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Analysis of the Quality of Aurelia's Ready-To-Wear Embroidered Set Using Embroidery Techniques Based-on Expert Evaluations

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Abstract

This study aims to analyze the quality of the Aurelia Embroidered Set apparel product, which is based on embroidery techniques, using the expert judgment method. The background of this study is rooted in the growing demand for ready-to-wear products that not only possess aesthetic value but also measurable technical and functional quality. The research method used is descriptive quantitative with a product evaluation design. The research subjects consisted of five apparel experts selected using purposive sampling, with an assessment instrument in the form of a Guttman scale covering six indicators: design, sizing, aesthetics, sewing technique, garment performance, and product uniqueness. Data were analyzed using descriptive statistics to determine the percentage of suitability. The results showed that all indicators fell into the "highly suitable" category, with an average percentage of 91.00%. The sewing technique aspect received the highest score, while the sizing aspect received the lowest score but still fell within the "highly suitable" category. The conclusion of this study indicates that the Aurelia Embroidered Set product has good quality in terms of design, production techniques, aesthetics, and comfort, making it suitable for development as an innovative ready-to-wear product in the fashion industry.

Keywords: ready-to-wear, embroidery, expert judgment, apparel quality, fashion design

INTRODUCTION

The fashion industry is currently growing rapidly in line with the public's increasing demand for clothing that serves not only as a means of covering the body but also as a medium for expressing identity and lifestyle¹. One of the most widely used categories is ready-to-wear clothing because it is practical, easy to produce, and meets the needs of the modern market. However, high demand for ready-to-wear products is not always accompanied by structured quality testing; therefore, an evaluation is needed to ensure that products are not only visually appealing but also meet quality standards in terms of design, production techniques, and garment performance². Therefore, quality testing is essential to ensure a product's suitability before it is marketed or further developed within

¹ M Ranadireksa, "FASHION STYLE SEBAGAI KOMUNIKASI NONVERBAL DALAM MEMBENTUK IDENTITAS DIRI (Kajian Komunikasi Simbolik Pada Penggunaan Tren Fashion Era 90-An Dan 2000-An Di Kalangan Mahasiswa Ilmu Komunikasi Universitas Lampung 2021-2023)" (Universitas Lampung, 2025).

² Novia Hidayatunnisa, I Dewa Ayu Made Budhyani, and Putu Agus Mayuni, "PENGEMBANGAN BUSANA READY TO WEAR BERBAHAN LIMBAH DENIM DENGAN SUMBER IDE OMBAK LAUT," *Jurnal BOSAPARIS: Pendidikan Kesejahteraan Keluarga* 15, no. 2 (July 2024): 164–74, doi:10.23887/jppkk.v15i2.69374.

the fashion industry.

In the development of ready-to-wear fashion, design is a key factor that continues to undergo innovation. One element widely used to enhance aesthetic value is the embroidery technique, which serves not only as decoration but also as a means of shaping the character and visual identity of garments. Embroidery techniques can add artistic value and enhance the appeal of fashion products³. Furthermore, the use of design elements such as embroidery also plays a role in differentiating products amid the increasingly competitive fashion industry. Therefore, embroidery is not merely positioned as a decorative element but also as a vital component in shaping the aesthetic quality of ready-to-wear clothing.

Previous research indicates that the development of ready-to-wear apparel has been extensively pursued through various creative approaches, such as exploring cultural sources of inspiration, traditional games⁴, and contemporary design concepts⁵. However, most of these studies have focused primarily on the design development process and the exploration of ideas⁶, without comprehensively and in-depth examining the quality of the final product using structured evaluation indicators⁷. Furthermore, research on embroidered sets that focuses on quality evaluation based on expert judgment remains relatively limited, even though embroidery techniques hold great potential for enhancing the aesthetic value and character of modern fashion products.

Based on these conditions, this study presents the Aurelia Embroidered Set as an innovation in ready-to-wear fashion that integrates embroidery techniques as a key design element. This product was selected because it represents a fusion of modern feminine concepts, the use of soft denim, and the exploration of decorative techniques that possess strong aesthetic value and character. Thus, the Aurelia Embroidered Set is not only a fashion product but also a subject of study to examine the extent to which design quality and production techniques can meet industry standards in the fashion industry.

