

Observation of Interior Facilities Standards Boutique Hotel in Bandung City

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ABSTRACT

Boutique hotels are an attraction for tourists to do a staycation because this hotel has unique designs and characteristics with different themes. With that, boutique hotels in Bandung can be a solution for tourists to do staycations as an accommodation to refresh physically and mentally, which can increase hotel occupancy in Bandung. Based on the standard evaluation of boutique hotel interior facilities, these three boutique hotels already have the appropriate standardization according to the classification of star hotels based on the Decree of the Directorate General of Tourism No. 12/U/II/88. Boutique hotels still need provisions. So, Boutique Hotel will do research by observing and using descriptive qualitative research methods on several 3-star boutique hotels in the city of Bandung by making comparisons of the three hotels regarding standards at boutique hotels based on the shape of the facade, the style of the building, the theme, and the interior atmosphere. And hotel staff services. In addition, based on the organization of space in boutique hotels. So, this study found that boutique hotels have used boutique hotel standards and still use the standards of existing 3-star hotels. Thus, the standards in the three hotels can act as a reference in designing boutique hotels

KEYWORDS

Boutique Hotel
Interior
Facility
Evaluation
Standardization

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1. Introduction

Bandung is famous for exciting destinations or places to visit, such as historical tours, culinary tours, potential natural beauty, shopping areas, and locations for other fun activities. Currently, developments in the tourism industry, such as hotels with unique designs, are starting to emerge to attract tourists. In addition, the city of Bandung has an inherent image as a tourist city.

There are various ways to release stress, such as avoiding bad habits, managing healthy and nutritious eating patterns, relaxing, practicing breathing, doing fun activities, exercising to maintain fitness, establishing harmonious relationships, avoiding being alone, and doing daily activities. Regularly, taking time for yourself and your family, and especially doing vacation or tourism activities. These activities aim to restore physical and mental strength. In a situation like that, the solution that can be done by city residents besides resting is to travel by visiting a place that can have a positive effect, such as providing psychological calm to body and soul. One of the activities that can carry out to achieve this goal is a staycation (Sukadiyanto 2010).

Staycation is a new phenomenon that has emerged in the current era for city dwellers who do it for a short time. Bandung is one of the big cities with people who follow this trend. According to (William Putra Utomo 2019), there are three favorite destinations as exciting tourist spots to visit, namely Jogja, Bandung, and Bali. The large number of tourists who visit the city of Bandung during vacation activities has an impact on the increasing demand for hotel room rentals. Hotels have become a necessity of human



activity. Staycation is one of the activities carried out by staying somewhere in the middle of the city or on the city's outskirts. Staycation activities are very closely related to the community's need for comfort and a sense of relaxation due to stress after daily monotonous activities. So, it can be concluded that 'staycation' can have a calming effect on the mind, body, and soul supported by aesthetic aspects that involve different reactions and experiences in a place visited. Currently, one type of hotel that is starting to attract visitors because of its uniqueness and concept in each hotel in carrying out the staycation vacation trend is a boutique hotel.

A boutique hotel is a hotel that can attract visitors because it has a design style and service that is different from the usual hotel. From a study put forward by (Anhar 2001) about the characteristics of originality, most boutique hotels have a different concept from other star hotels, so a hotel has a strong identity with a unique style. Based on the classification of star hotels according to the Decree of the Directorate General of Tourism No. 12/U/II/88 February 25, 1988. Boutique hotels don't have provisions. Therefore, this study aims to determine the standardization of boutique hotels by implementing existing characteristics and facilities by observing boutique hotels in Bandung, such as Tama Boutique Hotel, Ivory Hotel, and Noor Boutique Hotel.

2. Literature Review

2.1 Hotel Definition

According to (E. Sujana, 2015) a hotel is a business entity or company that provides lodging service accommodation, as well as providing food and drink facilities, as well as sleeping areas or rooms that are used for resting users or guests by making transactions and providing services and facilities by those offered by the management and hotel manager.

Meanwhile, according to (Apandi & Baharta, 2015) a hotel is a building, symbol, and business entity that provides accommodation services and lodging services, food and drink, and other services that the public can use to stay overnight or as a community that uses the facilities provided. by hotels. As described by (Medlik & Ingram, 2000), hospitality is a business or service related to human travel, which is a place to stay and a means of moving people for various activities such as business, religion, tourism, meetings, and others.

Based on the definition of a hotel that has been explained, it can be concluded that a hotel is a business that provides facilities that do not only provide accommodation. However, there are other supporting facilities as support. So, visitors can use these facilities because they follow the price and services provided.

2.2 Boutique Hotel Definition

A boutique hotel is a small hotel that offers unique and luxurious rooms rented for short periods to tourists by having a unique, intimate, and unusual design and offering personal service like a five-star hotel. Thus, a boutique hotel has a small number of rooms (Panait, 2009). Meanwhile, according to (Mcintosh & Siggs, 2005), boutique hotels provide quality and unreal experiences to guests by facilitating psychological emotions, imagination, knowledge, and experience. Aspects of efficiency and comfort must be considered in designing the interior of a hotel. Both aspects affect hotel design by considering the interests of hotel visitors, who are the hotel's target (Nurhalisa et al., 2022), In addition, boutique hotels have quality service, intimate design, strategic location, use modern decorations and unique interior designs with an application of concepts and themes throughout the building that provides nuances and experiences for visitors to be interested (Nurhalisa, Wismoyo, and Farida 2022). Boutique Hotels are called "lifestyle hotels" or "Design Hotels" by offering originality in architecture, furniture, and decoration with superior service and high quality. The main aim of boutique hotels is to make tourists feel at home by creating a warm and welcoming environment in hotels (Gökdeniz, 2018) A study regarding the definition of a boutique (Lim & Endean, 2009) as follows:

- It has less than 100 rooms.
- Located in the city.

- It has a restaurant with good quality.
- Has services comparable to 3-4-5-star hotels.
- Have custom design and personal service.
- The structure of the building is attractive and has a historical appearance.

2.3 Boutique Hotel Classification

According to (Lucienne, 2001) in the article, The Definition of Boutique Hotel, the classification of boutique hotels includes:

- Small**
 This hotel has a minimum of 50 rooms with a maximum of 150 rooms, which aims to provide quality services to guests and improve relations between guests and hotel employees.
- Design**
 Distinction, warmth, and intimacy are the keys to Boutique Hotel design. Boutique Hotels strive to attract visitors to stay at Boutique Hotels. Boutique hotels have a strong and different concept in general. Themes and expressions are essential things that make this boutique hotel have a strong identity.
- Luxurious**
 Boutique Hotels emphasize furniture and decoration and provide the best service to hotel guests. With service and friendliness at Boutique Hotels, it can strengthen the relationship between employees and guests by providing facilities and fulfilling guest wishes.
- Low Profile**
 Boutique Hotels do not give excessive promotions and believe that guests and visitors will find their existence in this boutique hotel.

2.4 Boutique Hotel Standardization

Based on the classification of star hotels based on the Decree of the Directorate General of Tourism No. 12/U/II/88 dated February 25, 1988, this boutique hotel still has no provisions. Based on this, the standardization of boutique hotels which are the object of research, does not yet have a stipulation, so standardization is used based on several articles and journals as follows:

Table 1. Boutique Hotel Standardizations

Variable	Criteria
Facade shape and Building style	There is artistic and historical value. Stylish and luxurious small-sized hotel
Interior theme & atmosphere	There are displays (pictures/paintings/statues) with unique and modern decorations. Has a modern feel (following current trends). Having a unique concept Can be included in the design as there is a decoration such as a gallery.
Hotel Staff Service	Using uniforms that have distinctive and unique characteristics. Offer and provide good quality services.

2.5 Space Organization Boutique Hotel

Based on the observations made at the three 3-star boutique hotels in Bandung, interior elements and space organizations are found in boutique hotels. Thus, some variables can be used as standardization in boutique hotels. The following are the variables that exist in boutique hotels:

Table 2. Space Organizations Boutique Hotel

Space Organizations Boutique Hotel		
Boutique Hotel Facility	Space Organization	Lobby, Room, Restaurant
	Room Type	Floor, Wall, & Ceiling Element Furniture Element Decorative Element
	Interior theme & atmosphere	Style and Theme Colour Scheme Lighting and Ventilation

3. Method

This study uses a descriptive qualitative research method. Based on the explanation from (Mukhtar 2013), qualitative descriptive research is a method researchers use to find knowledge or theory of research at a particular time. This method uses an object comparison model through tables and direct observation of the hotel, which will be used as case study material. According to (Hudson, 2007), the comparative method compares similarities and differences in two or more facts and the nature of the object under study based on a specific frame of mind. So, by using this comparative method, researchers can get an answer about the factors that cause a particular phenomenon. Several previous studies have shown promising findings to taken into consideration in interior design in general and also in interior hotel design in particular (Interior, Kreatif, and Bandung 2016; Try et al. 2018). Furthermore, data is collected through observations which are then arranged in a comparison table for analysis related to the standardization of boutique hotels in Bandung. The completeness of data was compared with the standardization results of several studies discussed in the literature review.

Based on the results of the literature study that has been done, boutique hotels do not have suitable standardization. Therefore, boutique hotels only use the standardization of star hotels. Thus, this research was conducted by observing three 3-star City Boutique Hotels in Bandung City.

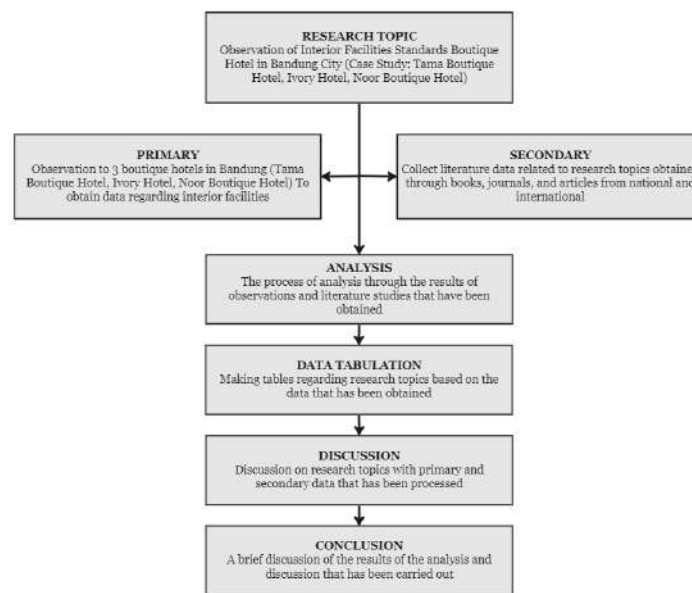


Fig. 1. Data Collection




4. Results and Discussion

In this study, the authors acquired data in the field as a first step, then rearranged them to fit the desired focus of analysis. Furthermore, the findings are continued by analyzing the data using the evaluation model (Firmansyah et al. 2021; Rangga et al. 2020), To get the depth of the analysis before later carrying out a comparative study, standard and facility boutique hotels will discuss in the following sub-chapters.

