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Designing an Eco-Friendly Information Center and Gallery for Sustainable Woven Fabrics in Jakarta

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ABSTRACT

The rapid growth of fast fashion has led to significant environmental damage. In contrast, Indonesia's traditional weaving industry represents a sustainable production method. However, local fabric brands emphasizing sustainability are not well-known. This study aims to design an information center and gallery to promote eco-friendly woven fabrics, utilizing sustainable materials such as bamboo, glass, and wood. The main objective is to raise public awareness of sustainable woven fabrics and support local brands with sustainable principles. A qualitative research approach was used, including data collection through questionnaires and surveys. Observations were made at the Textile Museum and Batik Keris to inform the design process. The design incorporates sustainable materials and aims to educate the public about environmentally friendly woven fabrics. The project includes spaces for workshops, information dissemination, and displays, promoting sustainable development goals and preserving Indonesian cultural heritage.

KEYWORDS

Sustainable Weaving
Eco-Friendly Material
Local Fabric
Public Awareness
Interior Design

1. Introduction

The proposed information center and gallery serve a crucial role in educating the public about Indonesia's rich cultural heritage, particularly its traditional fabrics, and the importance of sustainable fashion practices. These facilities are designed to fill a significant gap in public knowledge, providing a platform for learning about environmentally friendly woven fabrics—something that is currently lacking in Indonesia. Traditional Indonesian fabrics, such as batik and ikat, are deeply rooted in the nation's cultural identity. These textiles are produced using age-old methods that rely on natural materials and tools, passed down through generations. The preservation of these traditional practices is vital not only for maintaining Indonesia's cultural values but also for promoting environmental sustainability. As Wang (2019) notes, these practices are integral to preserving the cultural heritage that defines Indonesia's unique identity.

However, the rise of fast fashion presents a significant challenge to these traditional practices. Fast fashion, characterized by its rapid production cycles and reliance on low-quality materials, has led to severe environmental degradation, including pollution, waste, and the depletion of natural resources (Rukhaya et al., 2021). The industry's focus on speed and low costs often results in poor working conditions and exploitation of labor, particularly in developing countries like Indonesia. This stark contrast between fast fashion and traditional, sustainable textile production underscores the need for a shift towards more ethical practices in the fashion industry.

Sustainable fashion offers a viable alternative, emphasizing the use of environmentally friendly materials, fair labor practices, and waste reduction through recycling and upcycling. This approach aligns with the principles of sustainable development, aiming to create fashion that does not compromise the future. Mukendi et al. (2020) highlight the importance of fostering collaboration among designers, manufacturers, and consumers to promote a more ethical and sustainable fashion industry. The relevance of sustainable fashion to global goals is evident in the United Nations' Sustainable Development Goals (SDGs), particularly Goal 12, which calls for responsible consumption and production. This goal emphasizes the sustainable management of natural resources and encourages companies to adopt practices that minimize waste and environmental impact. Additionally, SDG Goal 11 focuses on making cities inclusive, safe, resilient, and sustainable, while Goal 15 emphasizes the protection and restoration

of terrestrial ecosystems. The design of the gallery within the information center aims to showcase collections of traditional fabrics, such as batik and ikat, thereby facilitating public education on the environmental and cultural significance of these textiles. The center is envisioned as a place where individuals, regardless of their prior knowledge, can learn about the sustainable production processes of woven fabrics, including dyeing and pattern making. Furthermore, the center seeks to raise awareness about the importance of protecting Indonesia's natural environment and preserving its cultural heritage.

Currently, Indonesia lacks dedicated information centers or galleries focused on eco-friendly woven fabrics, leaving many people unaware of the environmental and cultural significance of these textiles. The absence of such a facility underscores the need for this project, which aims to provide a central hub for information and learning about sustainable woven fabrics. By creating this platform, the project seeks to promote public recognition of sustainable fashion and support the growth of environmentally responsible practices within the fashion industry. The establishment of this information center and gallery represents a significant step towards bridging the gap in public knowledge about sustainable fabrics. It will serve as a vital resource for promoting sustainable practices, preserving cultural heritage, and fostering a deeper understanding of the importance of environmental stewardship in the fashion industry. Through education and public engagement, the center will contribute to the growth of a more sustainable and culturally conscious society.

