

## Heuristic Evaluation Analysis of Beauty E-Commerce Interfaces Using the Systematic Literature Review Approach: A Case Study of Sociola

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### Abstract

*This study aims to evaluate the Sociolla e-commerce website based on the principles and paradigms of Human-Computer Interaction (HCI). The evaluation covers multiple dimensions, including human-system interaction, technological implementation, usability metrics, and ergonomic aspects of the user interface. The research adopts Nielsen's heuristic evaluation approach, complemented by in-depth analysis of the user interface and aesthetic assessment, which influence user perception. Sociolla was chosen due to its significant market position as a leading beauty e-commerce platform in Indonesia, with an innovative and responsive interface design that meets user needs. The primary issue addressed in this study is how well the platform provides an optimal and efficient user experience in the context of human-computer interaction. The findings indicate that Sociolla demonstrates high compliance with HCI principles, particularly in system visibility, user control mechanisms, error prevention, and consistent interface design, which contribute to user comfort and engagement. Moreover, the platform effectively integrates aesthetic elements with functional needs in a manner that enhances user engagement while improving task efficiency. This study contributes significantly to the theoretical development of e-commerce interface design and provides practical insights for digital developers in creating effective interfaces, particularly in the beauty and cosmetics sector. The findings are expected to serve as a guide for designers and developers of other digital platforms in enhancing user experience by applying effective HCI principles, while maintaining a balance between functionality references.*

**Keywords:** Aesthetic Design, E-commerce User Interface, Human-Computer Interaction, Sociolla, Usability Evaluation, User Experience

## **I. Introduction**

Digital transformation has fundamentally changed the way humans interact with technology, especially in e-commerce, which has now become a catalyst for economic growth. In Indonesia, e-commerce has shown significant annual growth, reaching 20% in the last five years [11], making Indonesia one of the fastest-growing e-commerce markets in Southeast Asia.

However, despite its rapid growth, the main challenge in this industry is providing an optimal user experience. Human-Computer Interaction (HCI) plays a crucial role in creating designs that are not only functional, but also emotionally and psychologically satisfying for users. HCI principles now focus not only on functional aspects, but also include social, cultural, and emotional dimensions that influence user interactions with technology [26]. This is in line with the development of the HCI paradigm, which has shifted from simply “ease of use” to a more holistic and user-oriented experience [25].

Sociolla, one of Indonesia's leading beauty e-commerce platforms, is a relevant example of applying UCD principles locally. Founded in 2015, Sociolla has grown into an integrated beauty ecosystem with an online platform, physical stores, and a digital community [6]. With over 42 million users in 2023, Sociolla has successfully demonstrated that user-centered design plays a crucial role in the success of digital platforms.

This study aims to analyze the application of HCI principles in the design of the Sociolla website, particularly in terms of human, technology, usability, and ergonomic aspects, and to contribute to the understanding of how digital platforms can better serve user needs. This study also fills a gap in the literature on the application of HCI in Indonesian e-commerce, focusing on market characteristics that differ from those in developed countries.

### **2.1. Human-Computer Interaction: Evolution and Contemporary Paradigms**

Human-Computer Interaction (HCI) is a discipline that studies the relationship between humans and interactive computer systems. HCI initially developed in the 1980s, with a primary focus on the technical and functional aspects of computer systems. Over time, the HCI approach has evolved to include psychological and emotional aspects, as well as social and cultural aspects of the interaction between users and technology [1]. Today, HCI places greater emphasis on a holistic and contextual user experience, which seeks to reduce cognitive load and increase user satisfaction in interactions with computer systems.

In its early stages, HCI focused on improving the efficiency and effectiveness of computer use by addressing issues of ergonomics and human interaction. According to [3], HCI initially prioritized technical aspects, but since the 2000s, the HCI paradigm has shifted towards a more in-depth user experience, focusing on emotional and contextual influences in interactions [2]. This shows that interface design is not only about functionality, but also how technology can interact with users emotionally and culturally.

### **2.2. The Human Aspect in Human-Computer Interaction**

The human aspect of HCI focuses on the characteristics, capabilities, and limitations of humans as technology users. [4] classify the human aspect into three categories: physical, cognitive, and affective [26]. The physical aspect involves the user's motor skills and visual perception, while the cognitive aspect relates to thinking and problem-solving, and the affective aspect covers emotions and motivations that influence how users interact with technology.

In the context of e-commerce, these human factors greatly influence the user experience, especially in terms of how users feel when interacting with the platform. High usability can reduce cognitive load, facilitate navigation, and improve the shopping experience. [5] stated that demographic factors and technological experience influence user preferences for interface design [9]. Designs that take cultural aspects into account can improve usability and user satisfaction [34].

### **2.3. The Role of Technology in Human-Computer Interaction**

Web technologies, such as responsive design and progressive web applications (PWAs), play a major role in creating a consistent user experience across devices. According to [6], every layer of web technology, from strategy to surface, affects the overall user experience [7]. Technology also enables personalization, which can increase the relevance of content and services for users, affecting conversion rates and user satisfaction [20] [29].

### **2.4. The Usability Aspect in Human-Computer Interaction**

Usability measures how easy an interface is to use and includes five main components: learnability, efficiency, memorability, errors, and satisfaction [18]. Heuristic evaluation, which uses basic principles to identify usability issues, has been proven effective in detecting deficiencies in interface design [21]. In e-commerce, high usability is essential for improving user satisfaction and driving conversions [3] [32].

