

## Application of Upcycled Jeans and Macramé Techniques in Edgy Balatarang Menswear Designs

Dhea Amelia<sup>1</sup>, Adhi Kusumastuti<sup>2</sup>

<sup>1</sup>Universitas Negeri Semarang, Indonesia, <https://orcid.org/0009-0008-5029-2458>

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

\*Corresponding Author: [dheaamel362@students.unnes.ac.id](mailto:dheaamel362@students.unnes.ac.id)

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### Abstract

The fashion industry significantly contributes to environmental pollution through high textile waste, necessitating more sustainable design approaches, such as upcycling. This study aimed to explore the application of upcycled jeans and macramé techniques in the edgy menswear Balatarang and to evaluate its feasibility from technical, aesthetic, and functional perspectives. The research employed a practice-based research approach comprising concept exploration, design development, product realisation, and evaluation through feasibility testing by expert panellists. The findings indicate that upcycled jeans establish a strong visual character through texture and colour exploration, while macramé techniques enhance visual depth and design dynamism. Feasibility testing yielded scores of 91.67% for design, 93.33% for sizing, 80% for sewing techniques, 93.33% for aesthetics, 93.33% for garment performance, and 91.67% for distinctiveness, categorising the Balatarang menswear design as highly feasible, with sewing techniques rated as possible. Overall, the study concluded that integrating upcycled jeans and macramé techniques supports the Development of sustainable, distinctive menswear that remains relevant to contemporary fashion trends.

**Keywords:** sustainable fashion, upcycle jeans, macrame, menswear, edgy

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### INTRODUCTION

The fashion industry is currently recognised as one of the most significant contributors to environmental pollution. Various life cycle assessment studies indicate that the clothing and textile sector accounts for approximately 8–10% of global greenhouse gas emissions and consumes a substantial amount of water during the production of fibers, dyeing, and finishing processes.<sup>1</sup> Studies on textile waste within the framework of the circular economy report that globally more than 90 million tons of textile waste are generated each year, with only a small proportion recycled or reprocessed, while the remainder ends up in landfills or incineration facilities.<sup>2</sup>

The phenomenon of fast fashion exacerbates this condition by encouraging mass production and rapidly changing trend cycles, leading to garments being purchased more frequently but used for shorter periods.<sup>3</sup> This situation contributes to the accumulation of textile waste and the This situation contributes to the accumulation of textile waste and inefficient resource use, as wearable clothing is often discarded. In this context, sustainability has become an essential priority for industry

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<sup>1</sup> Kerrice Bailey, Aman Basu, and Sapna Sharma, "The Environmental Impacts of Fast Fashion on Water Quality: A Systematic Review," *Water (Switzerland)* 14, no. 7 (2022), <https://doi.org/10.3390/w14071073>.

<sup>2</sup> Khaliquzzaman Choudhury, Marina Tsianou, and Paschalis Alexandridis, "Recycling of Blended Fabrics for a Circular Economy of Textiles: Separation of Cotton, Polyester, and Elastane Fibers," *Sustainability (Switzerland)* 16, no. 14 (2024), <https://doi.org/10.3390/su16146206>.

<sup>3</sup> Nadia Olivar Aponte et al., "Fast Fashion Consumption and Its Environmental Impact : A Literature Review," *Sustainability: Science, Practice and Policy* 20, no. 1 (2024), <https://doi.org/10.1080/15487733.2024.2381871>.

practitioners and fashion designers, who are creating products that are not only visually appealing but also more environmentally and socially responsible. On the other hand, many menswear designs continue to focus on practical needs and conventional forms, resulting in relatively limited exploration of design concepts that integrate aesthetic value, strong character, and sustainability principles.<sup>4</sup> This condition opens opportunities for design strategies that can address these challenges through material and technical innovation.