2. Method

According to Sugiyono (2008), the qualitative research method is a method based on the philosophy of post-positivism, which is used to research on natural objects, where sampling or data is carried out with combined collection techniques, data analysis is inductive or qualitative. This approach involves a flexible and integrative use of various data collection techniques, such as observations, interviews, and document reviews, to gather comprehensive insights. The data analysis process in qualitative research is inductive, allowing patterns, themes, and categories to emerge organically from the collected data. This method is particularly effective for exploring complex, contextual, and multifaceted issues, providing a deep understanding of the underlying dynamics and meanings within the studied environment. Based on this understanding, the authors conducted research using qualitative research methods, where this research is realistic. This method was chosen with the aim of explaining and understanding the phenomena that exist in the surrounding environment as deeply as possible using data collection methods. Through in-depth data collection techniques, the researchers aimed to gain a profound understanding of the subject matter, capturing the nuances and complexities of the real-world context. This approach enabled a comprehensive analysis, ensuring that the findings reflect the true nature of the observed phenomena.

2.1. Data Collection

Data collection that was carried out used a questionnaire created by the author via Google Forms. The questionnaire was designed to gather detailed insights and perspectives from participants about their knowledge and attitudes toward environmentally friendly woven fabrics. To reach a broad and diverse audience, the questionnaire link was distributed through multiple social media platforms, including WhatsApp, Instagram Stories, and Twitter. This multi-platform approach ensured a wide distribution and increased the likelihood of obtaining a representative sample. Participants were invited to complete the questionnaire providing valuable data for the research.

2.2. Location

The design location is at DIPO Tower Floors 5 and 6, Jl. Jend. Gatot Subroto Kav. 51-52, RW.7, Petamburan, Tanah Abang, Central Jakarta, Special Capital Region of Jakarta 10260. The choice of this location was based on the results of the respondent's data in the questionnaire that had been carried out, which indicated that many people were still unaware of sustainable development and that Indonesian weaving aligns with the principles of sustainable development. The design location is in the capital city of Indonesia, Jakarta, where most people are expected to be able to find information about sustainable woven fabrics to a large audience. Additionally, it serves as a platform for local brands that adhere to sustainable principles, helping them gain wider recognition for their woven products. The layout of DIPO Tower maintains an eco-friendly theme that incorporates natural materials such as wood and bamboo. The workshop classrooms are specifically arranged to enhance the educational experience,

featuring displays of woven works and spaces for live demonstrations, thereby fostering a deeper understanding of sustainable weaving practices.

2.3. Observation

Observations were conducted as a comparative analysis to inform the project design at two significant locations: the Textile Museum and Batik Keris. The Textile Museum is dedicated to exhibiting works of art related to Indonesian textiles. One of its notable features is a batik course, which takes place in a building located in the museum's backyard. This building, designed in the style of a wide stilt house, has no internal partitions and is constructed entirely from wood with dark brown paint. It boasts numerous windows, enhancing air circulation within the structure, thus creating a conducive environment for batik workshops and exhibitions.

On the other hand, Batik Keris is a well-known company that produces a wide range of textile products, including clothing and handicrafts. While Batik Keris modernizes its products, it retains the quintessential characteristics of traditional batik. The company has numerous branches across Indonesia, with one of its prominent outlets located in the Ciputra Mall shopping center. However, it was observed that the product displays at Batik Keris provide minimal information about the items exhibited. This lack of detailed product information contrasts with the educational and informative approach observed at the Textile Museum, highlighting different methods of engaging with and educating the public about textile heritage and modern textile products.

2.4 Literature Review

2.4.1 Sustainability in Design

Sustainability in design emphasizes the integration of environmentally conscious choices throughout the lifecycle of a building or space, from material selection to energy efficiency and waste management. In the context of designing an eco-friendly information center for sustainable woven fabrics, it is crucial to incorporate materials and methods that reduce environmental impact. The use of bamboo, wood, and glass as primary construction materials not only contributes to the aesthetic appeal but also enhances the building's sustainability by using renewable and recyclable resources (Bredenoord, 2024). Furthermore, sustainable design principles can significantly lower the carbon footprint of a building, aligning with global goals for reducing greenhouse gas emissions and promoting resource efficiency (Achintha, 2016). These principles are essential in creating a space that not only educates but also embodies the values of sustainability.