### **2.5. Ergonomic Aspects in Human-Computer Interaction**

Ergonomics in IMK relates to the adaptation of system design to meet the physical, cognitive, and emotional needs of users. Ergonomic designs that pay attention to aesthetics and functionality have a significant impact on user experience [8]. In e-commerce, good visual ergonomics, including color selection and other design elements, can increase user satisfaction and trust [5] [13].

### **2.6. Sociolla: Profile and Position in Indonesia's Beauty E-Commerce Industry**

Sociolla, founded by PT. Social Bella Indonesia in 2015, is a beauty e-commerce platform that focuses on product authenticity and information transparency. Sociolla combines various elements, such as an online shopping platform, beauty media, social commerce, and physical stores, to create an omnichannel experience for users. With over 42 million users in 2023, Sociolla offers more than 300 beauty brands and has achieved significant growth in Gross Merchandise Value (GMV) [6]. Sociolla positions itself as a leader in Indonesia's beauty e-commerce industry by continuously innovating in design and user experience.

## **II. Related Work**

Research on e-commerce interface evaluation often uses a usability approach within the framework of Human-Computer Interaction (HCI), particularly through heuristic evaluation methods. Studies show that heuristic evaluation is effective in identifying navigation problems, design inconsistencies, and weaknesses in feedback mechanisms in online shopping systems. In addition, perceptions of usability including ease of use, efficiency, and clarity of information have a significant impact on user trust and purchase intent. These findings show that usability quality not only affects the user experience, but also the overall business performance of e-commerce platforms.

On the other hand, the aesthetic and emotional dimensions of interface design are gaining attention in contemporary HCI research. There are two main dimensions of website aesthetics, namely classical aesthetics and expressive aesthetics, which play a role in shaping the perception of system quality. The concept of aesthetic-usability effect shows that users tend to perceive more aesthetically pleasing systems as easier to use. This is in line with the theory of emotional design, which emphasizes that user experience is formed through interactions at the visceral, behavioral, and reflective levels. In the context of e-commerce, these aesthetic and emotional factors are crucial because the online shopping experience is greatly influenced by visual appearance, ease of navigation, and user affective engagement.

Although various studies have evaluated usability and aesthetics on global e-commerce platforms, comprehensive studies that integrate human, technology, usability, and ergonomics aspects in the context of Indonesian e-commerce are still limited. Most domestic studies focus on general marketplaces, while research on omnichannel-based beauty e-commerce platforms is still rare. Therefore, this study fills the literature gap by adopting a heuristic evaluation approach combined with aesthetic analysis to provide a more holistic understanding of the interface quality of the Sociolla platform. This approach is expected to enrich the IMK literature and provide empirical contributions to the development of e-commerce design in developing countries.