Several previous studies have examined jeans upcycling as a relevant approach to addressing sustainability issues in the fashion industry. The transformation of used jeans into new products has been shown to reduce textile waste while simultaneously enhancing the aesthetic value of the final products, thereby supporting more environmentally responsible, sustainable fashion practices.<sup>5</sup> Other findings indicate that using jeans waste through the principles of reduce, reuse, and recycle not only produces visually appealing fashion products but also helps mitigate the global negative impacts of textile waste.<sup>6</sup>

The upcycling approach has become increasingly relevant due to the inherent characteristics of jeans as a material that is strong, durable, and rich in texture, as well as its natural visual changes, such as fading and creasing, resulting from wear.<sup>7</sup> Through techniques such as cutting and joining, patchwork, panel reconstruction, and layering, used jeans can be reprocessed into new and distinctive surfaces without requiring the production of new fabric from raw materials. This approach has been proven to extend the material life cycle, reduce textile waste volume, and support the implementation of circular fashion concepts that emphasise the principles of reduce, reuse, and recycle. Therefore, the application of jeans upcycling in menswear design not only strengthens the visual character of garments but also makes a tangible contribution to reducing the environmental burden of the fashion industry.

In addition to material exploration, macramé techniques also offer significant potential as both decorative accents and structural elements in fashion design. Macramé relies on repetitive knotting techniques to create textures, patterns, and three-dimensional forms using cords or scraps of leftover material.<sup>8</sup> Within the context of menswear, the application of macramé can enrich visual details, add textural depth, and build an artistic impression without diminishing the masculine character intended to be emphasised. The combination of robust upcycled jeans materials and intricate macramé accents opens the door to creating menswear designs that are unique, bold, and distinctive.

From a design needs perspective, there are still issues with the limited exploration of upcycling and macramé techniques within well-conceptualised menswear collections. Many upcycling-based works remain at the level of visual experimentation and have not fully considered comfort, functionality, and garment construction quality for long-term use. Similarly, macramé is often treated merely as an additional decorative element rather than as an integral part of the design language and garment structure. This condition raises questions about how these two elements can be processed so that they function not only as stylistic features but also meet appropriate design criteria for functionality, comfort, aesthetics, and conceptual consistency.

Based on the identified issues, this study addresses the limited integration of jeans upcycling and macramé techniques in well-conceptualized menswear design. The application of upcycled jeans and macramé is often fragmented and tends to focus primarily on visual experimentation, without adequate consideration of functionality, comfort, construction quality, and conceptual consistency for long-term wear. The feasibility of the Balatarañg collection will be evaluated based on aspects of

<sup>4</sup> Sri Listiani et al., "Analisis Prinsip Desain Sustainable Fashion Upcycle Pada Busana Kasual," *Productum: Jurnal Desain Produk (Pengetahuan Dan Perancangan Produk)* 7, no. 1 (2024): 11–20.

<sup>5</sup> Nofi Rahmanita, Mega Kencana, and Yurisman, "Upcycling Jeans as an Eco-Friendly Fashion Solution," *Journal of Scientific Research, Education, and Technology* 4, no. 3 (2025): 1332–46.

<sup>6</sup> Orizza Anggun Ferayanti, Fairuz Widad Zahirah, and Priska Nanette Kristiyanto, "Sustainable Fashion Melalui Upcycling Limbah Jeans Dengan Teknik Pewarnaan Tekstil Ramah Lingkungan," *Ornamen* 22, no. 1 (2025): 1.

<sup>7</sup> Hakan Karagöl et al., "Sustainability Approach of Recycled Jeans Fabrics with a Life Cycle Assessment," *Fibres & Textiles in Eastern Europe* 32, no. 2 (2024): 57–63, <https://doi.org/10.2478/ftce-2024-0019>.

<sup>8</sup> S. Puspitasari, C; Pakpahan, A; Dolah, J; Yuningsih, *Decorative Elements in Muslim Fashion Product : A Case Study Using Macrame Technique*, 2021, <https://doi.org/10.1201/9781003193241-44>.

functionality, comfort, aesthetics, and consistency with the design concept. Accordingly, this study seeks to address two main research questions: (1) how the application of upcycled jeans materials and macramé accents can generate menswear designs that are unique and possess a strong character; and (2) how feasible the Balatarañg collection is when assessed in terms of functionality, comfort, aesthetics, and consistency of the design concept.

