silk Fabrics for Traditional Hanbok," *Fashion and Textiles* 11, no. 1 (December 1, 2024), <https://doi.org/10.1186/s40691-024-00388-6>.



**TABLE 9.** Frequency Distribution of Aesthetics Indicators

<b>Aesthetics</b>				
<b>No.</b>	<b>Score</b>	<b>Category</b>	<b>Percentage</b>	<b>Average</b>
1	81% - 100%	Very Feasible	100%	94%
2	61% - 80%	Feasible	0%	
3	41% - 60%	Fairly Feasible	0%	
4	21% - 40%	Less Feasible	0%	
5	0% - 20%	Not Feasible	0%	
Total			100%	

Sources: Output Microsoft Excel

The assessment of aesthetic indicators by three expert panellists found the ‘Sirena Varunya’ fashion design to be highly feasible. All panellists (100%) scored within the 81–100% range, yielding an average of 94%. This indicates that the design meets high aesthetic standards, including colour harmony, proportional harmony, texture play, and conceptual integrity. No panellists gave ratings in the fairly feasible, less feasible, or not feasible categories, indicating that the ‘Sirena Varunya’ fashion design has achieved optimal aesthetic standards.

The consistent scores from the panellists indicate a shared perception of the design’s aesthetic quality. In fashion aesthetics, visual excellence is reflected in the harmony of form, colour, and structural design, which is able to present an artistic impression and strengthen the identity of the fashion piece.<sup>37</sup> Aesthetic value extends beyond physical beauty to the ability of a design to communicate meaning and character effectively.<sup>38</sup> ‘Sirena Varunya’ successfully presented visual harmony, both through its colour palette, material combinations, and silhouette, all aligned with the “Wave in Motion” theme.

The decorative elements used, such as sequins, pearls, and beads, enhance the fashion piece’s visual value by enriching texture and producing dynamic light effects during movement. This aligns with the view that well-applied embellishments can elevate aesthetic quality by strengthening focal points and visual differentiation.<sup>39</sup>

The production of a proportional and harmonious silhouette further enhances the design’s aesthetic quality. Proportional balance is a key indicator in evaluating clothing aesthetics, as it shapes overall perception by both the wearer and the observer.<sup>40</sup> ‘Sirena Varunya’ combined a structured bustier with the fluidity of pleated tulle, creating a visually dynamic effect that reflects the ocean waves that inspired the design.

### e) Performance

Table 10 presents the frequency distribution of expert panellists’ evaluations of the performance indicators in the ‘Sirena Varunya’ fashion design.

**TABLE 10.** Frequency Distribution of Performance Indicators

<b>Performance</b>				
<b>No.</b>	<b>Score</b>	<b>Category</b>	<b>Percentage</b>	<b>Average</b>
1	81% - 100%	Very Feasible	67%	86%
2	61% - 80%	Feasible	33%	
3	41% - 60%	Fairly Feasible	0%	
4	21% - 40%	Less Feasible	0%	
5	0% - 20%	Not Feasible	0%	
Total			100%	

Sources: Output Microsoft Excel

<sup>37</sup> Annissa Meliawati, Yeni Sesnawati, and E. Lutfia Zahra, “Penerapan Estetika Kebaya Kutubaru dengan Style Casual pada Remaja,” *Journal of Fashion & Textile Design Unesa* 1 (2025): 128–37.

<sup>38</sup> Dewa Made Weda Githapradana, “Aesthetics and Symbolic Meaning of Androgynous and CO-ED Style Trends in Men’s Fashion,” *Humaniora* 13, no. 1 (February 15, 2022): 23–32, <https://doi.org/10.21512/humaniora.v13i1.7378>.

<sup>39</sup> Asril Ayu Lestari and Astuti, “Eksplorasi Decorative Trims pada Busana Evening Gown,” *NUSRA: Jurnal Penelitian Dan Ilmu Pendidikan* 5, no. 3 (2024), <https://doi.org/10.55681/nusra.v5i3.3126>.