### III. Research Method

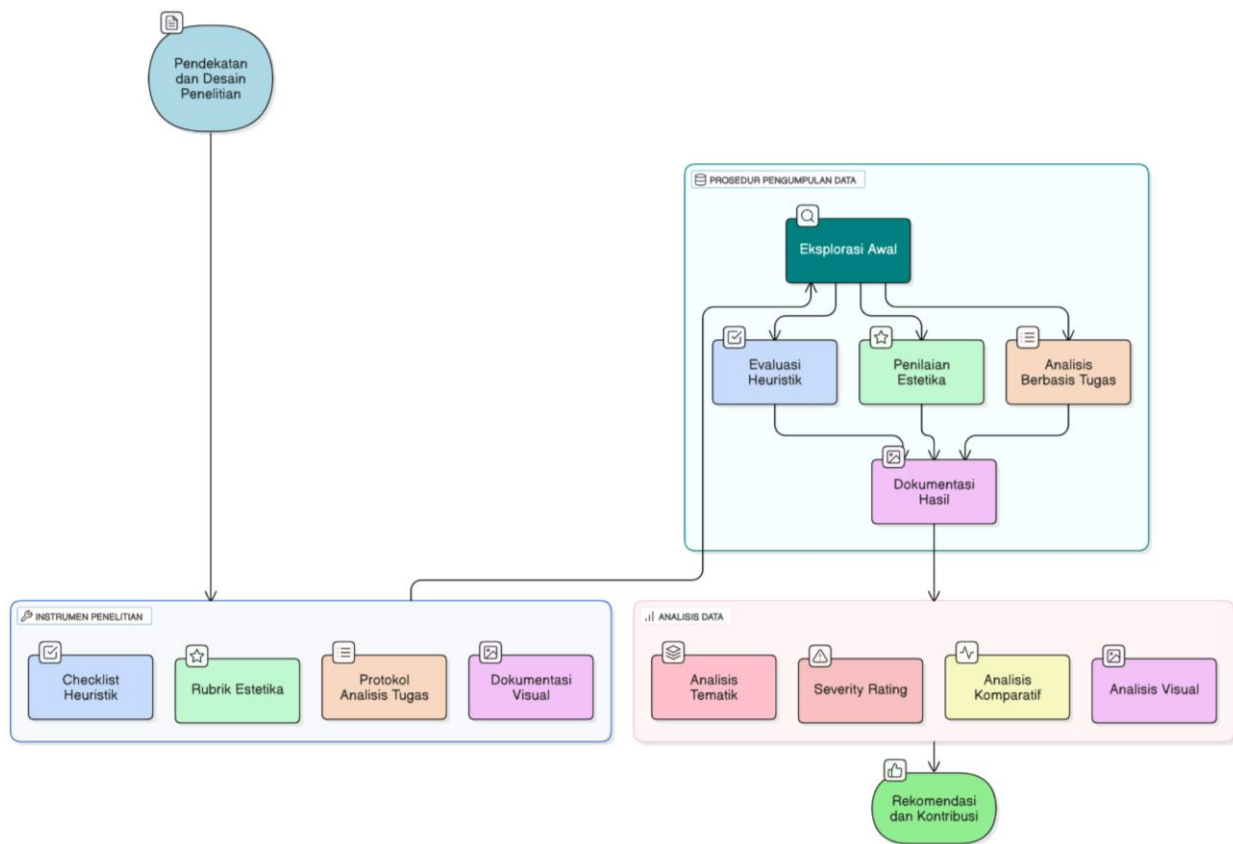


Fig. 1. Step of Research

#### 3.1 Research Approach and Design

This study uses an evaluative approach with a mixed-method design that combines qualitative and quantitative analysis. The evaluative approach was chosen to assess the quality of the Sociolla website based on criteria established in the IMK paradigm. The mixed-method design facilitates data triangulation, which provides a more comprehensive understanding of the phenomenon under study [4]. Specifically, this study adopts the heuristic evaluation model developed by [21] and expanded with an aesthetic component analysis based on the framework of [12]. The heuristic evaluation model is used to assess the usability of the website, while the aesthetic analysis assesses the visual design elements that influence the overall user experience. This combination allows researchers to evaluate not only the functional aspects of the Sociolla website, but also the aesthetic dimensions that are important in creating a comprehensive user experience. Thus, this study is

expected to provide a comprehensive picture of the quality of the Sociolla website based on relevant IMK principles.

### 3.2 Research Instruments

The main instrument used in this study was:

1. **Heuristic Evaluation Checklist:** Based on Nielsen's 10 heuristic principles, this checklist is used to identify usability issues on the Sociolla website. Each principle is operationalized into specific indicators that can be observed and measured.
2. **Aesthetic Evaluation Rubric:** Adapting Lavie & Tractinsky's aesthetic framework, this rubric is used to assess the aesthetic aspects of the Sociolla website. This rubric covers the dimensions of classical aesthetics (clarity, cleanliness, symmetry) and expressive aesthetics (creativity, originality, beauty).
3. **Task Analysis Protocol:** Used to analyze user flows in completing specific tasks on the Sociolla website, such as product search, product filtering, and checkout process.
4. **Screenshots and Screen Recordings:** Used to document elements of the Sociolla website interface and user interactions with the platform. This visual documentation is important to support analysis and provide stronger evidence of findings.

### 3.3 Data Collection Procedures

The data collection process was carried out in several stages as follows:

1. **Exploratory Analysis:** At this stage, researchers conduct an initial exploration of the Sociolla website to understand its information architecture, key features, and design characteristics. The goal is to gain a general overview of how the website is structured and how design elements are implemented.
2. **Heuristic Evaluation:** Evaluators with expertise in IMK conducted a heuristic evaluation of the Sociolla website using a prepared checklist. Each usability issue found was recorded, categorized based on its severity, and documented for further analysis.
3. **Aesthetic Assessment:** The evaluator assesses the aesthetic aspects of the Sociolla website using an aesthetic evaluation rubric. This assessment covers design elements such as layout, color, typography, and visual cohesion. The assessment aims to explore how well these elements support a pleasant visual experience for users.
4. **Task-Based Analysis:** The evaluator conducts a task-based analysis to evaluate the effectiveness and efficiency of the website in facilitating specific user tasks, such as searching for products, selecting filters, and completing the checkout process. The goal is to assess how easily and quickly users can complete their tasks without significant difficulty.
5. **Documentation:** All evaluation results, including screenshots and screen recordings, are documented to provide visual evidence of the findings. This documentation will be used to further explore how website design can affect user experience.

### 3.4 Data Analysis

The collected data will be analyzed using the following approaches:

1. **Thematic Analysis:** For qualitative data obtained from heuristic evaluation and aesthetic assessment, thematic analysis is used to identify patterns and themes that emerge in the context of compliance with IMK principles. This analysis will highlight patterns related to how design elements influence the user experience.

2. **Severity Rating:** Identified usability issues will be classified based on their severity using a scale of 0-4, in accordance with Nielsen's (1994) recommendations [19]. This scale classifies issues ranging from no problem (0) to critical issues that require immediate improvement (4).
3. **Comparative Analysis:** The evaluation results of the Sociolla website will be compared with industry standards and best practices in e-commerce design to identify the strengths and weaknesses of the website. This comparison aims to provide perspective on whether the Sociolla website is already in a competitive position in the e-commerce market.
4. **Visual Analysis:** Documented screenshots and screen recordings will be analyzed to provide visual context for the evaluation findings. This analysis will help identify design patterns that affect the user experience, particularly in terms of aesthetics and visual functionality.

Using this method, this study is expected to provide a clear picture of the quality of the Sociolla website, both in terms of functionality and aesthetics, as well as provide useful recommendations for improving the quality of the user experience on beauty e-commerce platforms in Indonesia. This study also aims to explore more deeply how IMK principles can be effectively applied to local platforms, which can enrich the IMK literature, especially in developing countries. In addition, the results of this study can provide insights for developers and interface designers to create platforms that are more inclusive and responsive to the needs of users in Indonesia. Finally, this study contributes to optimizing the design of e-commerce websites in Indonesia, by considering the aspects of ergonomics, usability, and aesthetics that are key to success in the digital industry.

## IV. Result

### 4.1.1 Cognitive Considerations

The Sociolla website demonstrates a good understanding of the cognitive aspects of users by implementing a design that minimizes cognitive load. This is in line with the cognitive load theory by Sweller et al. (1998), which states that excessive cognitive load can hinder the effectiveness of interaction [28]. Sociolla simplifies interactions by grouping products into clear categories, utilizing the principle of information chunking that makes it easier for users to organize information and make decisions. This principle is in line with Miller's (1956) magical number seven theory, which states that humans can only process  $7 \pm 2$  items of information at a time [17].