## METHOD

This study employs a practice-based research method, an approach that positions creative practice as the primary source of knowledge production<sup>9</sup>. This method was selected because it aligns with the research objective of exploring the application of jeans upcycling and macramé techniques in the development of the edgy-style Balatarañg menswear collection. In the context of fashion design, this approach serves as a bridge between theory and practice, integrating the design process and the realisation of the work into the research, thereby generating new insights into the technical, aesthetic, and functional aspects of garments through reflective design practice.<sup>10</sup>

The research process consists of four main stages: exploration, design, realisation, and evaluation. The exploration stage involves developing the design concept, creating a moodboard, and analysing the characteristics of upcycled jean materials and the potential applications of macramé techniques. The design stage focuses on developing design sketches and determining garment proportions in accordance with menswear characteristics. The realisation stage includes executing the designs through material processing, applying macramé techniques, and refining visual details. Finally, the evaluation stage is conducted through observation of the final products and feasibility testing to assess the conformity of the design outcomes with the predetermined concept.

In this study, data were collected via a structured questionnaire administered to three expert panellists selected through purposive sampling based on their educational backgrounds and relevant professional experience in fashion design. The research instrument consisted of a structured questionnaire based on a four-point Likert scale,<sup>11</sup> designed to evaluate six leading indicators: (1) design, (2) sizing, (3) aesthetics, (4) sewing techniques, (5) garment performance, and (6) distinctiveness. Each response category was converted into numerical scores, as presented in Table 1.

Table 1. Likert scale score conversion

Category	Score	Description
Very feasible	4	Considered very feasible if it meets three criteria
Feasible	3	Considered feasible if it meets two criteria
Less feasible	2	Considered less feasible if it meets one criterion
Not feasible	1	Considered Not feasible if it doesn't meet the criteria

Data analysis was conducted using quantitative descriptive analysis techniques. All expert responses were first converted to numerical scores using the applied scale. Subsequently, the mean values and feasibility percentages for each indicator were calculated using Equation (1):

$$P = \frac{\sum n}{\sum N} \times 100\% \quad (2)$$

Notes :

P = Feasibility percentage of menswear Balatarañg

$\sum n$  = Total score obtained from expert panellists' assessments

$\sum N$  = Maximum possible score

<sup>9</sup> Safira Valentina Thalib et al., "Penciptaan Desain Busana Muslim Modest Wear Dengan Inspirasi Noor Inayat Khan," *Jurnal Online Tata Busana* 12, no. 2 (2023): 8–15.

<sup>10</sup> Jose Teunissen, "The Transformative Power of Practice-Based Fashion Research," *Fashion Knowledge: Theories, Methods, Practice and Politics*, 2024, 15–26.

<sup>11</sup> Moh. Fiqih Eriansyah et al., "Sistem Evaluasi Pada Aplikasi Akademik Menggunakan Metode Skala Likert Dan Algoritma Naive Bayes," *Komputa: Jurnal Ilmiah Komputer Dan Informatika* 13, no. 1 (2024): 74–82.

After the feasibility percentage was obtained, the results were then classified into assessment categories to determine the level of product feasibility based on the expert panellists' evaluations. The percentage criteria for each feasibility category are presented in Table 2.<sup>12</sup>

Table 2. Feasibility level criteria

No	Score range (%)	Feasibility Criteria
1.	81% - 100%	Very feasible
2.	61% - 80%	Feasible
3.	41% - 60%	Moderately feasible
4.	21% - 40%	Less feasible
5.	<20%	Not feasible

## RESULT & DISCUSSION

### Application of Upcycled Jeans dan Macramé Techniques

#### a. Exploration of the Balataraṅ Concept

The design of the Balataraṅ menswear collection began with a concept exploration process as the foundation for establishing its design identity. In fashion design theory, a concept functions as a conceptual framework that connects the source of inspiration, visual direction, stylistic approach, material selection, and the application of garment forms and details. A conceptual design approach positions the source of inspiration as the starting point, which is then translated through the process of denim upcycling and the application of macramé techniques into design elements such as silhouette, line, texture, and color. Through this approach, the concept not only serves a visual purpose but also shapes the garments' overall character and meaning comprehensively.<sup>13</sup>