This study uses the expert judgment method to assess product quality based on six key indicators: design, size, aesthetics, sewing technique, garment performance, and uniqueness. This approach was chosen because it provides an objective evaluation by experts of the overall quality of fashion products⁸. Furthermore, this method is also relevant for ensuring that the developed products meet quality standards from both technical and aesthetic perspectives.

The novelty of this study lies in the integration of embroidery techniques as a key design element, as well as a comprehensive evaluation of product quality based on structured indicators. Therefore, this study is expected to contribute to the development of ready-to-wear apparel that is not only innovative in design but also possesses measurable quality that meets modern fashion industry

³ Dinar Octa Pratiwi and Sari Yuningsih, "PERANCANGAN BUSANA READY TO WEAR MENGGUNAKAN TEKNIK BORDIR DENGAN INSPIRASI MOTIF BENANG BINTIK," *MODA* 4, no. 2 (September 28, 2022), doi:10.37715/moda.v4i2.3161.

⁴ Eureka Mabelia and Widowati, "ANALISIS KUALITAS BUSANA READY TO WEAR 'ALONA' BERBASIS PERMAINAN TRADISIONAL CONGKLAK," *Jurnal Pendidikan Sejarah Dan Riset Sosial Humaniora* 6 (2026).

⁵ Supriyani and Maria Krisnawati, "Ready-to-Wear Fashion 'Klakka' Feasibility Test with an Exploration of the Congklak Game as Design Inspiration," *Journal of Creativity Student* 9, no. 1 (2026): 46, doi:10.56521/attendant.

⁶ Dinda Rosa Gayatri and Noor Laila Ramadhani, "EKSPLORASI BUSANA WANITA READY TO WEAR DENGAN SUMBER IDE RUMAH ADAT JEPARA," *JURNAL DEFA*, 2024.

⁷ Neetu Singh and Madhuri Singh, "Traditional Embroidery Revival for Sustainability: A Systematic Literature Review and Bibliometric Analysis," *Discover Sustainability* 6 (March 18, 2025), doi:10.1007/s43621-025-00944-0.

⁸ Naomi C. Brownstein et al., "The Role of Expert Judgment in Statistical Inference and Evidence-Based Decision-Making," *American Statistician* 73, no. sup1 (March 29, 2019): 56–68, doi:10.1080/00031305.2018.1529623.

standards⁹.

In addition, the objective of this study is to analyze the product quality of the Aurelia Embroidered Set based on six fashion quality assessment indicators. Theoretically, this study is expected to enrich the body of research on the evaluation of ready-to-wear apparel quality based on embroidery techniques. Practically, this study can serve as a reference for designers in developing fashion products that possess both aesthetic value and good technical quality, and it can be used as a guideline in the product development process for apparel based on innovative embroidery techniques.

METHOD

This study employed a descriptive quantitative approach with a product assessment design to analyze the quality of the Aurelia Embroidered Set consisting of a shirt and culottes based on embroidery techniques. The descriptive quantitative approach was used to describe and analyze research data in the form of numbers and percentages¹⁰. The research was conducted over one week in June 2026, with data collected at BBPVP Semarang, Burjo Ngegas Pleburan, and the experts' homes. Research subjects were selected using purposive sampling, consisting of five fashion experts: one fashion designer, two graduates of the Fashion Design Program, and two fashion educators. In this study, the term "expert" or "validator" is used instead of "respondent" because the subjects serve as evaluators of product quality. The research instrument used a Guttman-scale-based validation questionnaire that had been validated through expert judgment. The instrument consisted of six indicators for assessing garment quality: design, size, aesthetics, sewing technique, garment performance, and uniqueness. Each indicator consists of 5 main items with 6 sub-statements, resulting in a total of 30 main items with 180 assessment statements. Experts provided ratings by checking the "YES" column (score 1) if the statement applied to the product, and "NO" (score 0) if it did not¹¹. Data collection was conducted through product observation and a garment quality assessment checklist questionnaire. The obtained data were analyzed using descriptive statistics. The analysis stage involved calculating the frequency of "YES" responses from all experts for each item using SPSS version 27 to obtain the mean score for each indicator. Next, the mean values were converted into suitability percentages using Microsoft Excel. The suitability percentage was calculated using the formula:

$$P = \frac{f}{N} \times 100\%$$

Description:

- P = Eligibility percentage
- f = Total score obtained
- N = Maximum score

Table 1. Criteria

Percentage Value	Criteria
81% - 100%	Highly Eligible
61% - 80%	Eligible
41% - 60%	Moderately Eligible
21% - 40%	Less Eligible
0% - 20%	Not Eligible

⁹ Arfinda Yosihah and Wulansari Prasetyanintyas, "Fashion Feasibility Analysis Ready to Wear Based QR Codes in Fashion," *Journal of Creativity Student* 9 (2026).

¹⁰ Arif Rachman et al., *METODE PENELITIAN KUANTITATIF KUALITATIF DAN R&D*, ed. Bambang Ismaya et al. (CV Saba Jaya, 2019).

¹¹ Elok Fajriah et al., "Development Of Hots-Based Test Questions Wayground On Basic Food Processing Techniques In Culinary Vocational School," *Jurnal Pendidikan Tata Boga Dan Teknologi* 7, no. 1 (March 17, 2026): 96, doi:10.24036/jptbt.v7i1.27174.

This category is used to determine the quality rating of the Aurelia Embroidered Set based on the results of an objective and measurable expert assessment.

RESULTS AND DISCUSSION

Product Description: Aurelia Embroidered Set

The Aurelia Embroidered Set is a ready-to-wear outfit consisting of a top and culottes, featuring a modern, feminine, and casual-elegant design concept. It is crafted from soft denim in a washed denim color, giving it a relaxed yet distinctive look. The top is designed with a Shanghai collar, cuffed sleeves, and an asymmetrical cut that serves as both a front opening and the main focal point of the design, creating a dynamic and unique look. The front of the top features embroidery details created using a combination of machine and hand-embroidery techniques, serving as both an aesthetic element and a signature design feature adapted from an industrial internship (Prigel) experience, further enhanced by decorative gold rose-shaped buttons that add a feminine and elegant touch. Meanwhile, the culottes are designed with a high-waisted cut, featuring a single pleat at the front, an elastic waistband at the back, and a wide hem to create a neat, proportional, and comfortable silhouette. Overall, this product represents a fusion of design innovation, the aesthetic value of embroidery, and the character of modern ready-to-wear fashion.



Figure 1. Design of the Aurelia Embroidered Set
Sources: Authors, 2026

Results of the Expert Judgment Assessment

Table 2. Product Quality Assessment Criteria

Respondents	Design	Size	Aesthetic	Sewing Techniques	Garments Performance	Unique Features
R1	30	29	30	30	30	30
R2	30	29	30	30	30	30
R3	27	24	28	30	29	30
R4	24	26	28	29	26	17
R5	28	20	17	26	28	24

¹² Armia Vidatul Zummiassa et al., "PENGEMBANGAN MEDIA LIFT THE FLAP BOOK UNTUK MENINGKATKAN KEMAMPUAN KONSEP PENJUMLAHAN 1-5 PADA ANAK USIA DINI," *Jurnal Program Studi PGRA* 9, no. 1 (January 2023).