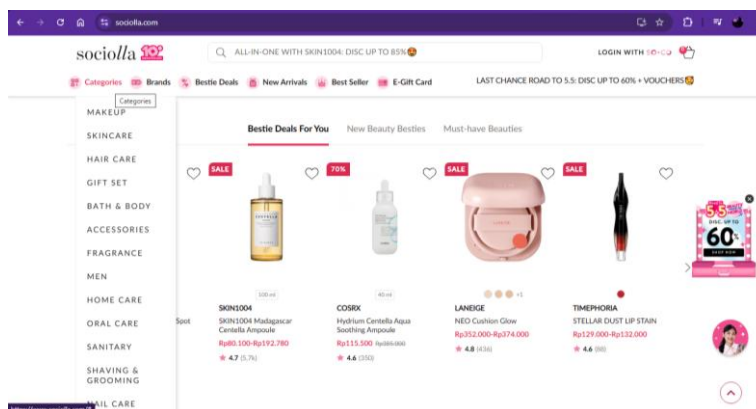


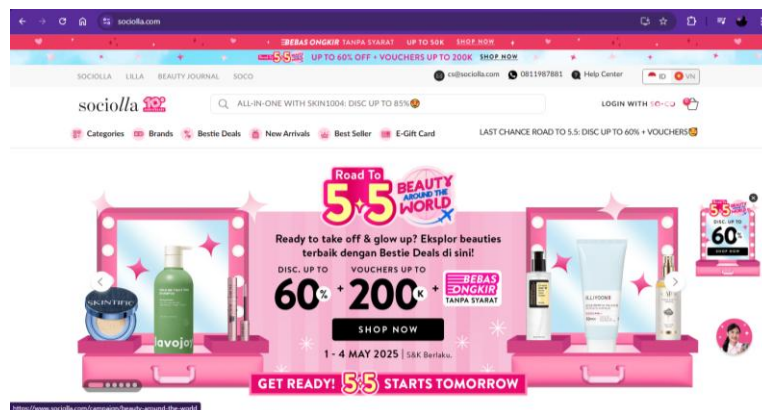
Fig 2. Sociolla Product Categorization

Features such as “Product Recommendations” and “Similar Products” utilize the principle of recognition over recall [16], allowing users to recognize relevant options without having to actively remember them. The implementation of this principle speeds up searching and decision making, in line with [17] findings, which emphasize the importance of designs that optimize human cognitive processes.

The Sociolla website also uses a clear visual hierarchy to direct users' attention to important elements. This principle improves efficiency in product search and decision making, as well as reducing confusion. [18] research on reducing cognitive load also underscores the importance of designs that simplify user interactions [27].

#### **4.1.2 Affective Considerations**

In terms of affective aspects, Sociolla has succeeded in creating a pleasant emotional experience for users with its attractive design, in line with [19] theory of emotional design [23]. This theory divides emotional experiences in design into three levels: visceral, behavioral, and reflective. At the visceral level, Sociolla uses attractive visual elements such as a harmonious color palette, high-quality product images, and a clean layout. A positive first impression enhances users' emotional response to the platform.

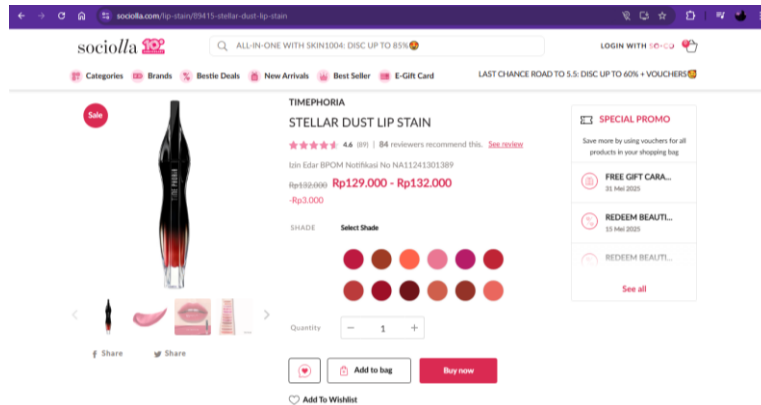


**Fig 3.** Sociolla Home Page

At the behavioral level, Sociolla offers intuitive and responsive navigation, allowing users to interact easily during the shopping process. The experience becomes more meaningful at the reflective level, where personalized content and relevant product offerings strengthen the emotional connection between users and the platform. This is in line with [24] findings on user-enjoyment-based design [10]. This design approach also applies the aesthetic-usability effect principle [31], which shows that aesthetic design can improve the perception of ease of use. Sociolla prioritizes attractive and easy-to-use designs, creating comfort for users and reducing barriers to interacting with the website.

#### **4.1.3 Perceptual Considerations**

The Sociolla website design demonstrates an understanding of the principles of human visual perception, which is essential for creating an optimal user experience. The use of Gestalt principles, as shown in Figure 3, helps to create a cohesive and easy-to-understand visual experience. One example is the use of the principle of proximity, where related elements such as product prices and ratings are grouped close to the product images, making it easier for users to process information quickly.