The primary source of inspiration for this collection was the phenomenon of ocean waves, which were interpreted as a symbol of dynamic, adaptive, and continually moving strength. The philosophy of Balataraṅ, meaning the power of waves in Sanskrit, embodies a vitality that is both flexible and unstoppable. This conceptual meaning was then translated into selecting an edgy style as the collection's main visual approach. The choice of this style was based on observations of contemporary fashion trends that indicate a growing interest in menswear with strong structural qualities, rich textures, and bold expressions. In this context, the edgy style emphasises bold silhouettes, asymmetrical cuts, and expressive details, reinforcing the identity and character of modern menswear.<sup>14</sup> The concept exploration stage was conducted to visualise the Balataraṅ philosophy into a clear visual direction and design character, using ocean waves as a symbol of dynamic, adaptive strength.

#### b. Design Development of Balataraṅ Menswear

The design development stage was carried out by translating the Balataraṅ philosophy into a clear visual direction and design character. This process began with the preparation of a moodboard as a visual tool to compile references of ideas, atmospheres, and material characteristics to be applied, including wave textures, curved lines inspired by ocean movements, dark blue, gray, and natural brown color tones, as well as material imagery that represents a strong yet organic impression. The moodboard functioned to maintain conceptual consistency and guide the design development process, ensuring alignment with the intended philosophy. As illustrated in Figure 1, the visual concept was subsequently translated into design elements that emphasise a modern, adaptive masculine character through the selection of bold silhouettes, strong structures, and textural explorations that support the edgy style of the Sindu Tarang collection.

<sup>12</sup> Andi Rustandi and Rismayanti, "Penerapan Model ADDIE Dalam Pengembangan Media Pembelajaran Di SMPN 22 Kota Samarinda," *Jurnal Fasilkom* 11, no. 2 (2021): 57–60.

<sup>13</sup> Muhammadiyah Khalik Mustafa et al., "The Fundamental Research Inspiration in Fashion Design," *Journal of Fashion & Textile Design Unesa* 6 (2025): 259–65.

<sup>14</sup> I Kadek Krisna Dwipayana, Ida Ayu Kade Sri Sukmadewi, and Ni Luh Ayu Pradnyani Utami, "Pajaga Tasi Nusantara : Metafora Menara Pinisi Dalam Gaya Busana Edgy Futuristic Di UD Charisma Bali," *Journal of Fashion Design* V, no. 2 (2025): 114–21.



Figure 1. Moodboard Sindu Tarang Collection  
*Sources: author, 2025*

The Balatarang concept was subsequently realised in the garment designs of the Sindu Tarang collection through the selection of oversized silhouettes with bold structures that represent strength and protection, in line with the edgy style character adopted. Loose cuts were combined with curved lines to create a sense of flexibility and dynamism, reflecting the natural movement of ocean waves. Curved cutting details and the interplay of panels were designed to form a visual flow in textile form, allowing a clear connection between the source of inspiration and the resulting designs to be perceived. As shown in Figure 2, the application of bold silhouettes, layered structures, and textural exploration produces a modern, adaptive, and non-rigid masculine character.



Figure 2. Design Balatarang Menswear  
*Sources: author, 2025*

### c. Application of Upcycled Jeans and Macrame Techniques

The implementation of upcycled denim and macramé techniques in the Balatarang menswear collection focused on material processing and their application as elements that shape the overall character of the garments. This approach was intended to strengthen the edgy concept while simultaneously emphasizing sustainability values within the Sindu Tarang collection. The use of discarded denim was selected for its strong, durable material characteristics and its natural variations in texture and colour formed by previous wear, which make it relevant to a sustainable fashion



approach based on material reuse.<sup>15</sup>

The initial stage of implementation involved selecting used jeans based on their physical condition, fabric thickness, and structural stability. This process was intended to ensure that the selected denim remained technically suitable while also providing distinctive visual value. The chosen jeans then underwent a cleaning and material preparation process without removing natural visual traces such as fading and creases, which were intentionally preserved as integral elements of the design character.

The upcycled denim was subsequently applied as an accent on the oversized jacket, particularly on the body and sleeves. The placement of these accents was intended to reinforce a bold, protective impression while creating textural contrast with the main fabric, the Bulu woven textile. This application demonstrates that used denim can function as a practical visual focal point in establishing an edgy character without dominating the overall design,<sup>16</sup> as shown in Figure 3.