2.4.2 Cultural Preservation and Sustainable Fashion

The intersection of cultural preservation and sustainable fashion is pivotal in maintaining the heritage of traditional textile practices while addressing modern environmental challenges. Indonesia's rich tradition of weaving, including techniques such as batik and ikat, is deeply intertwined with its cultural identity. By promoting sustainable fashion through these traditional methods, information centers and galleries can play a critical role in preserving these art forms for future generations (Wang, 2019). The design of such spaces should, therefore, highlight the cultural significance of these textiles, showcasing them in a manner that respects their historical context while educating the public on the benefits of sustainable fashion practices. This approach not only supports cultural preservation but also advocates for a shift away from environmentally harmful fast fashion trends (Mukendi et al., 2020).

2.4.3 Eco-Friendly Materials and Construction Methods

Utilizing eco-friendly materials and construction methods is a cornerstone of sustainable architecture. The choice of materials like bamboo and reclaimed wood, which are both sustainable and culturally significant in Indonesia, aligns with the environmental goals of the project while reinforcing local traditions (Bredenoord, 2024). Bamboo is one of the most sustainable building materials due to its rapid growth rate and high carbon sequestration capabilities. It is a renewable resource that can be harvested within 3-5 years, much faster than traditional hardwoods, making it an eco-friendly alternative for construction and design. Bamboo's tensile strength also makes it ideal for use in structural applications, from flooring to furniture, and even as a primary building material in sustainable architecture (Bredenoord, 2024). Its natural aesthetic appeal and durability further enhance its suitability for eco-friendly projects. Hemp is another versatile and sustainable material, particularly valued for its low environmental impact during cultivation. Hemp plants grow quickly and require minimal water and

pesticides, making them an environmentally friendly crop. Hemp fibers are used in textiles, offering a durable and biodegradable alternative to synthetic fabrics. Additionally, hemp can be used in construction as hempcrete, a lightweight and insulating building material that sequesters carbon, further contributing to sustainability goals (Andrianambinina, 2023).

Organic cotton is grown without synthetic pesticides or fertilizers, reducing its environmental footprint compared to conventional cotton farming. It also promotes healthier soil through the use of crop rotation and composting methods. The production of organic cotton helps to minimize water usage and chemical runoff, making it a more sustainable choice for textile manufacturing. Organic cotton is commonly used in the fashion industry to produce clothing that aligns with sustainable and ethical standards, supporting both environmental and social responsibility (Delate et al., 2021). Glass is a sustainable material often used in construction due to its recyclability and durability. In sustainable design, glass is valued for its ability to improve energy efficiency through the use of insulated glazing, which helps in reducing heating and cooling needs in buildings. Additionally, glass can be recycled indefinitely without losing its quality, making it a circular material in the construction industry. Its applications range from windows and facades to interior design elements, where it can enhance natural lighting and contribute to energy savings (Achintha, 2016). Terrazzo is a composite material made from chips of marble, quartz, granite, or glass, bound with cement or resin. It is considered sustainable due to its long lifespan, durability, and the ability to incorporate recycled materials. Terrazzo is often used for flooring and countertops, offering a durable and aesthetically pleasing surface that reduces the need for frequent replacements. The use of recycled glass and other aggregates in terrazzo production further enhances its sustainability by reducing the demand for virgin materials and minimizing waste (Pandharpurkar, 2022).

Additionally, incorporating modern sustainable technologies, such as energy-efficient lighting and water conservation systems, further reduces the environmental impact of the building (Celadyn, 2020). These methods not only contribute to the sustainability of the structure but also serve as educational tools within the space, demonstrating the practical application of sustainable practices in construction and design.

2.4.4 Educational Spaces in Museums and Galleries

Designing educational spaces within museums and galleries requires a focus on accessibility, engagement, and the effective dissemination of information. The layout of these spaces should facilitate easy navigation while providing immersive learning experiences that cater to diverse audiences (Liu et al., 2024). In the context of an information center for woven fabrics, this involves creating areas that allow visitors to explore the process of textile production, from raw materials to finished products, in a hands-on manner. Interactive displays, workshops, and live demonstrations can significantly enhance the educational value of these spaces, making them not only places of learning but also centers for cultural exchange and preservation (Ching & Binggeli, 2018).

Visitor engagement is crucial in ensuring that museums and galleries are not just informative but also memorable. Experience design focuses on creating environments that are both aesthetically pleasing and intellectually stimulating, encouraging visitors to explore, learn, and connect with the exhibits on a deeper level (McLean, 1993).