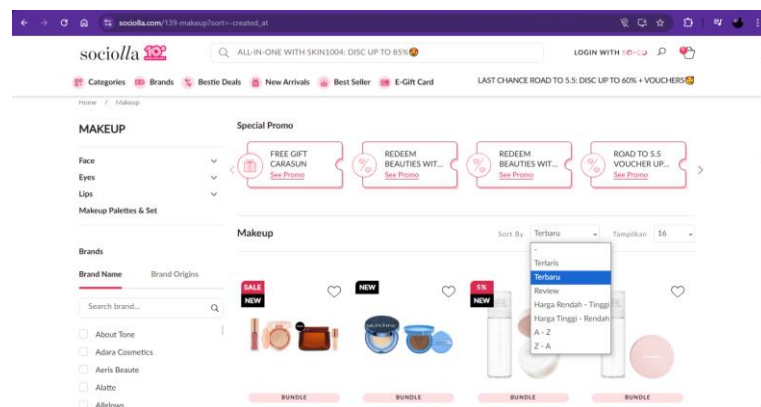
**Fig 4.** Implementation of the Proximity Principle in Sociolla Product Layout

The figure-ground principle is also effectively applied through the use of white space to create clear contrast between foreground and background elements. This improves readability and helps users focus on relevant information. The use of appropriate typography, with varying font sizes and styles, supports the implementation of a clear visual hierarchy that prioritizes important information such as price, rating, and product description. With a design that pays attention to these perceptual aspects, Sociolla makes it easier for users to understand and process information visually.

## 4.2 Evaluation of Technology Aspects on the Sociolla Website

### 4.2.1 Frontend Technologies

Sociolla utilizes the latest frontend technology, including HTML5, CSS3, and modern JavaScript, to create a responsive interface across various devices. This is in line with the principles of responsive web design introduced by [15]. The website can be accessed optimally on desktops, tablets, and smartphones, ensuring a consistent user experience across all platforms. The use of AJAX enables dynamic content updates without reloading the page, which improves interaction speed and user convenience.



**Fig 5.** Sociolla Website Responsiveness

However, although this website complies with most of the Web Content Accessibility Guidelines (WCAG) 2.1, there is still room for improvement, particularly in terms of color contrast and keyboard navigation. These improvements are important to ensure better accessibility for users with visual or mobility impairments.

### 4.2.2 Backend Technologies

On the backend side, the Sociolla website implements infrastructure that supports scalability and high performance. The use of a Content Delivery Network (CDN) ensures fast page loading times, even when accessed from various geographical locations. This improves the user experience by reducing latency. In addition, an effective caching system helps minimize server response times, enabling a smoother experience when moving between pages.

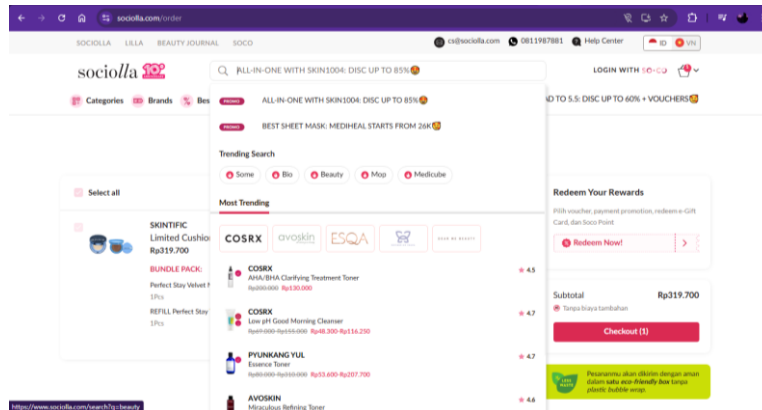


Fig 6. Search feature on Sociolla

Load balancing technology and database optimization are used to handle large transaction volumes and maintain website stability even during spikes in visitor traffic. This demonstrates that Sociolla has paid attention to the need for efficient and reliable infrastructure, especially for e-commerce businesses with high transaction volumes.

### 4.2.3 Integration Technologies

Sociolla demonstrates expertise in integrating various external technologies that enhance website functionality. A comprehensive payment system integrated with various methods, ranging from credit cards to e-wallets, provides convenience for users in choosing payment options according to their preferences. This integration is in line with the principle of flexibility of use recommended by [19].

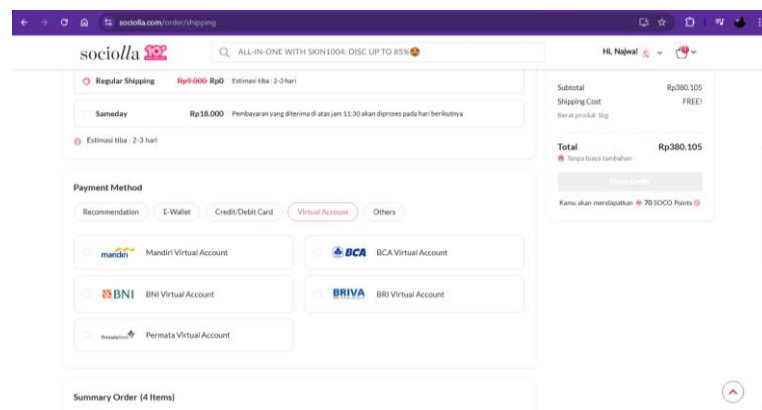


Fig 7. Integrated Payment Options on the Sociolla Website

This website is also integrated with a logistics system, allowing users to track their shipments in real time. This feature provides users with the transparency they need to know the status of their orders. Integration with social platforms such as SOCO also allows users to view product reviews, enriching their shopping experience with more social and interactive content.

### 4.3 Evaluation of Usability Aspects on the Sociolla Website

#### 4.3.1 Visibility of System Status

The Sociolla website implements the principle of system status visibility well. Users are always given timely feedback on system status through visual indicators, such as progress bars during loading and animations when products are added to the shopping cart. This provides transparency about what is happening within the system, which enhances the user experience. Clear information is also displayed when a product is out of stock or limited in stock, and users are offered the option to sign up for availability notifications. With this kind of transparency, users feel more in control at every stage of their interaction with the website.