Figure 3. Application of upcycled jeans in an oversized jacket

In the subsequent stage, macramé techniques were applied as both decorative and structural elements. The macramé was constructed using repetitive knots, with sizes and densities adjusted to the garment's proportions. These accents were placed on the shoulder area, as this section plays a significant role in shaping the silhouette and expressing the wearer's movement. The application of macramé techniques on the shoulders creates a dynamic visual impression while reinforcing the design's representation of flexibility, as shown in Figure 4.



Figure 4. Application of macramé techniques

Taken as a whole, the implementation results indicate that the combination of upcycled denim and macramé techniques significantly contributes to the visual, structural, and conceptual quality of

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<sup>15</sup> Rily Tersinaningsih and Diah Indah Pratiwi, "Redefining Jeans Waste: Desain Outwear Berbasis Upcycle Sebagai Solusi Fashion Berkelanjutan," *Jurnal Keluarga X*, no. 01 (2025): 56–66.

<sup>16</sup> Bella Annesha and Bintang Titisari, "Model Desain Praktik Upcycling Fashion Dalam Pemanfaatan Limbah Pakaian Bekas," *AtratJurnal Seni Rupa* 11 (2023): 141–52.

the garments. Variations in texture and colour derived from used denim create a distinctive, non-repetitive appearance, while macramé enriches the textile dimension without diminishing the garments' primary function. The final appearance of the Balatarañg menswear in the Sindu Tarañg collection is shown in Figure 5, with the garments presented in front and side views.



Figure 5. Final look menswear Balatarañg  
Sources: author, 2025

### Expert Panel Evaluation of Balatarañg Menswear Feasibility

The feasibility assessment of the Balatarañg menswear was conducted to evaluate the extent to which the garment designs met the technical, aesthetic, and functional aspects in accordance with the design objectives. The assessment was conducted by three expert panellists with expertise in fashion design. The evaluation covered six leading indicators: design, sizing, sewing techniques, aesthetics, garment performance, and distinctiveness. The assessment was conducted using observation sheets, and the obtained scores were converted to percentages by comparing them with the maximum possible score. The final score represents the average of the evaluations from the three Panellists and was classified according to the feasibility criteria.

Taken as a whole, the feasibility assessment of the Balatarañg menswear indicates positive evaluations across most indicators. The Balatarañg menswear designs were categorised as very feasible. A detailed analysis of each indicator is presented in the following section.

### Design

The design indicator evaluates the suitability of the garment's visual elements with the theme and the wearer's character. The sub-indicators include colour harmony, clarity of design lines, appropriateness of silhouette, proportional balance, and clarity of the garment's focal point. The results of the design indicator assessment are presented in Table 3.

Table 3. Result of Design Indicator Assesment

Panellist	Percentage
Panellist 1	95%
Panellist 2	90%
Panellist 3	90%
<b>Average</b>	<b>91,67%</b>
<b>Criteria</b>	<b>Very feasible</b>

Sources: author, 2025

Based on Table 3, the design indicators of Balatarañg menswear receive relatively high and consistent ratings from the panellists. Panellist 1 assigned a score of 95%, while Panellists 2 and 3 both awarded a score of 90%. The average score for the design indicators was 91.27%, placing it in the "highly feasible" category. This finding indicates that the clothing designs successfully create a strong visual unity by selecting colours and design lines that harmonise with the theme. The silhouettes were

assessed as appropriate for the design character, while the proportions and focal points of the garments appeared balanced, without causing visual distraction.

In fashion design, the design concept is realized through the manipulation of visual elements such as color, line, silhouette, and focal points, arranged harmoniously to create visual unity and legibility. Evaluations by expert Panellists indicated that the Balatarang menswear design successfully fulfills these elements, as evidenced by the harmony of colors with the theme, clarity of design lines, appropriateness of silhouettes, and controlled focal points that do not disrupt the garment's composition. This finding aligns with Aidah and Suhartini, who emphasize that the arrangement of visual elements and focal points plays a crucial role in reinforcing design unity,<sup>17</sup> And is further supported by Sari, who states that the precise application of visual elements significantly influences the aesthetic quality and legibility of fashion design.<sup>18</sup> Thus, the design indicators of Balatarang menswear are highly feasible, as they reflect a strong, well-conceived visual concept.