4.1 Standards Comparison in Boutique Hotel

The hotels used as material for the case studies were Noor Boutique Hotel, Ivory Hotel, and Tama Boutique Hotel. Of the three hotels, it has quite a different feel from one to the other. The comparison results were based on the standardization of boutique hotels, as mentioned in table 1. For the first analysis, boutique hotels in their building structure have historical value and unique designs. Also, the hotel has a small size that is stylish and luxurious.

Table 3. Facade shape and Building style.

Facade shape and Building style	Tama Boutique Hotel	Ivory Hotel	Noor Boutique Hotel
			
	Fig. 2. Tama Boutique Hotel Facade	Fig. 3. Ivory Hotel Facade	Fig. 4. Noor Boutique Hotel Facade

Tama boutique hotel is a hotel with a Korean concept. Hotel Tama this hotel has a total of 24 rooms.

Ivory Hotel is a hotel that applies contemporary and Mid-Century Modern elements with 59 rooms.

Noor boutique hotel displays classic elements to its buildings by applying an Islamic image, and this hotel has 33 rooms.

Boutique Hotel is a hotel that dares to explore design. Boutique hotels used as facilities to attract local and foreign tourists should describe the surrounding culture as one of their characteristics (Raharjo, Sn, & Kunci , 2014). The three hotels above show several differences, have different concepts, and are unique in their characteristics. These three hotels have different images and artistic and historical values. The three hotels have few rooms and are within the maximum by boutique hotel standards. So, these three hotels follow the standardization that has been mentioned.

Table 4. Interior theme and Atmosphere

Interior theme & atmosphere	Tama Boutique Hotel	Ivory Hotel	Noor Boutique Hotel
			
	Fig. 5. Tama Boutique Hotel Interior Theme	Fig. 6. Ivory Hotel Interior Theme	Fig. 7. Noor Boutique Hotel Interior Theme

There are displays with unique decorations showing typical Korean decorations, traditional Korean nuances of the Joseon royal dynasty, and mixing with modern culture. This hotel uses a lot of natural materials, such as wood, in its interior and has corridors that resemble the residences of the royal family of the Joseon dynasty.

Ivory Hotel adopts a modern tropical mid-century style. The materials widely used in this hotel are wood and iron, with lots of plants and patterned floors typical of a modern mid-century style. Besides that, the interior hotel cafe uses a retro style that can be seen in murals and decorations.

Noor Boutique hotel has a concept with a classic Turkish Islamic. This hotel uses white throughout the hotel with a combination of Tosca colors. Besides that, the theme of this hotel is Moroccan style with a touch of modern classics. It can be seen from some of the decorations and styles used that are Islamic.

Based on a boutique hotel's standard theme and concept, the three hotels have unique decorations according to their respective concepts by taking a contemporary theme. Even though Hotel Tama uses a traditional Korean concept, the concept presented is unique because it is rarely seen in various hotels. The Ivory Hotel can be seen from the unique decorations and murals, and the Noor Boutique hotel uses Islamic ornaments and decorations, which give a unique impression among others. So, according to boutique hotel standards, the three hotels have met the criteria based on the theme and atmosphere achievement


Table 5. Interior theme and Atmosphere

Hotel Staff Service	These three hotels have different services and uniforms that suit each image, and the facilities are also different. At the Noor boutique hotel itself, female employees wear the hijab because the image of the Noor hotel carries an Islamic image, and the facilities at this hotel use sharia elements. So, the Hotel services provided sufficient quality and according to the standards of a boutique hotel.
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4.2 Space Organization in Boutique Hotel

Boutique hotels have thematic facilities and designs that give a different impression from other hotels. In designing a boutique hotel, attention can also be paid to the facilities and space organization which can be used as a reference in table 2.

Table 6. Analysis Space Organization in Boutique Hotel

Room	Boutique Hotel Facility		
	Tama Boutique Hotel	Ivory Hotel	Noor Boutique Hotel
Lobby	 <p>Fig. 8. Tama Boutique Hotel Lobby</p> <p>Tama Boutique Hotel lobby is located on the L floor, which is the top floor of this building. To go to the hotel lobby, visitors can use the elevator on the 1st floor, next to the Bornga restaurant. The right side front of the elevator is a sitting area for waiting for administration with a capacity of 8-10 people.</p>	 <p>Fig. 9. Ivory Hotel Lobby</p> <p>The Ivory Hotel lobby is right side at the front of the hotel. On the front is a waiting area, and on the right is a reception desk. This lobby is adjacent to Everjoy Cafe. The lobby is located on the 1st floor.</p>	 <p>Fig. 10. Noor Boutique Hotel Lobby</p> <p>The lobby at Noor Boutique Hotel is on the 1st floor and next to the reception. There is a sitting area with a capacity of 6-8 people. Meanwhile, the reception area has a capacity of 2-4 visitors. There is also a restaurant from Emmy's Kitchen and a retail area in this lobby area.</p>
Guest room type	<ul style="list-style-type: none"> - Superior - Deluxe twin - Deluxe double - Deluxe balcony twin - Suite Balcony twin 	<ul style="list-style-type: none"> - Superior city view - Deluxe city view - Superior - Deluxe - Family 	<ul style="list-style-type: none"> - Deluxe King - Deluxe Twin - Executive king - Executive twin
Restaurant	 <p>Fig. 11. Tama Boutique Hotel Restaurant</p>	 <p>Fig. 12. Ivory Hotel Restaurant</p>	 <p>Fig. 13. Noor Boutique Hotel Restaurant</p>

Bornga restaurant is located on the 1st and 2nd floors of the Tama Boutique Hotel. This restaurant serves Korean specialties. The interior of this restaurant resembles a Korean palace in the Joseon dynasty. This restaurant belongs to the famous chef in Korea, Baek Jong Won, and has many branches spread across Asia and Australia.

Everjoy Cafe is on the left of the Ivory hotel, connected directly to the lobby. Everjoy cafe serves Asian, Western, and various types of coffee. Everjoy Cafe is also located on the 1st floor with a retro feels.

This restaurant is located on the 1st floor and is located to the right when entering this hotel. This restaurant collaborates with Emmy's kitchen with various food choices: Indonesian, western, and Middle Eastern. This restaurant has an all-white nuance with a touch of Tosca with Middle Eastern vibes.

Meeting Room

X



Fig. 14. Ivory Hotel Meeting room

From the results of a survey conducted at the Tama boutique hotel, it does not have a meeting room. It is assumed that because the target visitors to this hotel are families and tourists. In addition, the size of the hotel is manageable and has limited land.

This meeting room is used as a multi-function meeting and event room by Accommodating Max. 34 people. The meeting room is located on the 1st floor.



Fig. 15. Noor Boutique Hotel Meeting room

This meeting room is located on the 2nd floor and has three rooms of different sizes. This meeting room is usually used as a gathering room and can also be a place to carry out contracts. This meeting room consists of Shafa, with a capacity of 80 people, and Marwah, with a capacity of 50 people, for a more private meeting room, namely Zam-zam, with a capacity of 15 people.

Retail

X

X



Fig. 16. Noor Boutique Hotel Retail

From the survey results, there is no retail at this hotel, and it is not included in the standard 3-star hotel facilities.

From the survey results, there is no retail at this hotel, and it is not included in the standard 3-star hotel facilities.

This retail is located on the 1st floor and near the lobby selling several Muslim clothing and a set of prayer tools.

Prayer Room

X

X

From the survey results, there is no prayer room at this hotel, and it is not included in the standard 3-star hotel facilities.

From the survey results, there is no prayer room at this hotel, and it is not included in the standard 3-star hotel facilities.



Fig. 17. Noor Boutique Hotel Prayer Room

Mushola ini terdapat di lantai 2 dan 4. Mushola di lantai 2 hanya dapat diakses oleh penghuni kamar, sedangkan untuk mushola pada lantai 4 dapat diakses oleh pengunjung yang tidak menginap. Mushola pada lantai 4 memiliki kapasitas 5-20 orang dan terletak dekat dengan area duduk yang berada di outdoor

Based on the analysis of the facilities at these three hotels, namely Tama Boutique Hotel, Ivory Hotel, and Noor Boutique Hotel. Space organizations include Lobby, Room, Restaurant, Meeting Room, Retail, and Prayer Room. The hotel shows visible differences in meeting, retail, and prayer rooms. Noor Boutique Hotel has meeting rooms, retail, and a prayer room. The Ivory Hotel has meeting room facilities, but the Tama Boutique hotel needs these three aspects. Based on the analysis conducted, the three hotels are 3-star hotels. Thus, based on the provisions of 3-star hotels in the Hospitality Accommodation book (Suwathi et al. 2008), there are several facilities provided at 3-star hotels, namely:

- Have a minimum of 30 standard-type rooms with a minimum area of 24m².
- Have at least two suite-type rooms with a minimum area of 48m².
- There are WIFI, TV, AC, and separate bathroom and toilet facilities.
- Having good ventilation and air circulation.
- Have security on the door of the room.
- It has a lobby, bar, gym, and recreation area, and there is valet parking.

Table 7. Analysis of Boutique Hotel Facilities

3-star hotel criteria	Tama Boutique Hotel	Ivory Hotel	Noor Boutique Hotel
Have a min. 30 standard-type rooms with a minimum area of 24m ² .	✓	✓	✓
2 suite-type rooms with a minimum area of 48m ² .	✓	✓	✓
WIFI, TV, AC, and separate bathroom and toilet facilities.	✓	✓	✓
Have good ventilation and air circulation	✓	✓	✓
Has a safety on the room door.	✓	✓	✓
There is a lobby, bar, gym, recreation area, and valet parking.	(-)	(-)	(-)
	It does not have a gym, bar, and leisure area	It does not have a gym and leisure area	It does not have a gym, bar, and leisure area

From the comparative analysis in the table carried out at 3-star boutique hotels in Bandung, it can be concluded that the implementation and standards applied to the three hotels follow the standards

listed in Table 1 and Table 2. However, the three hotels still have to meet the criteria for standard 3-star hotel facilities. This boutique hotel can also provide additional facilities to support and be adapted to the target audience. Based on this standardization, the considerations that can be considered in carrying out the design can be seen in the standardization and variables in boutique hotels in Table 1 and Table 2.

5. Conclusion

Based on Standards Comparison in Boutique hotels, which are compared based on facade shape and building style, boutique hotels have different and unique concepts with their characteristics. These three hotels' interior has artistic and historical value. Based on the theme & atmosphere, they have unique decorations by their respective concepts, the three hotels have met the criteria based on the theme and achievement of the atmosphere. Based on hotel staff service, the services provided by these three hotels are of sufficient quality and according to the standards of a boutique hotel. Thus, the three boutique hotels already have standards following the variables mentioned in table 1.