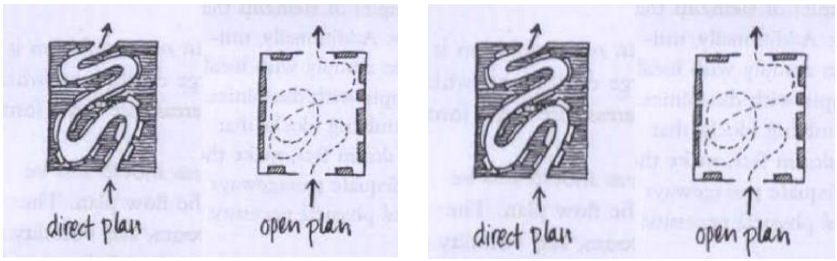

Fig. 1. Circulation Flow (McLean, 1993)

According to Ambrose and Paine (1993), several solutions can mitigate visitor boredom in exhibition halls, primarily by providing escape hatches. These escape hatches are rest or reading areas where visitors can take a break or read. Such areas must be equipped with seats and may also offer reading materials or catalog sheets, allowing visitors to rest before continuing their tour of the exhibition space (Liu et al., 2024). Based on the suggestions by McLean (1993), effective circulation patterns can

significantly enhance visitors' ability to see and navigate exhibition spaces (fig. 1). The following circulation path patterns are recommended:

- Direct Circulation Pattern (Direct Plan / Linear): This straightforward approach offers visitors only one route, ensuring a clear and directed path through the exhibition.
- Open Circulation Pattern (Open Plan): This pattern allows traffic to flow freely from the starting point to the end without following a definite sequence, providing a more flexible visitor experience.
- Circular Circulation Pattern (Radial Plan): Developing from or towards the center of the exhibition space, this pattern offers a central focal point from which visitors can explore various exhibits.

Random Circulation Pattern (Random Plan): This pattern provides multiple alternative paths for visitors, creating a dynamic and varied experience as they navigate through the exhibition.

For an information center dedicated to sustainable woven fabrics, this could involve the use of sensory experiences, such as touchable fabric samples, immersive audiovisual presentations, and interactive workshops. Such design strategies help to create a more dynamic and engaging visitor experience, fostering a lasting appreciation for sustainable fashion and traditional cultural practices (Liu et al., 2024).

3. Results and Discussion

3.1 Concept

The design of an eco-friendly information center and gallery for sustainable woven fabrics in Jakarta is rooted in a thorough analysis of activities and spatial requirements. This section elaborates on the conceptual framework derived from these analyses. The initial step in designing the concept involved creating a comprehensive table of activities and facilities required by the users of the information center. This table outlines the functions of each area, the number of users, the duration of use, and the space requirements, ensuring that all aspects of user interaction and space utilization are considered.

A bubble diagram was created to visualize the spatial relationships and flow between different functional areas within the information center. This diagram helps in understanding how spaces interact and ensures efficient circulation and accessibility (fig. 2).

Fig. 2. Bubble Diagram of the 5th Floor

Figure 6 illustrates the bubble diagram for the 5th floor, highlighting key areas such as the information center spaces, live show area, merchandise and sales area, cafeteria, and lobby. The diagram uses color coding to differentiate between service, private, public, and semi-private areas, ensuring clarity in the spatial organization.

The zoning blocking diagrams further refine the spatial layout by providing a more detailed and scaled representation of the space allocation. These diagrams ensure that the design adheres to the planned spatial relationships and functional requirements.