Sources: Authors, 2026

Summary of Scores and Eligibility Percentages

Table 3. Summary of Scores and Eligibility Percentages

Indicators	Percentage	Category
Design Quality	92.67%	Highly Acceptable
Size Quality	85.33%	Highly Acceptable
Aesthetic Quality	88.67%	Highly Acceptable
Quality of Sewing Techniques	96.67%	Highly Acceptable
Quality of Garment Performance	95.33%	Highly Acceptable
Quality of Product Distinctiveness	87.33%	Highly Acceptable
Average	91.00%	Highly Acceptable

Sources: Authors, 2026



Figure 2. Aurelia Embroidered Set

Sources: Authors, 2026

The research results show that the quality of the Aurelia Embroidered Set falls into the “very satisfactory” category, with an average score of 91.00%. This indicates that the product is of good and consistent quality across all evaluation aspects, including design, sizing, aesthetics, sewing techniques, garment performance, and product uniqueness. This high score indicates that the application of design concepts and production techniques aligns with ready-to-wear apparel quality standards, which emphasize not only aesthetics but also functionality and comfort. Overall, these results demonstrate that the developed product meets the fashion industry’s quality standards and is therefore suitable for further development as a ready-to-wear product that offers a balanced blend of aesthetic and functional value.

In terms of design, the product received a score of 92.67%, falling into the “highly satisfactory” category. This result indicates that the garment’s design meets the criteria for color harmony, silhouette, proportions, and focal point. The wash denim color used conveys a modern and neutral impression in line with the character of ready-to-wear clothing, while the garment’s proportional silhouette effectively accentuates the wearer’s body shape in a balanced manner. Additionally, the asymmetrical cut on the front of the garment serves as the primary focal point, directing visual attention and creating a dynamic, non-monotonous look. This aligns with, who state that decorative elements and design structure can strengthen the visual identity of ready-to-wear garments, as well as¹³, who emphasize that design development based on source ideas can enhance the character value

¹³ Ni Kadek Feby Diantari, Ni Ketut Widiartini, and Putu Agus Mayuni,
“PENGEMBANGAN BUSANA CASUAL BERBASIS KEARIFAN LOKAL DENGAN

of fashion products. Overall, the design aspects demonstrate that the visual aesthetics and garment structure have successfully formed a strong product identity that aligns with the design concept.

In terms of sizing, 85.33% of the garments were rated as “very suitable.” This result indicates that the garment sizes align with the wearer’s body proportions, including balanced measurements for bust, waist, and hip circumferences, as well as garment length. This fit demonstrates that the patterns used conform to the body’s shape without causing wrinkles or excessive tension. Additionally, the balance between the right and left sides of the garment also showed precise results, making the garment look neat when worn. More broadly, these results indicate that pattern construction and sizing play a crucial role in determining the comfort and wearability of ready-to-wear garments, as sizing inaccuracies can affect both the aesthetics and overall functionality of the garment.

In terms of aesthetics, the garment received a score of 88.67%, falling into the “highly satisfactory” category. This score indicates that the design elements such as color, shape, texture, and ornamentation are harmoniously integrated. The embroidered details on the top serve as the primary aesthetic element, enhancing the garment’s visual character without disrupting the overall design balance. The combination of soft denim with gold rose-shaped button accents also adds artistic value that enhances the garment’s feminine and elegant appeal. Overall, these results demonstrate that a garment’s aesthetics are determined not only by decorative elements but also by the harmony of all design elements that form the product’s visual unity.

In terms of sewing techniques, the highest percentage 96.67% was achieved in the “very satisfactory” category. This indicates that the quality of garment production is excellent, as evidenced by the neatness of the seams, the accuracy of pattern alignment, and the quality of the garment’s interior finishing. The sewing techniques used demonstrated high precision, including the application of decorative techniques such as embroidery, which was executed neatly and in accordance with the design specifications. These results align with the findings of¹⁴, who state that the quality of production techniques and finishing plays a crucial role in determining the final acceptability of fashion products. More broadly, the high score in this aspect indicates that meticulousness in the production process is a key factor supporting the final quality of a garment.

In terms of garment performance, a score of 95.33% was achieved, falling into the “very satisfactory” category. This indicates that the garments are comfortable to wear, retain their shape well, and allow for flexibility during wear. The soft denim material used ensures a neat drape and resists deformation, so the garment maintains its proportions when worn. Additionally, the garment conveys an elegant and professional look in line with its design concept. These results demonstrate that garment performance is influenced not only by design but also by the selection of appropriate materials and construction techniques during the design process¹⁵.