<sup>40</sup> Ni Putu Ryani Puspa Yeni, “Analisis Elemen Desain pada Metafora Arwana Merah dalam Busana Bergaya Sexy Dramatic,” *Besaung: Jurnal Seni Desain Dan Budaya* 8, no. 2 (2023).

Performance relates to a piece's ability to function effectively when worn. Performance encompasses not only aesthetics but also mobility, comfort, and practical usability without reducing the quality of visual appearance. Performance indicators are crucial for evaluating design success, particularly in fashion pieces with transformable mechanisms that requires precision in construction and careful material selection.

The expert panellist's assessment of the 'Sirena Varunya' performance indicators yielded positive results. Two of the three panellists (67%) rated the indicators within the 81–100% range, categorizing performance as very feasible, with an average score of 86%. A panellist (33%) rated the indicators as feasible (61–80%), suggesting that some aspects still require improvement.

'Sirena Varunya' still requires assistance during dressing. Ease of use is a determining factor in the performance of modern clothing, as good design should allow the wearer to put it on independently without sacrificing comfort or efficiency.<sup>41</sup> The piece's tail was observed to fold easily when worn while walking. This condition can reduce mobility and overall visual quality. Shape stability, particularly in fashion pieces with extended elements or added volume, is essential for maintaining performance and ensuring the piece remains visually neat under various conditions of motion.<sup>42</sup>

The expert panellist also recommended exploring alternative materials that are lighter and more adaptive to body movements. Heavy textiles can increase fashion piece weight, limit flexibility and reducing wearer comfort. Textile research trends in recent years highlights that choosing materials that are responsive to movement and lightweight can significantly improve fashion piece's performance, especially in designs that require flexibility and shape stability.<sup>43</sup> Using such materials is essential for optimizing function while preserving aesthetic quality.

#### f) Uniqueness

Table 11 presents the frequency distribution of expert panellists' evaluations of the uniqueness indicators in the 'Sirena Varunya' fashion design.

**TABLE 11.** Frequency Distribution of Uniqueness Indicators

<b>Uniqueness</b>				
<b>No.</b>	<b>Score</b>	<b>Category</b>	<b>Percentage</b>	<b>Average</b>
1	81% - 100%	Very Feasible	100%	98%
2	61% - 80%	Feasible	0%	
3	41% - 60%	Fairly Feasible	0%	
4	21% - 40%	Less Feasible	0%	
5	0% - 20%	Not Feasible	0%	
Total			100%	

Sources: Output Microsoft Excel

Uniqueness encompasses not only distinctive visual aspects but also the designer's ability to present new ideas through concept selection, material manipulation, and the integration of aesthetic and structural elements that create a strong identity.<sup>44</sup> Based on the results of the assessment by three expert panellists on the uniqueness indicators in the 'Sirena Varunya' fashion design, it was found that the design was in the highly feasible category. All expert panellists (100%) gave ratings in the range of 81%–100%, with an average score of 98%, placing the uniqueness of the fashion design at a very high level of quality.

The panellists assessed that the uniqueness of 'Sirena Varunya' is evident in its integration of transformative features with decorative elements that convey a strong aesthetic narrative. The ability to present a visual identity that distinguishes the design from other fashion works emphasizes that the uniqueness of a fashion product is linked to conceptual innovation, novel composition, and the

<sup>41</sup> Melkie Getnet Tadesse et al., "Comfort Evaluation of Wearable Functional Textiles," *Materials* 14, no. 21 (November 1, 2021), <https://doi.org/10.3390/ma14216466>.

<sup>42</sup> Liliana Indrie et al., "A Study of Types of Silhouettes in Women's Clothing," *Industria Textila* 76, no. 1 (2025): 19–30, <https://doi.org/10.35530/IT.076.01.2024139>.