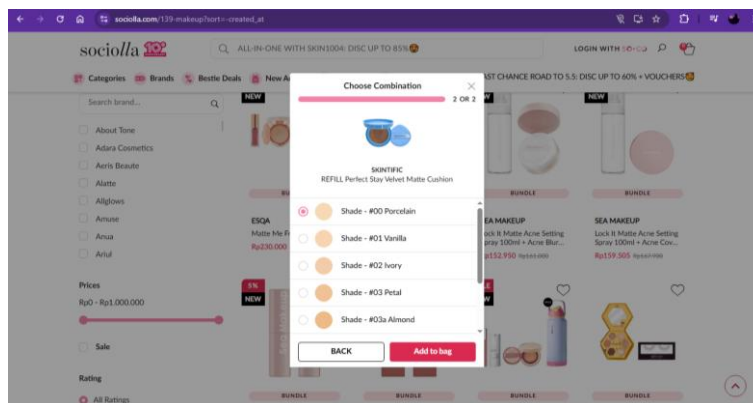


Fig 8. Visual Feedback When Adding Products to the Shopping Cart

This principle is also reinforced by the use of immediate visual feedback, such as pop-up notifications or animations that inform users when a product has been successfully added to their cart or when a transaction is being processed. This helps users feel more confident and reduces confusion. For example, when adding a product to the cart, an animation showing the item entering the cart provides immediate confirmation to the user, which is in line with the principle of feedback needed to reinforce user confidence in their interaction with the system [9].

In addition, Sociolla also maintains open communication through notifications when there are errors or technical problems, such as when a payment fails or there is a problem with delivery. This shows the importance of communicating the system status in a way that is clear and understandable to users, ensuring they can make better decisions or take the necessary actions to continue.

#### 4.3.2 Error Prevention

The Sociolla website implements various mechanisms to prevent user errors, creating a smoother and less frustrating experience. This approach is in line with the principle of error prevention, which emphasizes that designs that prevent problems are better than good error messages [19].

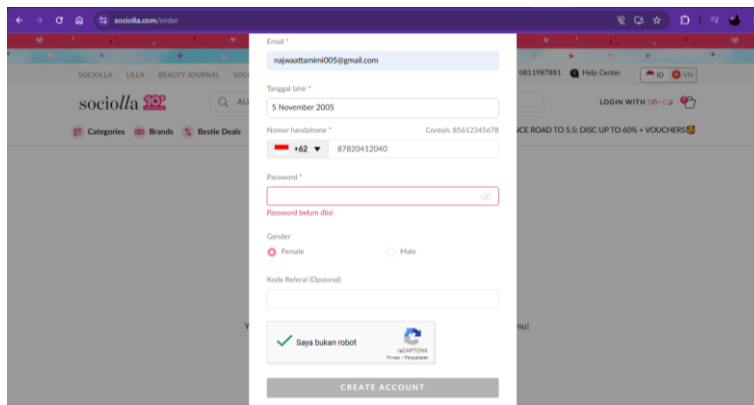


Fig 9. Form Validation on the Sociolla Registration Page

The input forms on the registration and checkout pages are equipped with real-time validation that provides instant feedback when users enter invalid data. This approach prevents users from submitting forms with incomplete or incorrectly formatted data, reducing frustration and increasing efficiency, in line with [33] recommendations on effective form design.

### 4.3.3 User Control and Freedom

Sociolla gives users complete control over their navigation and actions on the website. The consistent “Back” feature allows users to return to the previous page without losing any data they have entered, creating a sense of security and trust in their interaction with the website. Figure 9 shows how the confirmation dialog when removing items from the cart gives users the opportunity to cancel their actions if an error occurs. Users can choose to cancel the removal of items or confirm the removal of products directly.

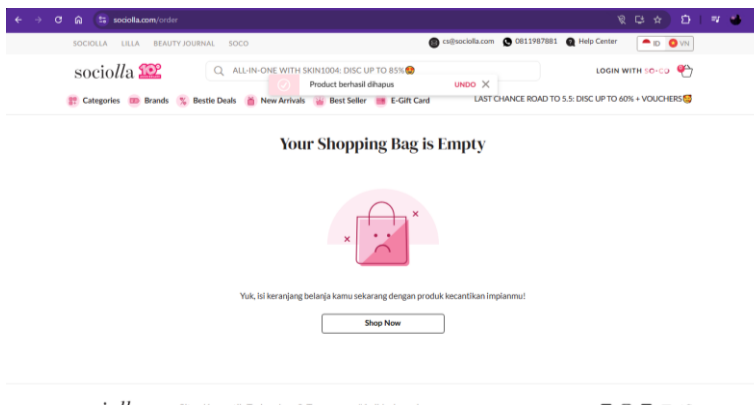


Fig 10. Display When Deleting Items from the Cart

In addition, this website provides various options to allow users to correct or change decisions they have made, such as editing shipping information or changing payment methods on the checkout page. This approach is in line with the principle of reversible actions expressed by [29], who suggests that interfaces should give users the freedom to cancel or change their decisions easily without negative consequences [30]. The “Search History” and “Recently Viewed Products” features allow users to quickly return to items they have previously explored, reducing the need to remember and search again. This implementation is in line with the principle of reversible actions recommended by [31] to enhance user exploration and experimentation

[30]. It also allows users to feel more free to explore and correct their mistakes without fear of losing the information they have already found.