In terms of product uniqueness, the set received a score of 87.33% in the “highly satisfactory” category. This result indicates that the Aurelia Embroidered Set offers novelty through the use of embroidery as the primary design element, as well as the exploration of asymmetrical cuts as the garment’s focal point. Furthermore, inspiration drawn from industrial practice (Prigel/internship) lends the product a distinctive identity that sets it apart from typical ready-to-wear garments. This uniqueness is also evident in the combination of modern design with decorative touches that give the product a one-of-a-kind character. Overall, this demonstrates that a product’s uniqueness is a crucial factor in achieving differentiation within the competitive fashion industry.

Overall, all evaluation indicators fell into the “highly satisfactory” category, with an average percentage of 91.00%. This indicates that the Aurelia Embroidered Set product is of good quality across all aspects of the expert judgment evaluation. When compared to previous studies, the results of this study reinforce the finding that the development of ready-to-wear apparel based on the exploration of

TEKNIK PATCHWORK DAN SULAMAN SASHIKO,” *Jurnal BOSAPARIS: Pendidikan Kesejahteraan Keluarga* 17, no. 1 (March 2026): 33–43, doi:10.23887/jppkk.v17i1.110527.

¹⁴ Diah Ayu Listiawati and Sri Endah Wahyuningsih, “Convertible Party Clothing Design ‘Lumora’ and Fashion Product Quality Analysis,” *JURNAL TEKNOLOGI BUSANA DAN BOGA* 14, no. 2 (2026), <https://journal.unnes.ac.id/journals/teknobuga/index>.

¹⁵ Nimas Ayu Pawestri Atmaja and Adhi Kusumastuti, “Gaun ‘Divine Armor of Grace’ Dengan Bustier Resin: Penciptaan Dan Uji Kelayakan Estetika Busana Couture,” *SENTRI: Jurnal Riset Ilmiah* 5, no. 1 (January 23, 2026): 44–55, doi:10.55681/sentri.v5i1.5427.

design and decorative techniques such as embroidery can produce products that are not only aesthetically pleasing but also possess good technical quality and are worthy of further development within the fashion industry.

CONCLUSION

Based on the research findings, it can be concluded that the Aurelia Embroidered Set developed as a ready-to-wear garment using embroidery techniques was found to be of very high quality based on expert judgment across six indicators: design, sizing, aesthetics, sewing techniques, garment performance, and product uniqueness, with an average score of 91.00%. These results demonstrate that the integration of modern design concepts with the application of embroidery techniques as the primary aesthetic element can produce apparel products that not only possess good visual appeal but also meet technical, comfort, and functional requirements in use. These findings underscore that structured product quality evaluation is crucial in the development of ready-to-wear apparel to produce competitive products that meet fashion industry standards. Thus, this product has the potential for further development within the fashion industry as a reference for innovative design, as well as a benchmark for designers in creating ready-to-wear apparel based on decorative techniques such as embroidery that possess measurable aesthetic value and quality.

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REFERENCES

- Atmaja, Nimas Ayu Pawestri, and Adhi Kusumastuti. "Gaun 'Divine Armor of Grace' Dengan Bustier Resin: Penciptaan Dan Uji Kelayakan Estetika Busana Couture." *SENTRI: Jurnal Riset Ilmiah* 5, no. 1 (January 23, 2026): 44–55. doi:10.55681/sentri.v5i1.5427.
- Brownstein, Naomi C., Thomas A. Louis, Anthony O'Hagan, and Jane Pendergast. "The Role of Expert Judgment in Statistical Inference and Evidence-Based Decision-Making." *American Statistician* 73, no. sup1 (March 29, 2019): 56–68. doi:10.1080/00031305.2018.1529623.
- Fajriah, Elok, Lucia Tri Pangesthi, Luthfiyah Nurlaela, and Diwyacitta Antya Putri. "Development Of Hots-Based Test Questions Wayground On Basic Food Processing Techniques In Culinary Vocational School." *Jurnal Pendidikan Tata Boga Dan Teknologi* 7, no. 1 (March 17, 2026): 96. doi:10.24036/jptbt.v7i1.27174.
- Hidayatunnisa, Novia, I Dewa Ayu Made Budhyani, and Putu Agus Mayuni. "PENGEMBANGAN BUSANA READY TO WEAR BERBAHAN LIMBAH DENIM DENGAN SUMBER IDE OMBAK LAUT." *Jurnal BOSAPARIS: Pendidikan Kesejahteraan Keluarga* 15, no. 2 (July 2024): 164–74. doi:10.23887/jppkk.v15i2.69374.
- Listiawati, Diah Ayu, and Sri Endah Wahyuningsih. "Convertible Party Clothing Design 'Lumora' and Fashion Product Quality Analysis." *JURNAL TEKNOLOGI BUSANA DAN BOGA* 14, no. 2 (2026).