According to the Space Organization in Boutique Hotel, Lobby, Room, Restaurant, Meeting Room, Retail, and Prayer Room. It Shows visible differences in meeting rooms, retail, and prayer rooms. Based on table 7. shows that these three boutique hotels follow 3-star standards but still present parts of standard boutique hotels. In addition, the facilities provided must still be adjusted to the criteria for standard star hotels that have been set. So that in designing boutique hotels, they can provide appropriate facilities based on existing standards according to star hotel standards and standards in boutique hotels.

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Innovation of Tourism Icons through Blender Software Utilizing Natural Fibers in Sukoharjo

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ABSTRACT

Tourism, as an economic sector with significant potential, requires attractions that can be drawn from various aspects, including icons. These icons, rooted in local characteristics and culture, can be transformed into statues, monuments, and other forms of representation. However, sculpture creation poses a challenge for communities lacking adequate knowledge and skills. Natural fibers, such as bamboo, hemp, tree bark, rattan, and straw, are abundant materials that can be utilized for this purpose. Trangsan Village in Sukoharjo Regency, Central Java, is one area with tourism potential that currently lacks icons and branding. This research aims to develop methods for creating sculpture or tourism icons by translating 3D software models into life-sized objects or prototypes. The research stages include observation and data analysis, determination of tourism icons, 3D modeling, and post-modeling by composing fragment images as anatomical references. The subsequent processes involve creating and materializing prototypes, protecting intellectual property rights, and conducting public tests. This study addresses the challenge of icon creation in underdeveloped tourism areas and offers a systematic approach for integrating traditional craftsmanship with modern technology to enhance local tourism branding.

KEYWORDS

Blender 3D Modeling
Natural Fiber
Tourism Icon
Cultural Heritage
Tourism Branding

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1. Introduction

The tourism industry in Indonesia holds significant economic potential and has become a priority sector in national development. The government recognizes the substantial contribution of tourism to the country's economic growth and has therefore placed special emphasis on its development. With increasing global competition, the development of innovative and effective marketing strategies has become crucial. A strong brand identity for tourist destinations can significantly influence tourists' decisions, as they are more likely to choose destinations with a positive perception (Chuang, 2015).

Central Java has fewer tourist destinations compared to West Java and East Java. However, the tourism potential in Sukoharjo Regency, Central Java, is gaining attention. The Strategic Plan of the Department of Education and Culture of Sukoharjo Regency for 2021-2026 allocates increasing funds for tourism empowerment each year. A notable destination in this regency is the Rotan Trangsan Tourism Village, known for its rattan production, rattan products, and rattan weaving education (Kurniawan et al., 2023), (Sumarno & Indarto, 2018). The village serves as a center for the rattan industry and aims to evolve into an industrial hub and attractive tourist destination. The tourism industry, as part of the national industrialization goal, seeks to create prosperity by providing employment opportunities, boosting purchasing power, and enhancing the national image as an appealing tourist destination (Dominggus, 2007).

creating the identity of a product, including in the context of tourism (Lestari & Aprilia, 2013). Branding involves a series of efforts to build a unique image, perception, and identity for tourist destinations. Through effective branding, a tourist destination can differentiate itself from its competitors and attract the interest of potential tourists (Foroudi et al., 2016).

One effective tool in developing tourism branding is Blender 3D modeling software. Blender is a powerful open-source software for creating realistic and engaging 3D models. The advantage of Blender lies in its built-in game engine and compositing features, which allow content creators to effectively combine visual elements (Rochman, 2012). In prototype design, 3D animation provides the ability to depict objects in a more realistic and dynamic environment. With greater control over the rotation and movement of objects in three dimensions, 3D animation enables designers to explore various perspectives and interactions among design elements. This allows users to gain a better understanding of how the prototype will look and behave in real-world contexts. As a result, 3D animation in prototype design can help communicate ideas and concepts more effectively to stakeholders and facilitate the product development process (Zebua et al., 2020). In the context of developing tourism branding strategies, Blender provides the ability to create captivating visualizations of tourist destinations that attract the attention of tourists.

Table 1. Comparison of commonly used animation software applications

Comparison of 3D Software	3ds Max	Autodesk Maya	Blender 3D	Softimage XSI	Lightwave 3D
Price (starting from)	\$3,500.00 (USD)	\$3,500.00 (USD)	Free	\$495.00 (USD)	\$1,495.00 (USD)
Platform	Windows	Windows, Mac OS, Linux	Windows, Mac OS, Linux, FreeBSD	Windows, Linux	Windows, OS X
Usage	Modeling, Animation (Video Game), Lighting, Rendering	Modeling, Animation (Video), Lighting, Rendering, Visual 3D Effects	Animation, Lighting, Modeling, Rendering, Video Game Creation, Visual 3D Effects, Sculpting, Basic Post-Production Video Editing	Modeling, Animation, Video Game Creation, Lighting, Rendering, Visual 3D Effects	Modeling, Animation, Lighting, Rendering, Film, Previz, Television, Video Game Creation

Utilizing local agricultural products, such as rattan, bamboo, and straw, as visual content materials also plays a crucial role in tourism branding strategies. Visual content can convey information quickly and effectively, while local agricultural products provide a sense of authenticity and appeal to tourists (Ashari & Patria, 2021). By combining Blender 3D modeling technology with the utilization of local agricultural products, tourism branding strategies can become more innovative and attractive, creating captivating visual experiences for tourists.

In developing tourism branding strategies, it is essential to consider factors such as individual creativity, organizational culture, environment, and socio-economic aspects. By understanding and integrating these elements, tourist destinations can achieve their branding goals more effectively, enhance their attractiveness, and create memorable experiences for visitors.

2. Method

The methodology employed in this research follows an applied research approach aimed at creating tourism village icons. The design process unfolds through distinct phases: analysis, generation, evaluation, and communication or implementation, as outlined by Howard (Howard et al., 2008).

2.1. Analysis phase

The analysis phase serves as the foundation, encompassing data reduction, data presentation, and drawing conclusions. Data reduction involves sifting through collected data to identify patterns and themes relevant to the research objectives. These insights are then presented through various mediums such as text, tables, and 3D visualizations. Drawing conclusions involves synthesizing significant findings related to the utilization of 3D modeling with Blender for sculpture making. Prior research has highlighted Trangsan Village's unique visual identity, characterized by symbolic representations, particularly wayang characters, which encapsulate the village's essence (Rahmawati & Hakim, 2023).

2.2. Generation phase

In this phase, creative ideas are developed into more concrete design concepts. This process involves exploring various shapes and visual features that can be integrated into 3D models. In the context of this research, the generation phase includes:

1. Initial sketching and storyboarding: Basic ideas are translated into visual narratives, outlining the desired storyline.
2. Design concept development: The most promising concepts are selected and further developed, focusing on both visual aesthetics and technical feasibility.
3. Initial simulation: Preliminary models are crafted using Blender to provide visual and technical validation of the design concepts.

2.3 Evaluation Phase

The evaluation phase marks a critical juncture where developed concepts and models undergo rigorous scrutiny to ensure their alignment with research objectives and quality standards. This phase encompasses:

1. Visual and technical quality testing: Thorough assessments are conducted to evaluate the aesthetic appeal and functional integrity of the 3D models.
2. User testing: Feedback is solicited from potential users or target audiences to gauge their perceptions and responses to the models.
3. Revision and refinement: Based on the feedback received, iterative improvements are made to enhance the 3D models and address any identified shortcomings.

2.4 Communication dan implementation phase

As the research progresses to the communication and implementation phase, the focus shifts towards materializing the envisioned designs and sharing them with the public. Key activities in this phase include:

1. 3D modeling: Developing 3D models with Blender, incorporating agricultural product elements.
2. Fragment Image Creation: Detailing character anatomy and agricultural products, explaining visual elements in detail.
3. Frame Making: Designing prototypes based on the 3D models and fragment images.
4. Prototype Realization: Creating physical prototypes based on the designed models and frames. Implementation and public testing were conducted during the "grebeg penjalin 2023" event in Trangsan Village, Gatak Subdistrict, Sukoharjo Regency.

In summary, this comprehensive methodology facilitates a systematic approach to the creation of tourism village icons, integrating creative ideation, rigorous evaluation, and tangible implementation to realize impactful outcomes. Through each phase of the design process, the research endeavors to capture the essence of Trangsan village's cultural heritage while fostering innovation and community engagement.

3. Result and Discussion

In developing tourism branding strategies, it is important to consider factors such as individual creativity, organizational culture, environment, and socio-economic aspects. By understanding and integrating these elements, tourist destinations can achieve their branding goals more effectively, enhance their attractiveness, and create memorable experiences for visitors.

Tourism marketing involves efforts by both private and governmental stakeholders to attract more tourists, both international and domestic. The aim of these marketing efforts is to encourage tourists to visit more frequently, stay longer, and spend more money at the destinations they visit (Yoeti, 2002). The presence of village icons plays a vital role in preserving cultural traditions, strengthening community cooperation, and actively contributing to development efforts. Village icons serve as a connection point between village residents, the government, and other stakeholders, thereby supporting the creation of community spirit and active citizen involvement in various initiatives (Bima et al., 2024).

After conducting several research steps, including literature review and data collection, the final stage in this research is the experimental phase. The experiment stage aims to produce an artwork in the form of a prototype (Anggakarti & Benyamin, 2021). The experimental stages conducted in this research include:

- a. **3D Modeling Creation:** Developing a 3D model using Blender software, incorporating elements of local culture and natural materials.
- b. **Fragment Image Creation:** Composing fragmented images that detail the anatomical features of the characters and the use of agricultural products.
- c. **Frame Construction:** Designing and constructing the frame for the prototype based on the 3D models and fragmented images.
- d. **Prototype Realization:** Creating the physical prototype using natural fibers and other materials, followed by public testing to gather feedback and make necessary refinements.

Through this experimental process, the research aims to create a tourism icon that not only enhances the visual appeal of Trangsan Village but also preserves its cultural heritage and promotes community engagement. The integration of modern 3D modeling technology with traditional craftsmanship provides an innovative approach to tourism branding, potentially boosting the local economy and attracting more visitors to the area.

3.1. 3D Modelling Creation

The first stage of the experiment involves creating a 3D model using Blender software. In this case, the wayang character Bima was chosen as the tourism icon for Trangsan Village. This process involves in-depth research into the history, mythology, and physical appearance of Bima. Through the use of Blender, this 3D model is combined with the previously planned artistic vision.

Extensive research was conducted to understand the historical and mythological background of Bima, a prominent figure in the Mahabharata. Bima is known for his strength and bravery, often depicted with a muscular build and distinctive facial features in traditional Javanese wayang. The collected data on Bima's appearance, attire, and symbolic attributes formed the basis for creating an accurate and culturally resonant 3D model.