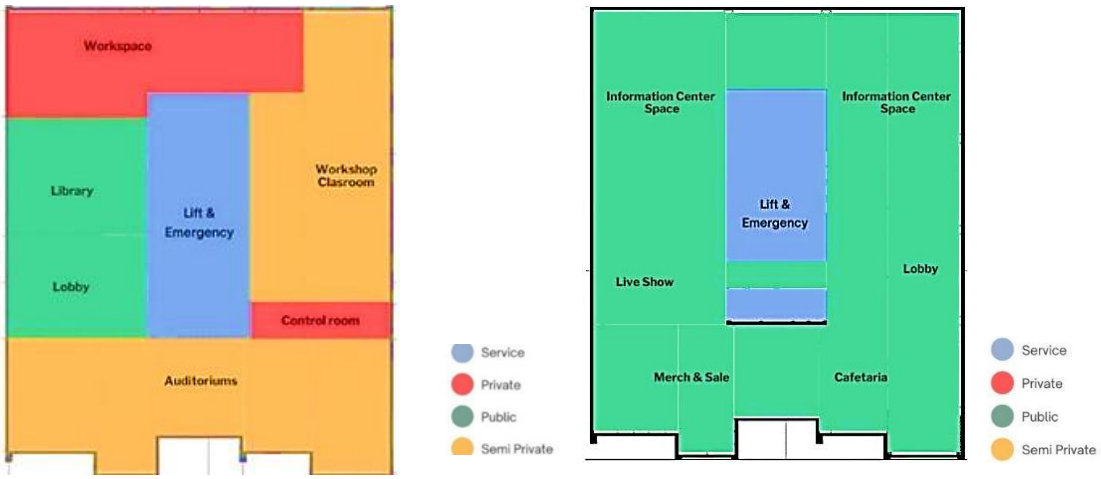

Fig. 3. Zoning Blocking of 6th Floor

Fig. 4. Zoning Blocking of 5th Floor

The design concept for the woven fabric information center is thoughtfully crafted, emphasizing both functionality and aesthetic coherence while adhering to principles of sustainability and cultural preservation. The building is structured across two floors, each meticulously planned to optimize space utilization and support the various functions of the center.

On the 6th floor, as depicted in Figure 3, the zoning strategy is carefully implemented to accommodate key areas such as the workspace, library, auditorium, control room, and workshop classroom. The central lift and emergency area are strategically placed to ensure efficient circulation and safety. This floor's layout promotes a clear and logical flow of movement, facilitating ease of use and access to different functional spaces. Meanwhile, Figure 4 details the zoning blocking of the 5th floor, where the design focuses on public and semi-private areas. The floor includes an information center, live show area, merchandise and sales area, cafeteria, and lobby. The layout is designed to ensure that these public spaces are easily accessible, while maintaining necessary separations for service and private areas, ensuring a smooth interaction between different user groups.

Key elements incorporated into the design include the Two-Floor Structure, which not only optimizes spatial distribution but also ensures that the building's functional requirements are met effectively. The center includes Three Specialized Rooms dedicated to workshops, live demonstrations, and information dissemination, providing a versatile environment for various activities. In terms of interior design, the use of Curved Furniture Design plays a symbolic role, representing the softness and fluidity of woven fabrics. This design choice is complemented by the application of Natural Materials such as wood, bamboo, and rattan, which reinforce the center's commitment to sustainability and eco-friendliness. Furthermore, the Color Selection in the interior spaces reflects the natural materials used. Colors such as white, brown, cream, and other earthy tones are chosen to create a warm and inviting atmosphere, while also enhancing the overall eco-friendly theme of the center.

3.2 Design

3.2.1 Information Center

The design of the information center focuses on various functional areas, each serving a specific purpose in promoting and educating about sustainable woven fabrics. The layout and detailed descriptions of these areas are presented below.

Fig. 5. Layout of Information Center

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Figure 5 shows the comprehensive layout of the information center, highlighting different sections such as the lobby, areas for initial information on woven fabrics, information on basic woven fabrics, information on woven fabric dyes, woven fabric displays, and live shows demonstrating the manufacture of woven fabrics. This layout ensures a logical flow and accessibility for visitors, facilitating an engaging and educational experience. The Information Center Lobby applies a modern and environmentally friendly concept. The use of gold mirror material on the backdrop gives a luxurious and modern impression, with a touch of bamboo arranged vertically, emphasizing an eco-friendly touch. The reception desk measures 400 x 80 cm, featuring a wave shape under the table adapted from woven fabric. The floor and ceiling use a brown list pattern, and LEDs are embedded in the floor as a separator between the lobby area and the surrounding areas.

Fig. 6. Lobby of Information Center

Figure 6 depicts the lobby of the information center, showcasing the modern design with eco-friendly materials. The arrangement of bamboo and gold mirror elements creates an inviting atmosphere that aligns with the center's sustainability goals. The basic information area about weaving is designed with information posters attached to rattan, which are hung in a circle. With a diameter of 4m, this area is divided into two to create the impression of a larger space and to maintain visitor circulation. The material used for the poster shelves is plywood with a thickness of 18mm, finished with white HPL with an orange peel texture. Supporting poles are bamboo sticks, and frames are used on the woven rattan sides to make the information display neater and cleaner.