### Size

The size indicator assesses the garment's fit relative to the wearer's body proportions. The sub-indicators include the suitability of body measurements (chest, waist, and hips), garment length, right-left balance, pattern cutting accuracy, and the neatness of the garment's drape. The results of the size indicator evaluation are presented in Table 4.

Table 4. Results of Size Indicator Evaluation

Panellist	Percentage
Panellist 1	95%
Panellist 2	95%
Panellist 3	90%
<b>Average</b>	<b>93.33%</b>
<b>Criteria</b>	<b>Very feasible</b>

Sources: author, 2025

Based on Table 4, the size indicators for Balatarang menswear show relatively high and consistent ratings across the panellists. Panellists 1 and 2 both assigned a score of 95%, while Panellist 3 assigned a score of 90%. The average score for the size indicator reached 93.33%, placing it in the "highly feasible" category. The evaluations by expert panellists indicate that Balatarang menswear meets the criteria for size accuracy and body proportion. The pattern cutting was assessed as closely following the body shape without causing wrinkles or excessive tension. Furthermore, the garment length and the drape of the lower part matched the design well, and the right-left balance appeared precise, supporting a neat, proportional overall appearance.

In the construction of patterns and fitting of menswear, the conformity of the pattern to the body's characteristics serves as a crucial benchmark for achieving precise sizing. According to Agustazani, pattern conformity indicates that evaluating the pattern fitting is an essential step in assessing the relevance of the pattern system to the wearer's body characteristics.<sup>19</sup> Thus, the size indicators of Balatarang menswear are categorised as highly feasible, as they contribute to optimal wearer comfort, structural stability, and the comprehensive functional performance of the garment.

### Sewing Techniques

The sewing technique indicator evaluates the quality of garment construction and workmanship. The sub-indicators include the accuracy of main seams and seam allowances, neatness of stitching, quality of internal finishing, precision of pattern joins, application of decorative techniques, and neatness of zipper installation. The results of the sewing technique indicator evaluation are presented in Table 5.

<sup>17</sup> Luki Nur Aidah and Ratna Suhartini, "Analisis Hiasan Bordir Tiga Negara Ditinjau Dari Aspek Desain Dan Teknik," *Jurnal Online Tata Busana* 10 (2021): 26–37.

<sup>18</sup> Mutia Witri Sari and Nofi Rahmanita, "Upcycle Fast Fashion in The Art of Beat Style," *Jurnal Penelitian Busana Dan Desain* 05, no. September (2025): 89–98.

<sup>19</sup> Shinta Agustazani and Ernawati, "Kesesuaian Pola Kemeja Helen Joseph Armstrong Terhadap Pria Dewasa Indonesia Bertubuh Tinggi Gemuk," *Jurnal Pesona* 4, no. 1 (2024): 143–52.



Table 5. Results of Sewing Technique Indicator Evaluation

<b>Panellist</b>	<b>Percentage</b>
Panellist 1	75%
Panellist 2	85%
Panellist 3	80%
<b>Average</b>	<b>80,00%</b>
<b>Criteria</b>	<b>Feasible</b>

Sources: author, 2025

Based on Table 5, the sewing technique indicators for Balatarang menswear receive relatively high evaluations. Panellist 1 assigned a score of 75%, Panellist 2 assigned 85%, and Panellist 3 assigned 80%, resulting in an average of 80%, which falls into the "feasible" category. This indicates that, overall, the stitch quality of Balatarang menswear meets the feasibility standards, particularly in terms of seam strength and seam neatness. However, some panellists noted that the finishing of the macramé accents still requires refinement to achieve a higher level of workmanship.

In garment construction, the quality of sewing techniques plays a crucial role in determining the strength, visual neatness, and overall quality of fashion products. This aligns with Pamuk's statement that the accuracy of stitching parameters and the quality of seam joins directly influence the final quality of the garment, including shape stability and the appearance of the stitch surface.<sup>20</sup> Thus, the sewing technique indicators of Balatarang menswear are categorized as feasible, although there remains room for improvement in the macramé details to enhance the overall garment construction quality.