Using Blender, the research team began by crafting the basic shape and structure of Bima. This involved creating a wireframe model that captured the overall proportions and stance of the character. The wireframe served as the skeleton upon which further details were added, including muscle definition, facial expressions, and traditional attire.



Fig. 3. Character Bima in wayang (Google Image)



Fig. 4. 3D Modeling of the character Bima using Blender application (Personal Documentation)

The model's complexity gradually increased as more layers of detail were incorporated. Special attention was given to accurately representing Bima's physical attributes and traditional clothing. Fig. 3 shows the traditional depiction of Bima in wayang, which served as the primary reference for the 3D model. This ensures that the digital representation remains true to the cultural and historical context. Meanwhile, Fig. 4 illustrates the 3D model of Bima created using Blender, showcasing the detailed anatomy and features that have been meticulously crafted to match the traditional representation.

The artistic vision for the statue aimed to blend traditional elements with a contemporary design. Collaborations with local artists ensured that the 3D model accurately reflected traditional wayang aesthetics while appealing to modern sensibilities. This stage involved several iterations of the model, with continuous feedback and refinement to achieve the desired balance between tradition and innovation.

The creation of the 3D model is a critical step that bridges traditional cultural elements with modern technology. The detailed and accurate representation of Bima not only preserves cultural heritage but also enhances the visual appeal and engagement for a contemporary audience. This model serves as the blueprint for the subsequent stages of prototype construction and public testing.

3.2 Composing Fragmented Images as Anatomy References

After creating the 3D model, the next step is to compose fragmented images that reflect the anatomical details of the character Bima. These images are crucial as they provide accurate references for shaping the physical prototype. The anatomy details, poses, and character expressions are carefully described through these images.

The 3D model created in Blender is divided into smaller, manageable sections or fragments. This process, known as fragmentation, allows for a detailed focus on specific parts of the model, ensuring that each section is accurately represented. Fig. 5 shows the fragmented rattan statue using Blender application, focusing on the upper body. This image highlights the muscle definition and anatomical details that are essential for the physical prototype. Fig. 6 illustrates the fragmented rattan statue focusing on the lower body. This ensures that the leg structure, stance, and other lower body features are precisely captured.

Fragmented images serve as detailed guides for the craftsmen who will create the physical prototype. Each fragment provides a clear and detailed view of the specific anatomical parts, reducing the likelihood of errors during the construction process. These images are crucial for maintaining the proportions, poses, and character expressions as envisioned in the 3D model. They ensure that the physical prototype remains true to the original digital design.

By providing a detailed visual reference, fragmented images help craftsmen accurately reproduce the complex details of the character Bima. This includes muscle definition, facial expressions, and the

intricate details of traditional attire. The use of Blender for fragmentation allows for high precision and control, ensuring that each piece of the statue aligns perfectly when assembled.

The fragmented images bridge the gap between modern digital modeling and traditional crafting techniques. Craftsmen use these images to weave rattan fibers into the iron frame, ensuring that each section matches the detailed design. This integration helps preserve the traditional art of rattan weaving while incorporating the precision and accuracy of modern technology.

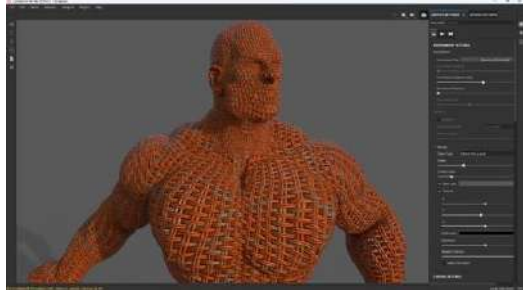


Fig. 5. Fragmented rattan statue using Blender application (upper body) (Personal Documentation)

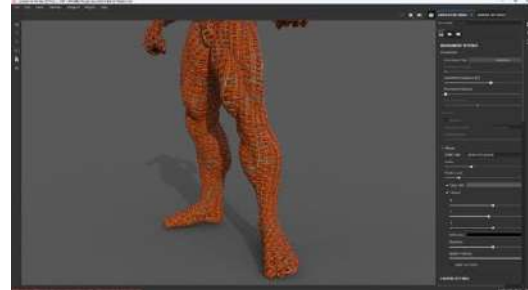


Fig. 6. Fragmented rattan statue using Blender application (lower body) (Personal Documentation)

The use of fragmented images is a critical step in ensuring the accuracy and fidelity of the physical prototype. These images provide a detailed and comprehensive guide that aids craftsmen in replicating the digital model with high precision. This process is particularly important for maintaining the cultural and historical accuracy of the Bima statue, ensuring that it remains true to traditional representations.

3.3 Frame Construction

The frame construction phase is a crucial step in the creation of the Bima statue, ensuring that the final sculpture is structurally sound and visually accurate. This process involves the meticulous crafting of the statue's frame using iron wire, guided by 1:1 projection drawings. The high precision required in this phase is essential to maintain the correct proportions, expressions, and stability of the statue. A sturdy frame is necessary to support the layers of natural rattan fibers that will be added later.

The initial design phase involves creating detailed 1:1 projection drawings of the Bima statue using Blender. These drawings serve as a blueprint for the construction of the iron frame. The iron frame design of the rattan statue (see Fig. 7 and Fig. 8) shows the initial skeletal structure created using Blender application. These images depict the careful planning and layout of the frame, ensuring all anatomical details are accounted for.

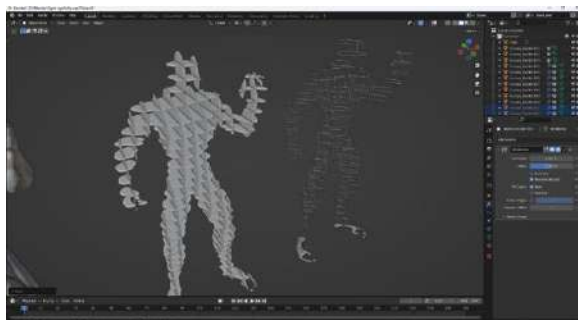


Fig. 7. Iron frame design of the rattan statue using Blender application (Personal Documentation)

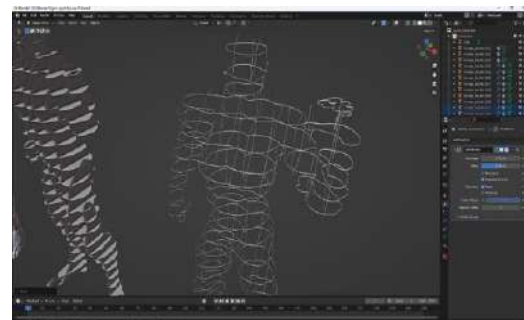


Fig. 8. Iron frame design of the rattan statue using Blender application (Personal Documentation)

The construction begins with bending and shaping iron wires according to the 1:1 projection drawings, requiring precision to match the outlined dimensions and proportions. Fig. 9 shows the weaving process of the frame, where the iron wires are shaped and assembled, involving the securing of joints and intersections to form a robust framework. Fig. 10 highlights these joints, emphasizing the importance of strong connections to ensure the frame's stability and integrity.



Fig. 9. The weaving process of the frame using the projection of 1:1 scale images as a guide (Personal Documentation)



Fig. 10. Joints of the statue frame made from iron wire (Personal Documentation)

Using the projection of 1:1 scale images as a guide, the iron frame is meticulously aligned to match the designed proportions. This step ensures that the physical frame corresponds accurately to the digital model. The projections help in visualizing the correct placement of each wire segment, maintaining the anatomical accuracy of the statue. The final frame of the statue made from iron wire, showcasing the completed structure before the addition of rattan fibers. The frame stands as a testament to the detailed craftsmanship and precision involved in this phase (see Fig. 11).



Fig. 11. The frame of the statue made from iron wire (Personal Documentation)

One of the significant challenges in this phase is ensuring that the iron frame can support the weight of the rattan fibers and any additional materials. This requires careful calculation and reinforcement at critical points. The use of 1:1 projections aids in minimizing errors and deviations from the design, ensuring that the frame is a faithful representation of the planned statue.

3.4 Prototype Realization

At this stage, the physical prototype of the Bima statue begins to take shape. This process involves close collaboration between the research team and local craftsmen, combining the 3D model, fragmented images, and natural rattan fiber materials. The layers of natural rattan fibers are meticulously placed, using glue or natural adhesive materials, to create a statue that accurately reflects the artist's vision.



Fig. 12. Rattan weaving on the statue frame (Personal Documentation)



Fig. 13. Rattan weaving on the statue frame (Personal Documentation)

The process begins with the careful weaving of rattan fibers onto the iron frame. The craftsmen follow the anatomical details provided by the fragmented images to ensure that the statue's contours and features are accurately represented. The initial stages of rattan weaving on the statue frame (Fig. 12 and Fig. 13) show the detailed craftsmanship involved in shaping the rattan to fit the structure of the frame, ensuring that each layer aligns with the design specifications.

Multiple layers of rattan are added to build up the thickness and texture of the statue. Each layer is adhered using natural glues or adhesives, which provide durability while maintaining the organic look of the materials. In addition to achieving the desired aesthetic, it ensures the sturdiness of the statue can withstand the environmental conditions.

Fine details are added to the statue by carefully manipulating the rattan fibers to create intricate patterns and textures. This stage involves refining the facial features, muscle definition, and other critical elements of the Bima character. Craftsmen use various tools and techniques to achieve the desired level of detail, ensuring that the final product is both visually striking and true to the original design.

The final step in the prototype realization involves the placement of supporting accessories. These elements, such as traditional weapons and attire, are crafted separately and then attached to the statue to complete the visual representation of Bima. Fig. 14 depicts the placement of these supporting accessories on the tourism icon of Trangsan Village. The accessories enhance the statue's overall appearance, adding context and depth to the cultural narrative it represents. This step is crucial in ensuring that the statue not only accurately depicts the character of Bima but also conveys the rich cultural heritage and traditions of Trangsan Village.



Fig. 14. Placement of supporting accessories on the tourism icon of Trangsan Village (Personal Documentation)

3.4 Public Testing

The completed prototype undergoes public testing to gather feedback from various stakeholders, including potential tourists, local residents, and entrepreneurs. This feedback is invaluable as it helps to improve and refine the prototype as well as the branding strategies for Trangsan Village. This process is crucial to ensure that the prototype not only meets visual standards but also provides a deep and meaningful tourism experience for visitors.

The public testing phase involves displaying the Bima statue prototype in various public settings within Trangsan Village. This allows a diverse group of stakeholders to interact with the statue and provide their impressions. Stakeholders include local residents who offer insights based on cultural significance, potential tourists who provide perspectives on the visual appeal and overall experience, and local entrepreneurs who assess the commercial potential of the statue as a tourism icon. A rattan statue created with Blender modelling software is being presented to the public as shown in Fig. 15 and Fig. 16. These images capture the initial reactions and interactions, which provide a visual context for the feedback process.