## 4.4 Evaluation of Ergonomic Aspects on the Sociolla Website

### 4.4.1 Visual Ergonomics

The Sociolla website implements visual ergonomics principles by using the right color contrast between text and background, creating good readability. The use of proportional font sizes and spacing between elements also reduces the possibility of eye strain for users who interact with the website for long periods of time. This approach demonstrates attention to user visual comfort, in line with recommendations for reducing eye strain.

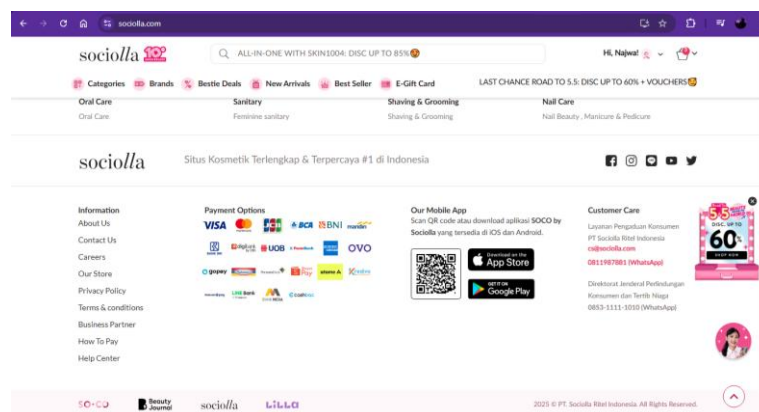


Fig 11. Optimal Visual Contrast Implementation in Text and Background

Proportional font sizes are essential to ensure good readability across different devices. Sociolla has paid attention to using fonts that are appropriate to the context, such as larger font sizes for important elements like prices and product names, and smaller font sizes for additional information like product descriptions. The spacing between elements also supports visual comfort and makes it easier for users to navigate the page without feeling overwhelmed by too much information.

### 4.4.2 Interactive Ergonomics

Sociolla applies the principle of interactive ergonomics by prioritizing ease and efficiency of interaction. The size of interaction targets, such as buttons and links, is adjusted so that they are easy for users to reach without error. Figure 18 shows the optimal implementation of touch targets on mobile devices, minimizing typing errors on interactive elements. The size of buttons and links on mobile devices has been adjusted to the standards recommended by [22], with an average size of 44px × 44px to ensure that users can interact with these elements comfortably.

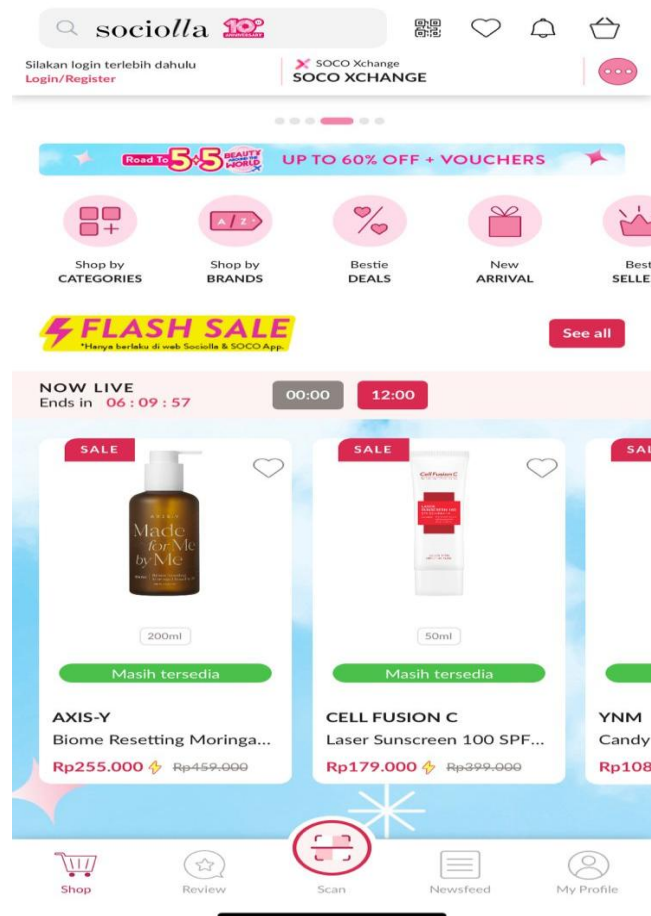


Fig 12. Optimal Implementation of Touch Targets on Mobile Versions

Sufficient spacing between interactive elements reduces the possibility of misclicks, especially on mobile devices with touch input. This implementation reflects an understanding of Fitts's Law, which explains the relationship between target size, distance, and ease of interaction [14]. Therefore, users can easily interact without feeling hindered or experiencing typos that often occur on websites that are not ergonomically designed.

#### 4.4.3 Cognitive Ergonomics

The Sociolla website also pays attention to the principles of cognitive ergonomics, with a clear information structure and navigation that makes it easy for users to understand the website. The use of visual cues such as color, size, and contrast to indicate information hierarchy helps users prioritize more important elements. This reduces the possibility of confusion and disorientation, and facilitates a more efficient experience.