<sup>43</sup> Somin Lee, Yoojung Han, and Changsang Yun, "Development of a Fabric Classification System Using Drapability and Tactile Characteristics," *Fashion and Textiles* 11, no. 1 (December 1, 2024), <https://doi.org/10.1186/s40691-023-00368-2>.

<sup>44</sup> Indarti, "Metode Proses Desain dalam Penciptaan Produk Fashion dan Tekstil," *Journal of Fashion and Textile Design Unesa*, vol. 1, 2020.

integration of non-repetitive techniques.<sup>45</sup>

Excellence in fashion design arises from the integration of creative ideas and technical skills, fostering the creation of original works with artistic depth.<sup>46</sup> The 'Sirena Varunya' exemplifies this principle through design details that are visually striking and reinforce the central narrative. In the perspective of fashion design, originality is increasingly crucial amid high competition and trend homogenization. Aesthetic innovation and design creativity significantly enhance perceived piece quality, particularly when the design exhibits distinct, recognizable characteristics.<sup>47</sup>

## CONCLUSION

The 'Sirena Varunya' fashion design presented a creative interpretation of transformable fashion concepts in response to sustainability challenges in the fashion industry. 'Wave in Motion' theme with ocean-inspired aesthetics was successfully translated into silhouette, material selection, colour palette, and decorative details that reflect the visual dynamics of waves.

Feasibility tests showed that 'Sirena Varunya' achieved an excellent overall score of 92%, indicating strong feasibility across all assessment indicators: design, size, sewing techniques, aesthetics, performance, and uniqueness. Although the results were highly positive, the expert panellists also provided constructive recommendations, including refining the smoothness of the draping, optimizing the stability of the tail structure, and selecting lighter materials to improve comfort and mobility.

## ACKNOWLEDGMENTS

The author would like to express sincere gratitude to the counsellor, colleagues, and the educational institution for their guidance, support, and facilities throughout the process of preparing this article. Heartfelt thanks are also extended to the author's parents for their continuous prayers, support, and motivation. All assistance and contributions received have played an essential role in the completion of this article.

## DECLARATION OF CONFLICTING INTERESTS

The authors states that there is no conflict of interest in the publication of this article.

## FUNDING

None.

## REFERENCES

- Amelia, Risa, Siti Mariah, and Enggar Kartikasari. "Pengembangan Media Pembelajaran Dasar Desain Berbasis Flip Chart Menggunakan Puzzle Di Aekolah Menengah Kejuruan (Development of Design Basic Learning Media Based on Flip Chart Using Puzzle in Vocational Middle School)," n.d.
- Ansari, Aniq, and Nikhila Rane. "Investigation of Conventional and Natural Treatments: Assessing the Healing Potential of Apple Cider Vinegar, Tulsi, Turmeric, Neem and Lemon Water." *International Journal of Home Science* 11, no. 1 (January 1, 2025): 603–9. <https://doi.org/10.22271/23957476.2025.v11.i1h.1832>.
- Antika, Rida, Midrawati Hasibuan, and Wita Ferwati. "The Influence of Service Price and Sewing Quality on Consumer Decisions at Din Tailor Business on Jalan Rantau Lama." *International Journal Of Humanities Education And Social Sciences (IJHESS) E-ISSN*. Vol. 4, 2025.

---

<sup>45</sup> Muhammad Khalik Mustafa et al., "The Fundamental Research Inspiration in Fashion Design," *Journal of Fashion & Textile Design Unes* 1 (2025): 259–65.

<sup>46</sup> Hao Yuan, "The Innovation Process in Fashion Design," 2023, 276–81, [https://doi.org/10.2991/978-2-38476-130-2\\_34](https://doi.org/10.2991/978-2-38476-130-2_34).

<sup>47</sup> Yola Rahmadiani and Eneng Lutfia Zahra, "Preferensi Konsumen pada Citra Fashion," *Practice of Fashion and Textile Education Journal*, vol. 3, n.d.