Fig. 15. The tourism icon of Trangsan Village, a rattan statue created with Blender modeling software.



Fig. 16. Rattan statue created with Blender modeling software.

To reach a broader audience, the statue is mobilized and displayed in various strategic locations throughout Trangsan Village. This mobility ensures that feedback is gathered from different demographic groups and settings. Fig. 17 shows the process of mobilizing the rattan statue, highlighting the logistical efforts involved in transporting and setting up the statue in different locations. This step is essential for maximizing exposure and gathering comprehensive feedback.



Fig. 17. The process of mobilizing the rattan statue (Personal Documentation)

The feedback collected during public testing is systematically analyzed to identify common themes and specific areas for improvement. This analysis focuses on both qualitative and quantitative aspects, such as aesthetic appeal, cultural relevance, and structural integrity. The research team uses this feedback

to make iterative refinements to the prototype, ensuring that it aligns with the expectations and preferences of the stakeholders.

The public testing phase plays a critical role in validating the effectiveness of the Bima statue as a tourism icon. The feedback from local residents provides valuable insights into the cultural authenticity and significance of the statue, ensuring that it resonates with the community's heritage. Potential tourists offer perspectives on the visual appeal and overall experience, which are crucial for attracting visitors and enhancing their engagement with the statue.

Local entrepreneurs assess the commercial potential of the statue, considering its impact on local businesses and its ability to attract and retain tourists. This multi-faceted feedback ensures that the statue not only serves as a cultural artifact but also contributes to the economic development of Trangsan Village.

By considering the feedback from public testing, the research team can refine the prototype to better meet the needs and preferences of all stakeholders. This iterative process helps to create a tourism icon that is not only visually striking and culturally significant but also commercially viable and sustainable.

Through this experimental process, Trangsan Village has successfully created an iconic statue using Blender 3D modeling technology and natural rattan fiber materials. This statue is not only a visual art product but also a manifestation of the collaboration between local tradition and technological innovation. The prototype not only establishes a strong visual presence in Trangsan Village's branding but also offers a unique, captivating, and meaningful tourism experience. By considering feedback from public testing, this prototype will continue to be refined to create sustainable appeal for tourists and advance Trangsan Village tourism to new heights.

4. Conclusion

This research has demonstrated that integrating modern 3D modeling technology using Blender with traditional wayang rattan sculpture art in Trangsan Village, Sukoharjo, Central Java, can significantly enhance tourism branding strategies. The use of Blender software allows local artists to create highly detailed and realistic statues, effectively merging the richness of traditional art with technological advancements.

The quality of the 3D statues produced using natural fiber materials, particularly rattan, is notable for their durability and stunning aesthetics. The application of Blender in traditional art not only preserves local cultural elements but also introduces innovative aspects that can attract visitors. This integration presents a unique opportunity for visual storytelling about the local culture's richness, potentially boosting visitor numbers and tourism revenue, which warrants further evaluation.

Moreover, this research contributes to community empowerment by providing training in 3D modeling technology and the use of natural fiber materials. This training enhances the skills of local artists and expands the possibilities for rattan sculpture art. Evaluating the artists' work before and after the training will help measure skill improvement and the impact of this empowerment initiative.

Beyond the creation of visually appealing art, these statues serve as a bridge connecting the local community, government, and tourists, fostering a sense of community and encouraging active participation in cultural preservation and tourism development. However, there are several areas that need further investigation. Future research should focus on:

- a. Economic Impact Assessment: Evaluating the long-term economic benefits of the statues on local tourism, including increased visitor numbers and revenue.
- b. Sustainability Practices: Exploring sustainable methods for sourcing and using natural fiber materials to ensure environmental responsibility.
- c. Broader Application: Investigating the potential of applying similar techniques to other cultural elements and regions to replicate this success.

In summary, this research not only explores the fusion of tradition and technology but also opens new opportunities for sustainable tourism development and local community empowerment. By

continuously leveraging the potential of art and technology within the local cultural context, Trangsan Village can build a brighter and more competitive future in the global tourism industry. Implementing these findings on a broader scale can serve as a model for other communities seeking to enhance their cultural tourism appeal.

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Interior Design Planning of the Indonesian Cultural Center in Berlin, Germany

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ABSTRACT

Indonesia is renowned for its rich cultural heritage, yet the global appreciation and understanding of this cultural wealth remain limited. This study addresses the challenge of enhancing international recognition and appreciation of Indonesian culture through the establishment of the Indonesian Cultural Center in Berlin, Germany. The primary objective is to develop an interior design concept that effectively introduces and represents Indonesian culture within a European context. Employing qualitative research methods, including observation, interviews, and surveys, the study focuses on the Embassy of the Republic of Indonesia in Berlin, which serves as the project's location. The research includes comparative analyses of various cultural centers and gathers insights from a diverse group of respondents. Results reveal that a well-curated interior design, incorporating elements such as traditional Indonesian materials, colors, and motifs, can significantly attract and engage German audiences. This study concludes with recommendations for spatial design strategies that balance cultural authenticity with local preferences, aiming to foster greater appreciation of Indonesian culture abroad.

KEYWORDS

Indonesian Cultural Center
Traditional
Indonesian Elements
Spatial Design

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1. Introduction

According to the Kamus Besar Bahasa Indonesia, culture encompasses thoughts, reasons, customs, and practices that have become habitual and difficult to change. This definition applies to every individual, small group, and even large entities like nations, each with distinct cultures. In Indonesia, cultural diversity is immense, spanning over 300 ethnic groups and 1,340 sub-ethnic groups, reflecting the national motto "Bhinneka Tunggal Ika" (Unity in Diversity).

Indonesia's rich cultural heritage is internationally recognized, with UNESCO acknowledging Indonesia as a cultural superpower possessing at least 600 nationally recorded cultural heritages. Despite this recognition, international appreciation of Indonesian culture often remains superficial. Many foreigners are more familiar with Bali without understanding it as part of Indonesia, and there is a general lack of interest in exploring Indonesian culture further (Putra et al., 2020).

Indonesian culture is relatively well-known across Asia due to acculturation and cultural similarities within the continent (Cohen, 2019). However, this familiarity diminishes the novelty and appeal of establishing an Indonesian Cultural Center within Asia. In contrast, introducing Indonesian culture to more culturally distinct continents like Europe, America, Africa, and Australia presents a unique opportunity (Abbondanza, 2022; Beeson et al., 2021; Celadyn, 2019). Europe, particularly Berlin, Germany, stands out as an ideal location due to its reputation as the top art lover's city in Europe and its existing appreciation for Indonesian arts through various schools and universities that teach the Indonesian language, angklung musical instruments, and traditional dances.

Germany's deep appreciation for art suggests it would be receptive to broader aspects of Indonesian culture. However, the current methods of cultural exchange—through educational institutions and embassies—are insufficient. A dedicated cultural center is necessary to serve as a

comprehensive platform for learning, introducing, and teaching Indonesian culture directly to the public (Dell'Ovo et al., 2021; Shen, 2020; Thamrin et al., 2019).

This study aims to explore and develop an interior design for the Indonesian Cultural Center in Berlin that effectively showcases Indonesian culture. The objectives are to identify suitable interior design concepts for the cultural center, devise spatial design strategies that integrate appropriate design elements, and highlight specific aspects of Indonesian culture within the design. Through qualitative research methods, including observations, interviews, and surveys, this study examines the potential impact and engagement such a cultural center could have in Germany. By presenting Indonesian culture in an authentic yet appealing manner, this cultural center aspires to foster deeper appreciation and understanding of Indonesia's cultural wealth among the German population.

2. Method

The design method applied in this study utilizes qualitative approaches, including observation, interviews, and surveys, to gather comprehensive insights into the project. The primary object of this research is the Ministry of Foreign Affairs (Kementerian Luar Negeri) in Germany, with the design implementation located within the Embassy of the Republic of Indonesia (KBRI) Berlin building. This building, which consists of four floors and covers an area of 3,185 square meters, provides a suitable venue for establishing the Indonesian Cultural Center.

This research involved comparing various Indonesian cultural centers abroad and cultural centers of other countries in Indonesia to understand best practices and contextual requirements. Cultural development centers are essential for promoting cultural potential and advancing tourism and education sectors (Patton, 2023; Seyfi et al., 2020; Yeoh, 2020). Additionally, the Regulation of the Minister of Education and Culture of the Republic of Indonesia Number 9 of 2014 emphasizes the need for regulations to support cultural diplomacy programs abroad, similar to the public diplomacy strategies employed by South Korea, which integrate various cultural and design elements into their diplomacy efforts (Choi, 2019). The Cultural Center can also integrate design elements to promote cultural exchange and experience, thus enhancing appreciation and fostering cooperation in the field of culture (Celadyn, 2020; Grincheva, 2019; Thamrin et al., 2019).

Koentjaraningrat (Sitohang & Fadilla, 2023) identifies seven universal elements of human culture: language, knowledge system, community system or social organization, living equipment and technology system, livelihood system, religious system, and art. These elements can be integrated into interior design through materials, colors, and finishes. A questionnaire was administered to 100 random respondents, including Indonesian citizens, foreigners, and Indonesian citizens residing outside Indonesia, to gauge their perspectives on Indonesian culture and its representation. An in-depth interview was also conducted with an Indonesian student currently on a student exchange program in Germany to obtain firsthand insights into the reception of Indonesian cultural elements in a foreign context (Van de Vijver & Leung, 2021). Germany's federal structure and its unique "culture of remembering", characterized by critical scrutiny of war, dictatorship, and ideological crimes, provide a rich cultural backdrop (Lewicki, 2022; Welsch, 2022). Germany values science and culture highly and emphasizes the importance of social welfare, freedom of religion, and high living standards. The country's appreciation for quality of life, balanced between urban work and natural retreats, further underscores its suitability as a location for the cultural center.

The qualitative methods employed allowed for a nuanced understanding of the potential impact and engagement strategies for the Indonesian Cultural Center in Berlin. Observations were made to assess existing cultural centers, and interviews provided detailed accounts of personal experiences and expectations. Surveys offered a broader view of public opinion and preferences, which were critical in shaping the design strategy. This methodological approach ensured that the design of the Indonesian Cultural Center was informed by diverse perspectives, making it culturally authentic and appealing to both local and international audiences (Van de Vijver & Leung, 2021). The comprehensive data collection and analysis provided a robust foundation for developing an interior design that effectively showcases Indonesian culture while resonating with the German public.

3. Results and Discussion

3.1 Design Concept

The design of the Indonesian Cultural Center is titled “The Magical of Nusantara,” encapsulating the extraordinary and enchanting essence of Indonesian culture in a manner that is both accessible and engaging for a diverse audience. This interior design concept aims to immerse visitors in an authentic Indonesian experience, showcasing the country's rich cultural diversity through various elements that can be seen, felt, and learned.