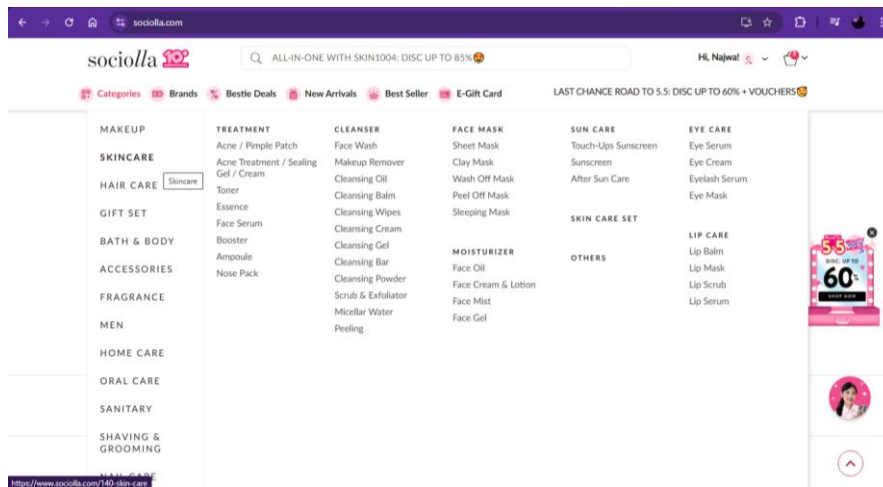


Fig 13. Implementation of a Clear Information Hierarchy on Category Pages

The implementation of progressive disclosure on product pages also supports the principle of cognitive ergonomics by presenting information in stages. More detailed information, such as full descriptions or user reviews, is only displayed when users need it, reducing the amount of information that must be processed simultaneously. This allows users to focus on the most relevant information and improves decision-making efficiency.

#### 4.4.4 Aesthetic Ergonomics

The aesthetic aspect of the Sociolla website is carefully considered, with a harmonious color palette and clean design. The minimalist design with effective use of white space helps reduce visual clutter and increases user focus on important information. The appropriate use of color not only serves an aesthetic purpose but also improves readability and comfort when interacting with the platform.

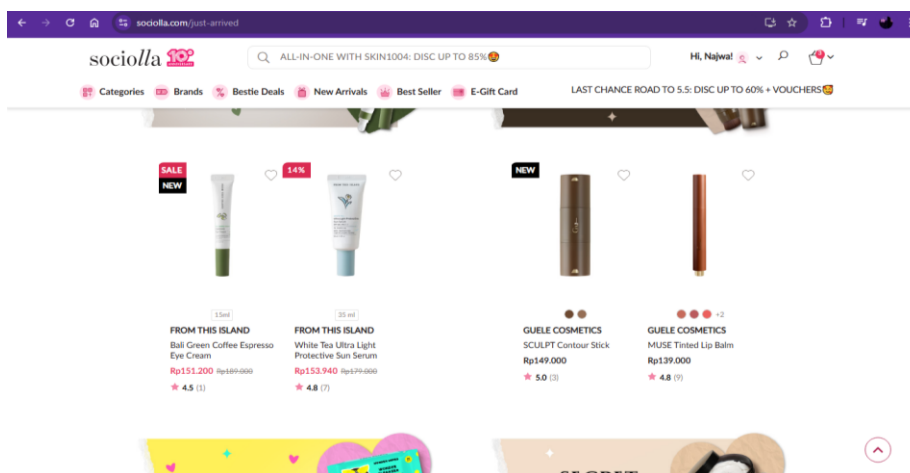


Fig 14. Consistent Visual Aesthetics Implementation Across Various Elements

This clean and organized design creates a comfortable user experience free from visual distractions. This design also reinforces the principle of aesthetic-usability effect [20], where an aesthetically pleasing and attractive design can improve the perception of website usability and increase user satisfaction.

## **V. Conclusion**

Based on a comprehensive evaluation of the Sociolla website using the Human-Computer Interaction (HCI) framework, it can be concluded that this website has implemented effective design principles that are responsive to user needs. From a human perspective, Sociolla demonstrates a good understanding of the cognitive, affective, and perceptual aspects of users. Cognitively, the website minimizes users' cognitive load by applying the principle of cognitive load minimization through clear product grouping and relevant recommendation features. This approach reduces the difficulty users have in processing information and speeds up decision making. On the affective side, the website design prioritizes the user's emotional experience with attractive visual elements and responsive navigation. This strengthens the user's emotional engagement with the platform. In addition, the application of Gestalt principles in interface design also supports cohesive visual perception and makes it easier for users to quickly understand and access relevant information.

From a technological standpoint, Sociolla utilizes frontend and backend technologies that support a responsive and efficient user experience. The use of HTML5, CSS3, and modern JavaScript allows the website to adapt to various devices, while performance optimizations such as Content Delivery Network (CDN) and caching ensure that page loading speeds are maintained even when accessed from different geographical locations. Integration with payment and logistics systems enriches the platform's functionality, allowing users to make transactions easily and track shipments in real-time. However, there is still room for improvement in terms of accessibility, especially in color contrast and keyboard navigation, which is important for reaching more users, including those with visual or mobility impairments.

The usability aspects of this website also demonstrate high compliance with Nielsen's usability principles, such as visibility of system status, match between system and the real world, and consistency and standards. With clear system transparency through visual indicators and timely notifications, users feel more in control at every stage of interaction. This website also makes it easier for users by aligning the design and interaction flow with real-world expectations, reducing confusion. However, the help and documentation aspects can still be improved to support users who need further guidance.

Finally, from an ergonomic perspective, Sociolla implements design principles that consider user comfort both physically and cognitively. The visual design uses appropriate color contrasts and proportional font sizes, as well as easily accessible interactive elements, reducing eye strain and minimizing errors in interaction. This design approach minimizes the potential for user errors during prolonged interaction.

Overall, the Sociolla website demonstrates a solid implementation of IMK principles, creating a user experience that balances functional and hedonic aspects. This contributes significantly to Sociolla's success as a leading beauty e-commerce platform in Indonesia, reflecting a deep understanding of the needs, preferences, and behavior of its target users.

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