- <https://ijhess.com/index.php/ijhess/>.
- Atika Sari, Anindita, and Apika Nurani Sulistyati. "Perancangan Motif Batik Kontemporer Untuk Tekstil Pakaian." *Ornamen: Jurnal Pengkajian Dan Penciptaan Seni Kriya* 22, no. 1 (2025): 2685–614. <https://jurnal.isi-ska.ac.id/index.php/ornamen/78>.
- Dhiwar, Komal, and Madhura Bedarkar. "Life Cycle Assessment in Fashion Industry: A Systematic Review." *Discover Sustainability*. Springer Nature, December 1, 2025. <https://doi.org/10.1007/s43621-025-02050-7>.
- Ermalena, Siti Sarah, Sri Wening, and Emy Budiastuti. "Pengembangan Tunik Menggunakan Pengaplikasian Teknik Colet-Boshi Shibori Pada Wanita Karir Dengan Bentuk Tubuh Pendek Gemuk." *Fashion and Fashion Education Journal* 12, no. 1 (2023). <https://journal.unnes.ac.id/sju/index.php/ffe/index>.
- Fadlia, Adlien, and Novi Yuniarti. "Digital Couture, The Intersection of Technology and Fashion In The Creations of Iris van Herpen." *ICDAD: International Conference Dialogue on Art & Design*, 2024. [www.senirupaikj.ac.id](http://www.senirupaikj.ac.id).
- Gilal, Faheem Gul, Naeem Gul Gilal, Shadma Shahid, Rukhsana Gul Gilal, and Syed Mir Muhammad Shah. "The Role of Product Design in Shaping Masstige Brand Passion: A Masstige Theory Perspective." *Journal of Business Research* 152 (November 1, 2022): 487–504. <https://doi.org/10.1016/J.JBUSRES.2022.08.008>.
- Githapradana, Dewa Made Weda. "Aesthetics and Symbolic Meaning of Androgynous and CO-ED Style Trends in Men's Fashion." *Humaniora* 13, no. 1 (February 15, 2022): 23–32. <https://doi.org/10.21512/humaniora.v13i1.7378>.
- Gunawan, Devina, Yoanita Kartika Sari Tahalele, and Marini Yunita Tanzil. "Perancangan Pakaian B-Leisure Untuk Wanita Karir Dengan Konsep Transformable Pada Brand Logom." *Moda* 2, no. 2 (July 2020): 65–83.
- Hakim, Muhamad Ardan Zia. "Corak Batik Mega Mendung Sebagai Warisan Budaya Cirebon Dalam Fashion Photography," 2019.
- Han, Dongmin. "Modern Fashion Design Trend and Integration Innovation from Cross-Cultural Perspective." *Journal of Education, Humanities and Social Sciences MAMEE* 51 (2025).
- Harun, Mohd Fauzi, Nur Safinas Al Bakry, Khairul Ezedy Abd Rahman, Fareez Vincent Amos, and Mohd Hisham Johari. "Semiotic and Cultural Analysis on Local Product Brand Name." *International Journal of Academic Research in Business and Social Sciences* 13, no. 1 (January 16, 2023). <https://doi.org/10.6007/ijarbss/v13-i1/15884>.