The design strategy employs a color, material, and finishing (CMF) approach that utilizes neutral colors such as brown, white, and black (Zuo & Lu, 2021). These colors are complemented by various Indonesian cultural accents from different provinces, creating a cohesive yet diverse aesthetic. The materials used include both original and artificial elements derived from Indonesian nature, with a focus on softer, matte finishes. For instance, materials such as marble or similar stones, wood, and fabric are incorporated alongside carefully selected lighting fixtures and accessories. This approach is visually unified through a mood board, ensuring that all design ideas align with the overarching concept.

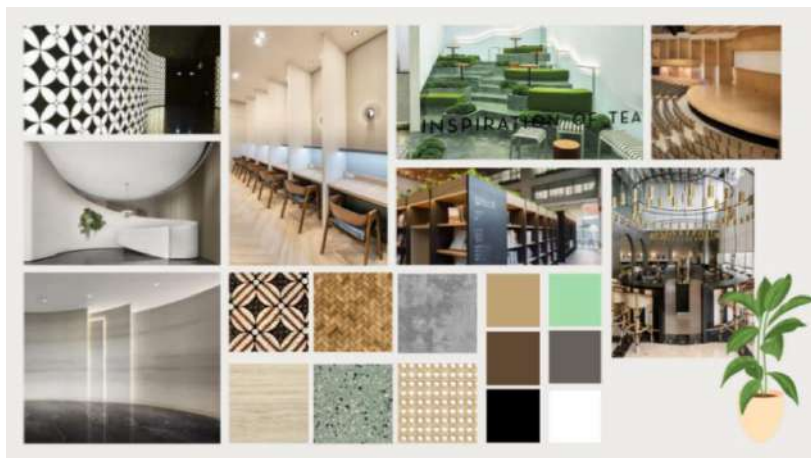


Fig. 1. Moodboard Planning

The interior design is structured across four floors, each dedicated to specific functions and themes. The first floor, or basement, serves practical purposes, including a parking area, storage, and a prayer room. The second floor is designed to be a public space, featuring a semi-outdoor food court, a lobby and lounge area, and an office accessible from the back of the building. The third floor houses a non-permanent gallery, a library, and a meeting room, offering flexible spaces for various public uses. The top floor is designed to accommodate an auditorium with a capacity of 100 people, along with classrooms for Indonesian music, batik, and theater, complete with a backstage area and wardrobe for performances.



Fig. 2. Blocking Planning

The design specifically emphasizes three key spaces: the lobby, library, and gallery. The lobby is designed to be simple yet profound, evoking a sense of Indonesian purity with features like a mountain accent at the reception area. It also includes a bar offering traditional Indonesian drinks and an LED screen displaying news about Indonesia. The library combines simplicity and luxury, featuring a grand imitation of the Borobudur Temple stupa, synthetic grass decorations, and glass floors with spotlights, alongside a reading staircase with a terrace concept. The gallery space is designed to be flexible and non-permanent, with a front desk adorned with a batik motif chandelier, smart mobile technology for exhibit explanations, and black-dominated interiors to highlight the cultural artifacts on display.

3.2 Lobby

The lobby of the Indonesian Cultural Center has been designed with simplicity and elegance to evoke the sacredness of Indonesian culture. Upon entering, visitors are greeted by a mountain accent at the reception area, symbolizing the reverence and spiritual connection inherent in Indonesian traditions. The reception area prominently features the signage "Indonesian Culture Center" in three languages—Indonesian, English, and German—underscoring the center's commitment to accessibility and cultural exchange.

On one side of the lobby, an oval-shaped bar offers a variety of traditional Indonesian drinks, such as herbal medicine, civet coffee, and various spices. This bar is designed to provide a taste of Indonesian hospitality and culinary heritage, enhancing the cultural experience for visitors. The bar's design integrates seamlessly with the lobby's aesthetic, offering a space for relaxation and cultural immersion.



Fig. 3. Rendering Image of Lobby's Bar and Receptionist

An LED screen at the end of the lobby continuously displays news and updates about Indonesia, ensuring that visitors are informed about the latest cultural, social, and political developments in the country. This feature serves as both an educational tool and a connection to contemporary Indonesian life. The lobby's design is carefully curated to create a welcoming and informative first impression, setting the tone for the rest of the cultural center. It balances modern design elements with traditional cultural accents, creating a space that is both functional and reflective of Indonesia's rich heritage.

3.3 Library

The library within the Indonesian Cultural Center continues the theme of simple luxury, creating an inviting and sophisticated space for visitors. Upon entering, guests are greeted by the front desk situated near the entrance, which serves as a central hub for librarians and a point of information for visitors.



Fig. 4. Rendering Image of Library's Reading Area and Reading Stairs

On the back and sides of the library, display shelves showcase the best-selling books and notable literary works, providing a curated selection that highlights Indonesian literature and global classics. This arrangement not only promotes reading but also emphasizes the rich literary heritage of Indonesia. On the opposite side of the room, a locker area is available for visitors to securely store their belongings. The lockers are made of glass material, enhancing security and minimizing the risk of loss, while seamlessly integrating into the library's design. At the heart of the library stands a magnificent imitation of the Borobudur Temple stupa, a central feature that adds a magical and iconic element to the space. This replica is surrounded by synthetic grass decorations and covered with glass floors and spotlights, creating a visually stunning centerpiece that draws visitors' attention.

Towards the back of the library, there is a reading staircase designed with an authentic terrace concept unique to Indonesia. This area provides a cozy and culturally immersive reading environment, featuring chairs with a dominant green color and grass accents on each step. This innovative design encourages visitors to relax and enjoy their reading experience while surrounded by elements that evoke the natural beauty and cultural richness of Indonesia.

3.4 Gallery

The gallery space within the Indonesian Cultural Center is designed to be non-permanent, allowing for flexible adjustments to accommodate various themes and exhibitions. This adaptability ensures that the gallery remains dynamic and relevant, capable of showcasing a diverse range of cultural artifacts and exhibits. At the entrance, visitors are welcomed by a front desk featuring a magnificent chandelier that mimics a cloudy mega batik motif. This striking piece adds a touch of elegance and cultural significance to the space.

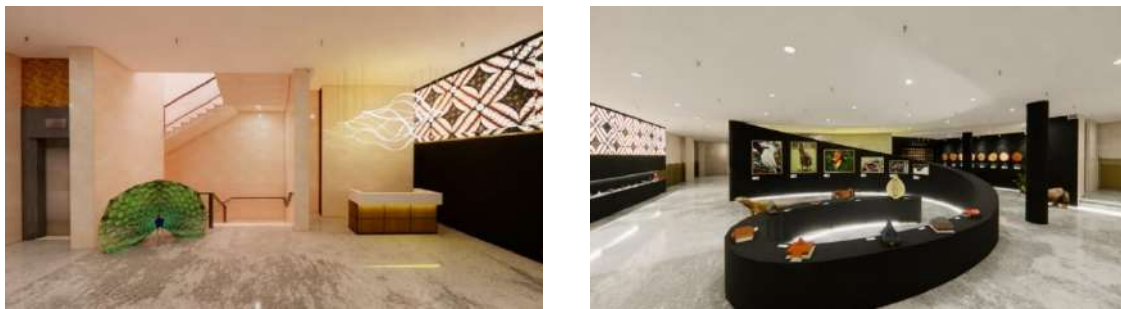


Fig. 5. Rendering Image of Gallery's Front Desk and Desk Partition

To enhance the visitor experience, the gallery utilizes smart mobile technology, enabling guests to access detailed explanations of each exhibit via their mobile devices. This interactive approach fosters a deeper understanding and appreciation of the displayed items. Adjacent to the front desk, lockers are provided for visitors to store their bags and personal belongings securely, thereby protecting the exhibits from potential damage and ensuring a comfortable viewing experience. At the center of the gallery, a circular partition table serves as a versatile display area. This table is designed to be easily replaced or reconfigured to align with new themes, maintaining the gallery's freshness and appeal. The exhibits include paintings, photos, and replicas of flora and fauna endemic to Indonesia, offering a comprehensive glimpse into the country's natural and cultural heritage.

The gallery's design is dominated by a black color scheme and an unfinished concrete floor, creating a stark, minimalist backdrop that emphasizes the exhibits. The simplicity of the interior design is intentional, allowing the artifacts to stand out and the magical side of the room to be highlighted. This approach ensures that the focus remains on the cultural items being showcased, enhancing their visual impact and educational value.

4. Conclusion

This cultural center represents a pioneering initiative, as it is the first of its kind in Berlin, aimed at introducing and celebrating Indonesian culture in a European context. The design concept titled "The Magical of Nusantara" is meticulously crafted to incorporate authentic Indonesian cultural elements and traditional color schemes. The focus on three key spaces—the lobby-lounge, library, and gallery—

ensures a holistic representation of Indonesia's rich heritage. The lobby's design features symbolic elements like mountain accents and an oval-shaped bar serving traditional Indonesian beverages, which together create a welcoming and culturally immersive atmosphere. The library's highlights, such as the imitation Borobudur Temple stupa and reading staircase with terrace concepts, provide a unique blend of cultural symbolism and modern functionality, fostering an environment conducive to learning and relaxation.

The gallery's flexible, non-permanent design allows for diverse thematic exhibitions, ensuring that the cultural center remains dynamic and engaging for repeat visitors. The use of smart mobile technology enhances the educational experience, allowing visitors to gain deeper insights into the exhibits. Throughout the cultural center, the selection of neutral colors—brown, black, and white—alongside materials like wood and marble, and accents of Indonesian batik motifs, create a cohesive and aesthetically pleasing environment. These design choices not only highlight the cultural artifacts but also contribute to the overall ambiance of elegance and sophistication.

In conclusion, the Indonesian Cultural Center in Berlin stands as a testament to the richness of Indonesian culture and the potential for cultural diplomacy to foster greater international understanding and appreciation. The thoughtful integration of traditional elements and modern design principles ensures that the center is both a cultural beacon and an inviting space for visitors. This project exemplifies how strategic interior design can effectively bridge cultural gaps and create lasting impressions on a global audience.

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The Application of "The Jungle Book" Theme in the Interior Design of Manimonki Animation Studio in Surakarta

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ABSTRACT

Indonesia is one of the countries with the highest popularity of animation in the world. However, the city of Surakarta lacks facilities to develop and support the potential of animation film-making communities. The lack of attention from the local government as a facilitator and enabler poses a problem, leading these communities to prefer working in larger cities with national-scale studios, thereby risking Surakarta's market segment in animation. This study aims to design the interior of Manimonki Animation Studio in Surakarta to provide a facility that can accommodate and support the local animation film-making community, enhancing the growth of the animation industry in Indonesia to compete internationally. The interior design of this studio adopts a unique theme, "Jungle Book," inspired by the 1967 American musical comedy animated film produced by Walt Disney Productions. The theme serves as a foundational concept for designers to address and solve design problems encountered. The methodology includes literature studies, field studies, and interviews to gather data, followed by zoning, grouping, and space organization to structure the interior design. The results indicate that the Jungle Book theme creates a creative and engaging work environment, boosting productivity and minimizing fatigue.