- <https://journal.unnes.ac.id/journals/teknobuga/index>.
- Mabelia, Eureka, and Widowati. "ANALISIS KUALITAS BUSANA READY TO WEAR 'ALONA' BERBASIS PERMAINAN TRADISIONAL CONGKLAK." *Jurnal Pendidikan Sejarah Dan Riset Sosial Humaniora* 6 (2026).
- Ni Kadek Feby Diantari, Ni Ketut Widiartini, and Putu Agus Mayuni. "PENGEMBANGAN BUSANA CASUAL BERBASIS KEARIFAN LOKAL DENGAN TEKNIK PATCHWORK DAN SULAMAN SASHIKO." *Jurnal BOSAPARIS: Pendidikan Kesejahteraan Keluarga* 17, no. 1 (March 2026): 33–43. doi:10.23887/jppkk.v17i1.110527.
- Pratiwi, Dinar Octa, and Sari Yuningsih. "PERANCANGAN BUSANA READY TO WEAR MENGGUNAKAN TEKNIK BORDIR DENGAN INSPIRASI MOTIF BENANG BINTIK." *MODA* 4, no. 2 (September 28, 2022). doi:10.37715/moda.v4i2.3161.
- Rachman, Arif, E Yochanan, Andi Samanlangi, and Hery Purnomo. *METODE PENELITIAN KUANTITATIF DAN R&D*. Edited by Bambang Ismaya, Anis Anggraini, M Raditya, and Utamirohmahsari. CV Saba Jaya, 2019.
- Ranadireksa, M. "FASHION STYLE SEBAGAI KOMUNIKASI NONVERBAL DALAM MEMBENTUK IDENTITAS DIRI (Kajian Komunikasi Simbolik Pada Penggunaan Tren Fashion Era 90-An Dan 2000-An Di Kalangan Mahasiswa Ilmu Komunikasi Universitas Lampung 2021-2023)." Universitas Lampung, 2025.
- Rosa Gayatri, Dinda, and Noor Laila Ramadhani. "EKSPLORASI BUSANA WANITA READY TO WEAR DENGAN SUMBER IDE RUMAH ADAT JEPARA." *JURNAL DEFA*, 2024.
- Singh, Neetu, and Madhuri Singh. "Traditional Embroidery Revival for Sustainability: A Systematic Literature Review and Bibliometric Analysis." *Discover Sustainability* 6 (March 18, 2025). doi:10.1007/s43621-025-00944-0.
- Supriyani, and Maria Krisnawati. "Ready-to-Wear Fashion 'Klakka' Feasibility Test with an Exploration of the Congklak Game as Design Inspiration." *Journal of Creativity Student* 9, no. 1 (2026): 46. doi:10.56521/attendant.
- Vidatul Zummiasa, Armia, Mas'udah, Sri Widayati, and Muhammad Reza. "PENGEMBANGAN MEDIA LIFT THE FLAP BOOK UNTUK MENINGKATKAN KEMAMPUAN KONSEP PENJUMLAHAN 1-5 PADA ANAK USIA DINI." *Jurnal Program Studi PGRA* 9, no. 1 (January 2023).
- Yosihah, Arfinda, and Wulansari Prasetyanintyas. "Fashion Feasibility Analysis Ready to Wear Based QR Codes in Fashion." *Journal of Creativity Student* 9 (2026).