### Aesthetics

The aesthetics indicator evaluates the garment's visual quality, encompassing the unity of design elements, visual balance, fabric texture, details and accents, and overall visual appeal. The results of the aesthetics indicator evaluation are presented in Table 6.

Table 6. Results of Aesthetics Indicator Evaluation

<b>Panellist</b>	<b>Percentage</b>
Panellist 1	95%
Panellist 2	90%
Panellist 3	95%
<b>Average</b>	<b>93.33%</b>
<b>Criteria</b>	<b>Very feasible</b>

Sources: author, 2025

Based on Table 6, the aesthetics indicators for Balatarang menswear receive relatively high evaluations. Panellists 1 and 3 both assigned a score of 95%, while Panellist 2 assigned 90%, resulting in an average of 93.33%, which falls into the "highly feasible" category. Expert panel evaluations indicate that Balatarang menswear demonstrates strong visual unity across colour, form, and texture. The visual balance of the garments was assessed as stable, while the details and ornaments effectively enhance the appearance without creating an excessive impression. The garments' visual appeal was considered appropriate to the theme and design character.

The aesthetic quality of a garment is determined by the designer's ability to harmonise visual elements (colour, form, texture, and details) to create a cohesive, visually appealing overall appearance. Research indicates that exploring ornamentation and decorative trims can enhance aesthetic value without compromising compositional balance.<sup>21</sup> Furthermore, studies on the application of decorative trims illustrate how the proportional arrangement of details can enhance

<sup>20</sup> Gulsah Pamuk, "Maximization of Sewing Strength and Minimization of Seam Pucker for Jeans Fabrics Using Taguchi Method," *Tekstil ve Konfeksiyon* 32, no. 3 (2022): 288–95, <https://doi.org/10.32710/tekstilvekonfeksiyon.1137635>.

<sup>21</sup> Nabilah Nur Haniyah and Ma'arifatun Nashikhah, "Penciptaan Desain Busana Edgy Dengan Manipulating Fabric Embroidery Terinspirasi Dari Sesaji Unan-Unan," *Jurnal Online Tata Busana* 12, no. 3 (2023): 1–12.

visual appeal while maintaining the harmony of the overall form.<sup>22</sup> Thus, the panellists' evaluations indicate that the aesthetics of Balataraṅ menswear are highly feasible, as the proportional treatment of details and textures reinforces the design's overall aesthetic quality.

### Performance

The garment performance indicator evaluates the garment's functionality when worn, including its conformity to the body shape, shape stability, ease of wear, suitability to the wearer's character, and the professional impression it conveys. The results of the garment performance indicator evaluation are presented in Table 7.

Table 7. Results of Performance Indicator Evaluation

Panellist	Percentage
Panellist 1	95%
Panellist 2	90%
Panellist 3	90%
<b>Average</b>	<b>91,67%</b>
<b>Criteria</b>	<b>Very feasible</b>

*Sources: author, 2025*

Based on Table 7, the garment performance indicators of Balataraṅ menswear show relatively positive evaluations. Panellist 1 assigned a score of 95%, while Panellists 2 and 3 each assigned a score of 90%, resulting in an average of 91.67%, which falls into the "highly feasible" category. The panellists' evaluations indicate that Balataraṅ menswear performs consistently and proportionately when worn. The garments were assessed as able to maintain their shape, resist deformation or wrinkling, and be easily worn and removed without compromising the design structure. Furthermore, the garments' appearance was considered consistent with the theme, reflecting the wearer's character and conveying a neat, professional, and controlled impression during use.

Garment performance is closely related to aspects of comfort, shape stability, and ease of use when worn. According to Pratiwi, garment performance is influenced by the appropriateness of pattern construction, material selection, and proper workmanship, enabling the garment to maintain its shape while providing comfort to the wearer.<sup>23</sup> Thus, the garment performance indicators of Balataraṅ menswear are categorized as highly feasible, as they effectively support the garment's functionality, comfort, and holistic appearance in a balanced manner.