KEYWORDS

Interior Design
Manimonki Studio
Jungle Book
Animation Industry
Creative Workspace

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1. Introduction

Manimonki Studio, a 2D and 3D animation production house, has established a significant presence over its eight years of operation, with numerous works published across various platforms. These works have garnered national and international awards, attesting to the studio's creative prowess. However, an observational analysis reveals that Manimonki Studio faces limitations in terms of infrastructure and facilities, which are crucial for a fully functional animation studio. This limitation confines their production to product/advertisement shorts, short films, and video content, primarily due to the limited number of computers and workspace.

A more expansive and well-equipped facility would significantly enhance the studio's capability to undertake larger industrial projects such as films and TV series. Additionally, a thoughtfully designed production environment is essential to maintain consistent performance and foster a progressive mindset among the staff. In this regard, the thematic planning of the studio's interior plays a critical role, as it supports the creative, educational, and entertainment functions inherent to an animation studio.

This study focuses on the interior design of Manimonki Animation Studio in Surakarta, adopting the "Jungle Book" theme inspired by the 1967 American musical comedy animated film by Walt Disney Productions. The choice of this theme aligns with Manimonki Studio's iconic character—a monkey living in a jungle. The primary aim of this design project is to create an interior that is both unique and creative, enhancing the productivity of the staff while minimizing fatigue, especially during long working hours (Konstantzos et al., 2020; Mumpuni, 2023; Ru et al., 2019).



To address the identified issues, this study will explore the application of the Jungle Book theme in the interior elements of the studio. The objective is to provide a reference design that accommodates and facilitates the animation filmmaking community in Surakarta, promoting the growth of the animation industry in Indonesia and enabling it to compete internationally. The theoretical framework involves a review of existing literature on thematic interior design and its impact on creative workspaces. The methodology includes data collection through literature studies, field observations, and interviews, followed by zoning, grouping, and space organization to structure the interior design effectively.

The expected outcomes of this research include a comprehensive interior design plan that not only meets the functional needs of Manimonki Studio but also creates a stimulating and enjoyable work environment. The benefits of this study extend beyond the studio itself, aiming to support the local animation community, attract more talent, and ultimately contribute to the broader animation industry in Indonesia. This research aims to provide a detailed and practical interior design solution for Manimonki Studio, using the Jungle Book theme to create an inspiring and efficient workspace. The anticipated impact is a significant enhancement in the studio's production capabilities and an improved working environment that supports both creativity and well-being.

2. Method

The methodology for this study comprises several phases, starting with data collection, followed by data analysis, design process, and a thorough literature review to establish a solid theoretical foundation.

2.1 Data Collection

The data collection phase includes three primary methods: literature review, field study, and interviews. The literature review identifies issues related to the interior design planning of Manimonki Animation Studio, providing useful data throughout the analysis and design process. The field study involves observing various locations that can serve as references and comparisons for the project, particularly in the field of interior design. Additionally, interviews are conducted with management and users to gather direct data regarding space allocation, circulation, and spatial requirements.

2.2 Data Analysis

The data analysis phase involves several critical steps to ensure an effective interior design plan. Initially, the interior spaces are divided into three classifications: Public Area, Semi-Private Area, and Private Area. Public Areas are accessible to the general public, Semi-Private Areas are restricted to relevant users, and Private Areas are designated for personal use.

Spatial dimensions are adjusted according to the estimated number of users, room size, furniture size, and furniture requirements. The organization of space within each zone is arranged based on the specific needs of each area. Circulation patterns are designed to be mixed, allowing users the freedom to choose their desired rooms. The relationship between spaces is structured to be adjacent, considering the functional requirements of each room.

2.3 Design Process

The design process involves several key steps to develop a cohesive and functional interior design. Initially, visual variations of the interior and furniture are created through hand sketches. These sketches and 2D plans are then transferred into AutoCAD 2022 for further development. The room components and furniture are modeled using SketchUp Pro 2021. Following this, materials are selected and applied to the designs. One alternative design is chosen for consultation with the project supervisor to ensure alignment with the project goals.

2.4 Literature Review

The literature review encompasses various sources that provide insight into the thematic and functional aspects of the project. For instance, animation studios are specialized companies focusing on creating three-dimensional, two-dimensional, and architectural animation (A'yun et al., 2018). The design of creative workspaces often requires the integration of natural elements to support creativity and productivity. Decision-making in spatial design significantly influences creativity, while design elements

such as natural lighting and green spaces can enhance employee creativity (K. Thoring et al., 2019; K. C. Thoring et al., 2021).

Moreover, physical elements like spatial layout and material choices greatly influence creative processes. A well-designed spatial layout can facilitate workflow and collaboration, while appropriate material choices can create an aesthetically pleasing and functional environment (Blomberg & Kallio, 2022). Creative work environments not only enhance productivity and innovation but also increase the attractiveness of organizations to potential talent (Maier et al., 2022).

In summary, the integration of natural elements, thoughtful spatial design, and careful material selection are essential components in creating a workspace that supports creativity and productivity. These design considerations are critical in making animation studios effective and appealing to both current and prospective employees.

“The Jungle Book”, an American musical comedy animated film produced by Walt Disney Productions in 1967, serves as a thematic inspiration for this project. The film, based on Rudyard Kipling's 1894 book, follows Mowgli, a wild child raised in the Indian jungle by wolves, and his friends Bagheera the panther and Baloo the bear, who try to convince him to leave the jungle before the evil tiger Shere Khan arrives (see Fig. 1).

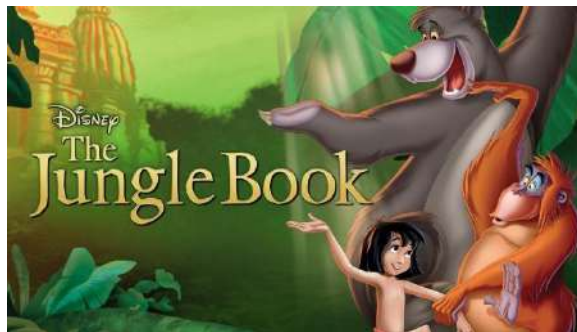


Fig. 1. Promotional Image from Disney's "The Jungle Book".

Incorporating the Jungle Book theme into the interior design of Manimonki Animation Studio aims to create a biophilic and modern atmosphere. This thematic approach is intended to foster creativity and recreation, transforming the studio from merely a production office into an educational tourist attraction that particularly appeals to children. This theme is consistent with Manimonki Studio's iconic character, a monkey living in the jungle, and serves to strengthen the studio's brand identity.

Key thematic elements such as clouds, trees, bushes, grass, streams, and animals are strategically integrated into various interior components including walls, floors, ceilings, furniture, and accessories. These elements collectively create an immersive environment that aligns with the studio's creative vision and operational needs.

The study also delves into the psychological effects of color, emphasizing their importance in enhancing the overall ambiance. The strategic use of colors in garden settings, flower arrangements, and neutral tones can significantly enhance relaxation. Green hues, in particular, are recognized for promoting calmness and tranquility, which are essential for maintaining a productive and stress-free work environment (Kexiu et al., 2021; Pasanen et al., 2018; Rapuano et al., 2022; Ratcliffe et al., 2022).



Fig. 2. A palette of neutral colors chosen based on their psychological effects.

By integrating these thematic and color elements, the interior design not only supports the aesthetic appeal but also contributes to the psychological well-being of the studio's employees. This comprehensive approach ensures that the workspace is both visually stimulating and conducive to creativity, making it an ideal environment for animation production.

The thematic concept of integrating the Jungle Book theme into the overall interior design methodology of Manimonki Animation Studio guides the design process at every stage. This approach ensures that each element of the theme is cohesively and effectively implemented throughout the studio's interior. The selection of these thematic elements is informed by initial data collection through literature reviews, field studies, and interviews, ensuring a comprehensive understanding of both functional and aesthetic requirements. The analysis includes zoning, grouping, spatial dimensions, organization, circulation patterns, and spatial relationships, as illustrated in Figure 3.



Fig. 3. Mindmap of the Jungle Book theme

The thematic elements incorporated into the interior design draw inspiration from clouds, trees, bushes, grass, streams, and animals. These elements are seamlessly integrated into various interior components, including walls, floors, ceilings, furniture, and accessories, to create a cohesive and immersive environment.

Clouds are represented in the lighting and ceiling design. Lighting fixtures crafted to resemble clouds add a whimsical and airy atmosphere to the space. Additionally, the ceiling is designed to mimic the sky, adorned with cloud patterns that enhance the biophilic effect, making the studio feel more open and natural. This aligns with the principles of active design, which can influence activity levels, sitting behaviors, and overall well-being in the workplace (Engelen, 2020).

Bushes are reflected in the wall designs, using textures and colors that evoke the feeling of being surrounded by nature, creating a sense of immersion in a jungle environment. Trees are creatively incorporated into the structural elements of the studio, with pillars designed to resemble trees, providing both functional support and reinforcing thematic consistency. The ceiling utilizes tree patterns and forms to create an immersive jungle canopy effect, further enhancing the theme.

Grass is brought into the studio through flooring and furniture. Green, grass-like flooring materials create a natural and refreshing atmosphere indoors, contributing to a biophilic environment that

promotes relaxation and productivity. Furniture pieces incorporate grass-like textures and colors, adding to the thematic coherence and making the environment more engaging.

Animals play a crucial role in enhancing the jungle ambiance. Animal-themed accessories and decorative items are strategically placed throughout the studio, adding charm and interest. Murals of jungle animals adorn the walls, providing visual depth and reinforcing the theme, making the space feel more vibrant and alive.

Integrating these thematic elements into the interior design of Manimonki Animation Studio aims to create a unique and engaging workspace that boosts productivity and creativity. This thematic approach not only addresses the functional needs of the studio but also adds an element of storytelling and immersion, making it an inspiring place to work. The effectiveness of the role of interior design in creating functional and institutional happiness for work environments is evident here, as a well-designed space can significantly enhance occupants' satisfaction and perceived productivity (Candido et al., 2019).

The methodology outlines a comprehensive approach to designing the interior of Manimonki Animation Studio. Through careful data collection, analysis, design, and theoretical research, this project aims to create a unique, functional, and inspiring workspace that supports the creative and professional needs of the studio. By enhancing creativity in activity-based offices, the design promotes a dynamic and flexible work environment conducive to innovative thinking and effective collaboration (Yekanielibeglou et al., 2021).