- Hidayah, Nur, and Muhtarom. "Validity and Reliability Test of Teaching Materials Using Aiken's V Formula and SPSS 22." *Schola* 1, no. 2 (2023): 75–82. <https://journal2.upgris.ac.id/index.php/schola/>.
- Indarti. "Metode Proses Desain Dalam Penciptaan Produk Fashion Dan Tekstil." *Journal of Fashion and Textile Design Unesa*. Vol. 1, 2020.
- Indrie, Liliana, Julieta Ilieva, Petya Dineva, Zlatina Kazlacheva, Zlatin Zlatev, and Amalia Sturza. "A Study of Types of Silhouettes in Women's Clothing." *Industria Textila* 76, no. 1 (2025): 19–30. <https://doi.org/10.35530/IT.076.01.2024139>.
- Kim, Jeong Hwa, and Jung Soon Lee. "Investigating Parameters Affecting the Real and Virtual Drapability of Silk Fabrics for Traditional Hanbok." *Fashion and Textiles* 11, no. 1 (December 1, 2024). <https://doi.org/10.1186/s40691-024-00388-6>.
- Królikowska, Aleksandra, Paweł Reichert, Jon Karlsson, Caroline Mouton, Roland Becker, and Robert Prill. "Improving the Reliability of Measurements in Orthopaedics and Sports Medicine." *Knee Surgery, Sports Traumatology, Arthroscopy* 31, no. 12 (2023): 5277–85. <https://doi.org/10.1007/s00167-023-07635-1>.
- Lang, Chunmin, and Bingyue Wei. "Convert One Outfit to More Looks: Factors Influencing Young Female College Consumers' Intention to Purchase Transformable Apparel." *Fashion and Textiles* 6, no. 1 (December 1, 2019). <https://doi.org/10.1186/s40691-019-0182-4>.
- Lee, Somin, Yoojung Han, and Changsang Yun. "Development of a Fabric Classification System Using Drapability and Tactile Characteristics." *Fashion and Textiles* 11, no. 1 (December 1, 2024). <https://doi.org/10.1186/s40691-023-00368-2>.
- Lestari, Asril Ayu, and Astuti. "Eksplorasi Decorative Trims Pada Busana Evening Gown." *NUSRA: Jurnal Penelitian Dan Ilmu Pendidikan* 5, no. 3 (2024). <https://doi.org/10.55681/nusra.v5i3.3126>.
- Marlianti, Mira, and Hadi Kurniawan. "Konsep Sustainable Fashion Pada Perancangan Karya Busana," n.d.
- Meliawati, Annissa, Yeni Sesnawati, and E. Lutfia Zahra. "Penerapan Estetika Kebaya Kutubaru Dengan Style Casual Pada Remaja." *Journal of Fashion & Textile Design Unesa* 1 (2025): 128–37.