### Uniqueness

The uniqueness indicator evaluates the level of novelty and design identity that distinguishes the garment from similar works. The sub-indicators include the originality of ideas, innovation in form or details, exploration of materials and textures, harmony of visual combinations, and the presence of distinctive features representing the designer's identity. The results of the uniqueness indicator evaluation are presented in Table 8.

Table 8. Results of Uniqueness Indicator Evaluation

Panellist	Percentage
Panellist 1	95%
Panellist 2	90%
Panellist 3	90%
<b>Average</b>	<b>91,67%</b>
<b>Criteria</b>	<b>Very feasible</b>

*Sources: author, 2025*

Based on Table 8, the uniqueness indicators of Balataraṅ menswear show relatively high evaluations. Panellist 1 assigned a score of 95%, while Panellists 2 and 3 each assigned a score of 90%, resulting in an average of 91.67%, which falls into the "highly feasible" category. Expert panel evaluations indicate that Balataraṅ menswear exhibits a strong, distinctive design character, setting it apart from typical menswear products. Innovation is evident in the treatment of forms, structural

<sup>22</sup> Asril Ayu Lestari and Astuti, "Eksplorasi Decorative Trims Pada Busana Evening Gown," *Nusra: Jurnal Penelitian Dan Ilmu Pendidikan* 5, no. 3 (2024): 1314–23.

<sup>23</sup> Ria Wanti et al., "Studi Sifat Fisik Dan Kenyamanan Kain Mukena," *Texere* 21, no. 02 (2023).

details, and material exploration that support the design concept. The combination of colours, materials, and details was assessed as creating a unique yet harmonious impression, giving the garments a clear, easily recognisable visual identity.

Design uniqueness is determined not only by visual novelty but also by the underlying conceptual value. The utilization of upcycled jeans as the primary element, combined with local weaving and macramé accents in Balatarang menswear, is considered capable of presenting a distinctive design character while reflecting sustainability values. This uniqueness strengthens the design's position as one that does not merely follow trends but also offers a new perspective on developing sustainable menswear through material exploration and a responsible design approach. This finding aligns with Dewi and Yulistiana, who state that the use of repurposed jeans combined with innovative decorative techniques can establish a strong design identity while enhancing the aesthetic value and sustainability of fashion products.<sup>24</sup> Therefore, Balatarang menswear successfully presents design novelty while establishing an identity consistent with the intended design concept.

Based on the analysis of the six feasibility indicators, the Balatarang menswear design is highly feasible across design, size, sewing techniques, aesthetics, garment performance, and uniqueness. This confirms that the implementation of the design concept, materials, and techniques applied has met the feasibility criteria for a fashion design ready for presentation and possesses potential for further development.

## CONCLUSION

The design of the Balatarang menswear collection demonstrates that exploring a strong philosophical concept, when combined with appropriate design strategies, can produce garments with a distinctive character that are relevant to sustainability issues. The philosophy of wave strength was consistently translated through bold silhouettes, dynamic cuts, and textural explorations that represent strong, flexible, and adaptive characteristics. The implementation of upcycled denim and macramé techniques not only reinforces the edgy visual identity of the collection but also contributes to reducing textile waste and to the sustainable use of materials. The feasibility test conducted by expert panellists indicates that the designs were rated as very feasible across most indicators and viable in terms of technical execution, suggesting that the garments meet the required standards as design works ready to be presented, while also possessing potential for further development, particularly in technical aspects and construction quality.

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<sup>24</sup> Rosseita Dwei and Yulistiana, "Upcycle Jaket Jeans Dengan Penerapan Teknik Hias Hand Painting Dan Embroidery," *Jurnal Penelitian Busana & Desain* 03, no. September (2023): 1–10.

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## AUTHOR(S) BIOGRAPHY

Dhea Amelia is a student of the Fashion Design Education Study Program at Universitas Negeri Semarang. Her interests focus on fashion design, batik development, and the creation of modest and ready-to-wear apparel. Through various academic activities and design practices, she has developed an understanding of contemporary design processes, the application of batik in modern fashion, and the adaptation of designs into functional and market-oriented garments. Dhea is committed to continuously refining her competencies in fashion design and vocational education, aiming to contribute to innovation in Indonesia's fashion industry.