Fig. 7. Weaving Information

Figure 7 illustrates the weaving information area, highlighting the circular arrangement and use of natural materials to enhance the educational aspect while maintaining an eco-friendly environment. In the information center area, a screen displays a video of the process of making threads for woven fabrics. Benches are provided for visitors who wish to watch the videos. On either side of the screen, displays showcase the basic materials used for weaving, such as cotton flowers, silkworm cocoons, and plant fibers.

Fig. 8. Basic Material of Woven Information

Figure 8 shows the area dedicated to basic materials for woven fabrics, including visual aids and seating arrangements to facilitate learning about the raw materials used in the weaving process. This section features a screen displaying videos of the process of making natural dyes for coloring woven fabrics or threads. Benches are available for visitors to sit and watch. Displays on the right and left sides of the screen exhibit colorful fabrics with information about the materials used to produce each color.

Fig. 9. Natural Material of Woven Information

Figure 9 presents the natural dye information area, emphasizing the educational aspect of sustainable dyeing practices through interactive displays and video presentations. The woven fabric display is located on the left wall and hangs from the ceiling. This display includes a collection of weaving from various regions and local brands that focus on eco-friendly products. The display serves a dual purpose of wall decoration and providing information about environmentally friendly woven fabrics. The material used for the display is rattan, formed into oval and circular frames to make it visually appealing and informative.

Fig. 10. Woven Fabric Display (hang on Ceiling)

Fig. 11. Woven Fabric Display

The images in Figures 10 and 11 showcase the design elements and layout of the woven fabric displays within the Woven Fabric Information Center. These displays are carefully designed to emphasize both the eco-friendly production methods and the aesthetic qualities of the woven fabrics.

Figure 10 highlights the innovative use of ceiling-hung fabric displays, which create a visually striking and dynamic atmosphere within the space. The curved forms of the hanging fabrics mimic the natural flow and softness of textiles, enhancing the thematic representation of woven materials. The spacious layout of the room, combined with the natural light filtering through the large windows, creates an inviting and serene environment that encourages visitors to engage with the displays. Figure 11 focuses on a more structured and detailed presentation of the fabrics, with each piece showcased in individual slots surrounded by circular frames. This arrangement not only highlights the uniqueness of each fabric but also organizes the display in a manner that is both aesthetically pleasing and functional.

The use of natural wood in the display frames and surrounding walls reinforces the eco-friendly theme of the center, creating a warm and organic atmosphere. Together, these design elements work harmoniously to convey the center's commitment to sustainability and cultural preservation. The selection of wood materials, along with the thoughtful placement of lighting and floor patterns, creates a cohesive and immersive experience for visitors.

Fig. 12. Weaving Live Show

Figure 12 provides a detailed visual representation of the weaving live show area within the Woven Fabric Information Center, highlighting the setup designed for live demonstrations of traditional weaving techniques. This area serves as an interactive platform where visitors can engage with the weaving process, gaining a deeper understanding of the craftsmanship involved in creating woven fabrics. The design emphasizes the use of sustainable materials, reinforcing the center's commitment to eco-friendly practices. The seating arrangements are crafted from natural materials, and their curved forms mirror the fluidity and flexibility of the weaving process itself. This thoughtful integration of sustainable elements not only enhances the aesthetic appeal of the space but also educates visitors on the importance of sustainability in both design and production. The stage, positioned at the center, is the focal point of the live show area, where skilled artisans demonstrate the intricacies of weaving. The layout is meticulously planned to ensure that all visitors have a clear view of the demonstrations, fostering a sense of connection between the audience and the weaving process (Sumarno & Indarto, 2018).

Moreover, the design of the information center as a whole is structured to provide a comprehensive learning experience. The use of modern aesthetics, combined with eco-friendly materials, creates an environment that is both visually pleasing and educational. Interactive displays and visual aids complement the live demonstrations, offering additional layers of information that deepen the visitor's understanding of sustainable woven fabrics. Overall, the weaving live show area is a crucial element of the information center, fulfilling its objective of promoting sustainable practices and preserving cultural heritage. By providing an engaging and educational experience, the center not only showcases traditional weaving techniques but also inspires visitors to appreciate and support sustainable design practices.