- Mustafa, Muhammad Khalik, Nasyirah Saleh, Dayang Intan Farahanies, Mohd Radzuan Mohd Rafee, Ishak Ramli, and Muhammad Redza Rosman. "The Fundamental Research Inspiration in Fashion Design." *Journal of Fashion & Textile Design Unes* 1 (2025): 259–65.
- Nidia, Chanifathin, and Ratna Suhartini. "Dampak Fast Fashion Dan Peran Desainer Dalam Menciptakan Sustainable Fashion." Vol. 09, 2020.
- Nisa Ulil Kamaliah, Aulan, and Abdul Rahman Prasetyo. "Jurnal Pendidikan Dan Penciptaan Seni Pengembangan Media Kartu 'Juragan Kuliner Nusantara' Untuk Meningkatkan Minat P5 Kewirausahaan Siswa SD Development of the Card Game 'Juragan Kuliner Nusantara' to Foster Elementary School Students' Interest in P5 Entrepreneurship." *Jurnal Pendidikan Dan Penciptaan Seni* 5, no. 1 (n.d.): 77–95. <https://doi.org/10.34007/jipsi.v5i1.756>.
- Ozdamar-Ertekin, Zeynep. "Can Luxury Fashion Provide a Roadmap for Sustainability?" *Markets, Globalization & Development Review* 4, no. 1 (2019). <https://doi.org/10.23860/mgdr-2019-04-01-03>.
- Putri, Aqilah, and Dina Ampera. "Analysis of Embroidery and Sequin Decoration Results on Party Dresses by Fashion Designer Riki Damanik." *Edu Cendikia: Jurnal Ilmiah Kependidikan* 5, no. 01 (2025): 247–53. <https://doi.org/10.47709/educendikia.v5i01.5630>.
- Putri, Mayang Anggraini, I Dewa Ayu Made Budhyani, and Ni Ketut Widiartini. "Pemanfaatan Limbah Perca Pada Pengembangan Busana Ready To Wear Menggunakan Teknik Patchwork Dengan Sumber Ide Pandemi Covid-19." *Jurnal Bosaparis : Pendidikan Kesejahteraan Keluarga* 14 (July 2023).
- Rahmadiani, Yola, and Eneng Lutfia Zahra. "Preferensi Konsumen Pada Citra Fashion." *Practice of Fashion and Textile Education Journal*. Vol. 3, n.d.
- Rosyidi, Muhammad Harun, and Fajar Ciptandi. "Visual Analysis of Contemporary Batik Motifs: The Meaning Behind Tribusono Batik." *International Journal of Art and Design Studies (IJADS)* 2, no. 4 (2023): 265–74. <https://doi.org/10.55927/ijads.v2i4.14733>.
- Sakaue, Moe, Daijiro Mizuno, and Kazutoshi Tsuda. "The Designer's Role in Fashion System Transitions: A Critical Review of Transition Design." *International Association of Societies of Design Research Congress*, October 5, 2023. <https://doi.org/10.21606/iasdr.2023.826>.
- Simamora, Bilson. "Skala Likert, Bias Penggunaan Dan Jalan Keluarnya." *Jurnal Manajemen* 12, no. 1 (November 22, 2022): 84–93. <https://doi.org/10.46806/jman.v12i1.978>.
- Smith, Hazel, and Roger T. Dean. "Practice-Led Research, Research-Led Practice in the Creative Arts," n.d.
- Sugiono. *Metode Penelitian Kuantitatif, Kualitatif, Dan R&D*. Bandung: ALFABETA, 2023. [www.cvalfabeta.com](http://www.cvalfabeta.com).
- Tadesse, Melkie Getnet, Carmen Loghin, Ionuț Dulgheriu, and Emil Loghin. "Comfort Evaluation of Wearable Functional Textiles." *Materials* 14, no. 21 (November 1, 2021). <https://doi.org/10.3390/ma14216466>.
- Yeni, Ni Putu Ryani Puspa. "Analisis Elemen Desain Pada Metafora Arwana Merah Dalam Busana Bergaya Sexy Dramatic." *Besaung: Jurnal Seni Desain Dan Budaya* 8, no. 2 (2023).
- Yıldız, Esra Zeynep, and Oktay Pamuk. "The Parameters Affecting Seam Quality: A Comprehensive Review." *Research Journal of Textile and Apparel* 25, no. 4 (2021): 309–29. <https://doi.org/10.1108/RJTA-05-2020-0044>.
- Yuan, Hao. "The Innovation Process in Fashion Design," 2023, 276–81. [https://doi.org/10.2991/978-2-38476-130-2\\_34](https://doi.org/10.2991/978-2-38476-130-2_34).
- Zuhro, Aida Roihana. "Transformasi Artistik: Dinamika Desain Batik Dalam Konteks Sosial-Modern." *Aksa Jurnal Desain Komunikasi Visual* 8, no. 1 (2024): 74–89. <http://jurnalaksa.stsrdvisi.ac.id>.

## AUTHOR(S) BIOGRAPHY

Aliyya Raharjanti is a student of the Fashion Education Study Program at Universitas Negeri Semarang, class of 2022. Born in Pati on September 6, 2004, she is currently engaged in her academic studies with a focus on developing technical proficiency and creative expertise in fashion design.

Adhi Kusumastuti is an academic at the Faculty of Engineering, Universitas Negeri Semarang, currently serving as a Professor in Textile Chemistry. Her research interests focus on green technologies, including natural dye production and its applications in DSSC and textiles, waste management, biofuels, and related areas.