3.2.2 Workshop Class

The design of the workshop class is crucial for fostering an educational environment that emphasizes sustainability and the traditional craft of weaving. The layout and specific elements are tailored to support interactive and engaging learning experiences. The workshop class is strategically positioned to optimize space and interaction. The study area is located in the middle of the classroom, providing a central point for instruction and group activities. On the right side, there is a designated area for displaying weaving works, serving as examples for students attending the workshop classes. This area helps in visualizing the weaving processes and outcomes, enhancing the learning experience. The use of bamboo arranged vertically to cover the columns gives the classroom an environmentally friendly impression. This choice not only reflects the sustainability theme but also adds a natural aesthetic to the space. The selection of furniture materials and classroom floors further reinforces the eco-friendly concept, with wood elements integrated throughout the design. On the side of the classroom, several displays showcase woven fabrics, providing students with tangible examples of the weaving work they are learning about.

Fig. 13. Workshop Classroom

Figure 13 presents the workshop classroom within the Woven Fabric Information Center, exemplifying a space that harmonizes modern design with eco-friendly principles. The design of this classroom is carefully crafted to create an environment conducive to interactive and hands-on learning, which is essential for students to grasp the complexities of traditional weaving techniques.

The space is thoughtfully arranged, with a central study area that allows for focused group activities while still accommodating individual learning needs. This central area is complemented by strategically placed display sections that not only serve as educational tools but also inspire students through the visual presentation of woven fabrics and the processes involved in their creation. The use of sustainable materials throughout the classroom reinforces the center's commitment to environmental responsibility. Natural materials such as wood are prominently featured, contributing to a warm and inviting atmosphere that aligns with the overall eco-friendly theme of the information center. This choice of materials not only supports sustainable practices but also connects students to the natural origins of the fabrics they are studying, providing a deeper understanding of the relationship between the environment and traditional textile production.

4. Conclusion

The interior design of the eco-friendly information center and gallery for sustainable woven fabrics in Jakarta is grounded in the concept of sustainability. From the outset, the design process focused on integrating sustainable materials, efficient circulation layouts, and cohesive aesthetic elements to create an interconnected and functional space. The design decisions were informed by extensive observations and research, ensuring that each aspect of the interior supports the overall mission of promoting sustainable practices and preserving cultural heritage. The selection of materials and colors for the information center and weaving gallery aligns with sustainability principles. Natural materials such as wood and bamboo are prominently used in special rooms to emphasize their eco-friendly properties. Furniture is constructed from blockboard and plywood, finished with wood-textured High-Pressure Laminate (HPL) to maintain a cohesive and natural appearance. The chosen color palette includes natural tones such as brown, beige, black, and white, which are complemented by accents of gold to impart a touch of luxury to the interior.

Additionally, the design incorporates plants in the cafeteria area to enhance the natural ambiance and reinforce the sustainability theme. The thoughtful integration of these elements not only creates an aesthetically pleasing environment but also educates visitors about the importance of sustainable materials and practices in interior design. By combining modern aesthetics with environmentally responsible choices, the information center and gallery provide an engaging and educational experience for visitors. The spaces are designed to facilitate learning and appreciation of sustainable woven fabrics, offering interactive displays, live demonstrations, and workshop classes that highlight the traditional and sustainable aspects of weaving. This comprehensive approach ensures that the information center serves as a platform for promoting sustainable development goals, supporting local artisans, and preserving Indonesia's rich cultural heritage.

References

Achintha, M. (2016). Sustainability of glass in construction. In *Sustainability of Construction Materials* (pp. 79–104). Elsevier. https://doi.org/10.1016/B978-0-08-100370-1.00005-6

Ambrose, T., & Paine, C. (1993). *Museum Basics*. Psychology Press.

Andrianambinina, H. T. (2023). Reintroducing Hemp (rongony) in the Material Palette of Madagascar: A study on the potential of Hemp Clay components and its impact on social and ecological communities. *Masters Theses*. https://digitalcommons.risd.edu/masterstheses/1117

Andrianambinina, H. T. (2023). Reintroducing Hemp (rongony) in the Material Palette of Madagascar: A study on the potential of Hemp Clay components and its impact on social and ecological communities. *Masters Theses*. Rhode Island School of Design

Anisah, S. S., & Tohjiwa, A. D. (2017). Pusat Batik Surakarta Hadiningrat di Laweyan, Surakarta. *Jurnal Ilmiah Desain & Konstruksi*, *15*(1). https://ejournal.gunadarma.ac.id/index.php/dekons/article/view/1587

Babaro, W. L. (2010). *Museum Budaya di Pontianak*. UAJY.

Bariarcinaur, Farino (2018). Gallery Function. Access 15th May. From https://artspace.id/2018/01/12/lima-fungsi-galeri-seni-dalam-kehidupan-sosial/

Bredenoord, J. (2024). Bamboo as a Sustainable Building Material for Innovative, Low-Cost Housing Construction. *Sustainability*, *16*(6), Article 6. https://doi.org/10.3390/su16062347

Celadyn, M. (2020). Integrative Design Classes for Environmental Sustainability of Interior Architectural Design. *Sustainability*, *12*(18), Article 18. https://doi.org/10.3390/su12187383

Ching, F. D. K., & Binggeli, C. (2018). *Interior Design Illustrated*. John Wiley & Sons.

Delate, K., Heller, B., & Shade, J. (2021). Organic cotton production may alleviate the environmental impacts of intensive conventional cotton production. *Renewable Agriculture and Food Systems*, *36*(4), 405–412. https://doi.org/10.1017/S1742170520000356

Delate, K., Heller, B., & Shade, J. (2021). Organic cotton production may alleviate the environmental impacts of intensive conventional cotton production. *Renewable Agriculture and Food Systems*, *36*(4), 405–412. https://doi.org/10.1017/S1742170520000356

Effendy, E., Aisyah, N., Manurung, R. S., & Nasution, R. (2023). Konsep Informasi Konsep Fakta Dan Informasi. *Jurnal Pendidikan Dan Konseling (JPDK)*, *5*(2), Article 2. https://doi.org/10.31004/jpdk.v5i2.14609

Güner, A., & Gülaçtı, İ. E. (2022). Business models transformed by digitalization in contemporary art museums and galleries. *Journal of Graphic Engineering and Design*, *13*(1), 13–20. https://doi.org/10.24867/JGED-2022-1-013

Liu, Y., Chen, L., Xu, Y., & Yang, J. (2024). Exhibition Space Circulation in Museums from the Perspective of Pedestrian Simulation. *Buildings*, *14*(3), Article 3. https://doi.org/10.3390/buildings14030847

McLean, K. M. (1993). *Planning for people in museum exhibitions*. https://ui.adsabs.harvard.edu/abs/1993ppme.book.....M/abstract

Mukendi, A., Davies, I., Glozer, S. and McDonagh, P. (2020), "Sustainable fashion: current and future research directions", *European Journal of Marketing, Vol. 54 No. 11*. https://doi.org/10.1108/EJM-02-2019-0132

Mukendi, A., Davies, I., Glozer, S., & McDonagh, P. (2020). Sustainable fashion: Current and future research directions. *European Journal of Marketing*, *54*(11), 2873–2909. https://doi.org/10.1108/EJM-02-2019-0132

Mumpuni, P. (2023). Hubungan Pencahayaan Perpustakaan terhadap Produktivitas Mahasiswa (Studi Kasus: Perpustakaan Institut Teknologi Bandung). *INSIDE: Jurnal Desain Interior*, *1*(2), 81-98. https://doi.org/10.31849/inside.v1i2.15703

Pandharpurkar, V. A. (2022). Use of Sustainable Materials and Technologies in Construction Practices. *International Journal of Research in Engineering, Science and Management*, *5*(4), Article 4.

Rukhaya, S., Yadav, S., Rose, N. M., Grover, A., & Bisht, D. (2021). Sustainable approach to counter the environmental impact of fast fashion. *The Pharma Innovation Journal*, *10*(8), 517–523.

Self, R. (2014). *The Architecture of Art Museums: A Decade of Design: 2000 - 2010*. Routledge. https://doi.org/10.4324/9781315817149

Sugiyono. (2008). *Metode penelitian pendidikan: (Pendekatan kuantitatif, kualitatif dan R & D)* (Cet. 6). Alfabeta.

Sumarno, S., & Indarto, I. (2018). Desain Show Room Bagi Para Perajin Rotan DS. Trangsan, Kec. Gatak, Kab. Sukoharjo. Pendhapa, 9(2). https://doi.org/https://doi.org/10.33153/pendhapa.v9i2.2419

Wang, C. (2019). Building a Network for Preserving Intangible Cultural Heritage through Education: A Study of Indonesian Batik. *International Journal of Art & Design Education*, *38*(2), 398–415. https://doi.org/10.1111/jade.12200