In summary, the Jungle Book-themed interior design of Manimonki Animation Studio exemplifies the potential of thematic and biophilic design to transform a workspace. By integrating these elements thoughtfully, the studio not only meets the functional requirements of animation production but also fosters a sense of well-being and creativity among its employees.

3. Results and Discussion

The interior design of Manimonki Animation Studio has been meticulously planned to integrate thematic elements inspired by the Jungle Book, ensuring that each aspect of the design contributes to creating a cohesive and immersive environment. Below is a detailed discussion of the layout, flooring, ceiling, and various perspectives within the studio.

3.1 Layout

The layout of the studio, as illustrated in Figure 4, employs dynamic and curved shapes as a primary design element, reflecting a modern style within the furniture and overall spatial organization. The unique furniture designs support the Jungle Book theme, making the environment both functional and visually appealing. The materials used for the furniture include wood, silicone, leather, foam, and polyester, all chosen for their safety and comfort.

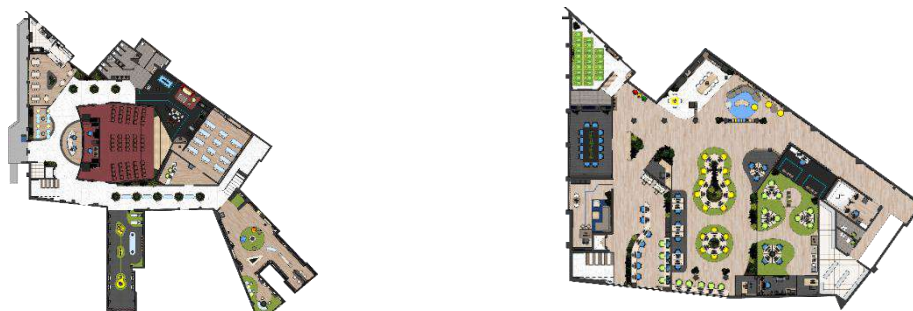


Fig. 4. Layout Plan

The layout plan is thoughtfully divided into different zones, each designed to serve specific functions and enhance the thematic experience. The main production area incorporates creative workstations, meeting rooms, and collaborative spaces, all featuring green flooring and tree-like pillars that contribute to the immersive jungle atmosphere. These design choices not only foster a collaborative and creative workspace but also reflect the studio's thematic inspiration.

In addition to the production area, the studio includes recreational and support areas such as the lobby, cafeteria, and corridors. These spaces are adorned with thematic decorations that reinforce the Jungle Book theme, providing employees with relaxing and visually stimulating environments. The lobby, for instance, features walls and a reception desk decorated with plants and jungle motifs, cloud-shaped lamps that create a whimsical atmosphere, and pillars designed to resemble trees. Similarly, the cafeteria integrates plant motifs and natural colors on the ceiling, walls decorated with plants and animal murals, and tree-like pillars, creating a cohesive and engaging space for social interaction and relaxation.

Furthermore, the first-floor corridor, which separates the cinema and gallery areas, continues the thematic design with tree-like pillars placed in the middle of the corridor, walls adorned with animal murals and natural textures, and plant beds that enhance the natural feel and thematic continuity.

3.2 Flooring

The flooring throughout Manimonki Animation Studio has been designed with materials that prioritize comfort, ease of maintenance, and safety. These materials include carpet, vinyl, ceramic, marble, granite, and parquet, as illustrated in Figure 5. The careful selection of these flooring options ensures that the studio environment is not only aesthetically pleasing but also practical and safe for daily use.

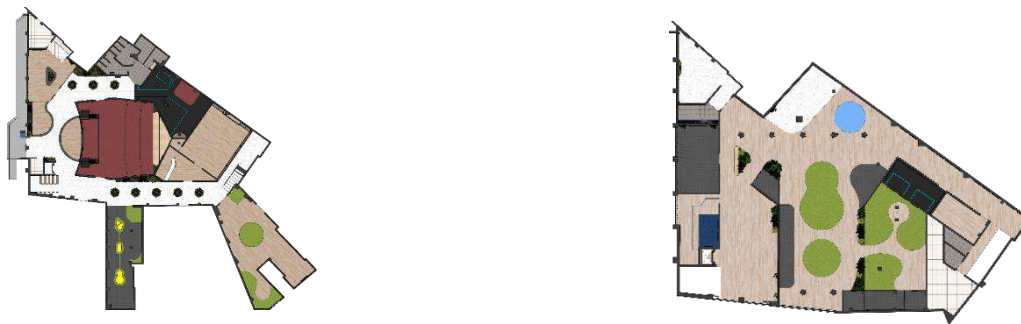


Fig. 5. Flooring Plan

Carpet and vinyl are prominently used in areas where comfort and noise reduction are crucial. These materials help create a quiet and comfortable atmosphere, essential for maintaining focus and productivity in an animation studio. The soft texture of carpets also adds a cozy feel to the space, making it more inviting for employees who spend long hours working.

In high-traffic areas, materials such as ceramic, marble, and granite are utilized. These materials are chosen for their durability and ease of cleaning, ensuring that the studio can withstand heavy use without frequent maintenance. Their robust nature makes them ideal for corridors, entrance areas, and other parts of the studio that experience constant movement.

Parquet flooring is used to add a natural wood aesthetic, aligning perfectly with the Jungle Book theme. The warm, natural tones of parquet not only enhance the visual appeal of the studio but also contribute to creating a harmonious and calming environment. This choice of material supports the biophilic design elements present throughout the studio, reinforcing the connection to nature.

Overall, the selection of flooring materials is integral to the studio's thematic and functional design. By combining comfort, durability, and aesthetic appeal, the flooring contributes to a workspace that is both inspiring and conducive to productivity. This comprehensive approach to flooring design reflects the studio's commitment to providing a safe, comfortable, and visually stimulating environment for its employees.

3.3 Ceiling

The ceiling design incorporates various styles, including conventional, exposed, suspended, up-ceiling, and down-ceiling, as shown in Figure 6. Additionally, the ceilings are decorated with climbing plants to create a refreshing and natural atmosphere. Materials used for the ceiling include gypsum, wood, and panels.

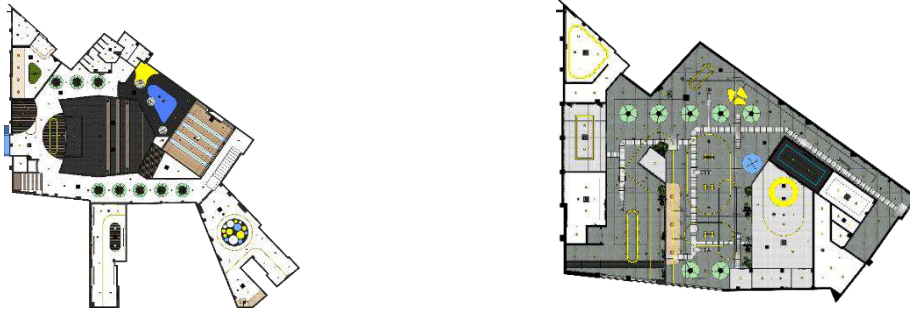


Fig. 6. Ceiling Plan

The ceiling designs in the Manimonki Animation Studio play a crucial role in enhancing the overall thematic elements of the Jungle Book-inspired interior. By incorporating both exposed and suspended ceilings, the design achieves a modern industrial aesthetic that seamlessly integrates natural elements. These ceilings not only add visual interest but also create a sense of openness and sophistication within the studio space.

In addition to the industrial design, the ceilings are adorned with climbing plants, which introduce a biophilic touch to the environment. This incorporation of natural greenery is not merely decorative; it has been strategically chosen to promote relaxation and creativity among the studio's employees. The presence of plants in the workspace has been shown to reduce stress levels, improve air quality, and enhance overall well-being, thereby fostering a more productive and inspiring work atmosphere.

3.4 Perspective



Fig. 7. Lobby perspective

The lobby design of the Manimonki Animation Studio, as shown in Figure 7, effectively incorporates the Jungle Book theme through several key elements. The walls and reception desk are adorned with plants and jungle motifs, creating an immediate sense of immersion as visitors enter the studio. This natural decor not only enhances the aesthetic appeal but also reinforces the thematic connection to the jungle environment.

Additionally, the lighting in the lobby features cloud-shaped lamps, adding a whimsical and playful touch to the space. These unique light fixtures contribute to a relaxed and creative atmosphere, aligning with the studio's overall design goals.

Furthermore, the pillars in the lobby are designed to resemble trees, providing structural support while simultaneously enhancing the jungle theme. This thoughtful integration of thematic elements helps to create a cohesive and engaging environment that sets the tone for the rest of the studio.



Fig. 8. Cafeteria perspective
(*Personal document: 2023*)

The cafeteria, as illustrated in Figure 8, seamlessly integrates the Jungle Book theme through a variety of design elements. The walls are adorned with plants and animal murals, creating a vibrant and lively atmosphere that reflects the essence of a jungle. The ceiling is decorated with plant motifs and natural colors, further enhancing the biophilic design. Additionally, the pillars are designed to resemble trees, adding to the thematic consistency and providing a cohesive look that ties the entire space together.

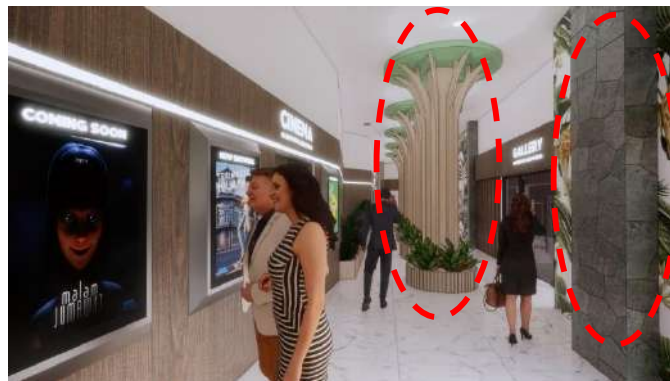


Fig. 9. First floor corridor perspective
(*Personal document: 2023*)

The first-floor corridor, depicted in Figure 9, effectively separates the cinema and gallery areas while maintaining the Jungle Book theme. Tree-like pillars are strategically placed in the middle of the corridor, providing both structural support and thematic continuity. These pillars are designed to resemble trees, adding to the immersive jungle atmosphere and reinforcing the biophilic design elements present throughout the studio.

The walls of the corridor are embellished with animal murals and natural textures, enhancing the visual appeal and thematic consistency. These murals not only add aesthetic value but also contribute to creating a sense of being in a natural, jungle environment. The use of natural textures on the walls further reinforces this feeling, making the corridor a seamless extension of the studio's overall design theme.

Additionally, plant beds are incorporated into the corridor design, strengthening the natural feel and maintaining the theme throughout the space. These plant beds add a touch of greenery, promoting relaxation and well-being among the employees and visitors. The integration of plants also aligns with biophilic design principles, which aim to connect occupants with nature, thereby enhancing their overall experience and satisfaction.

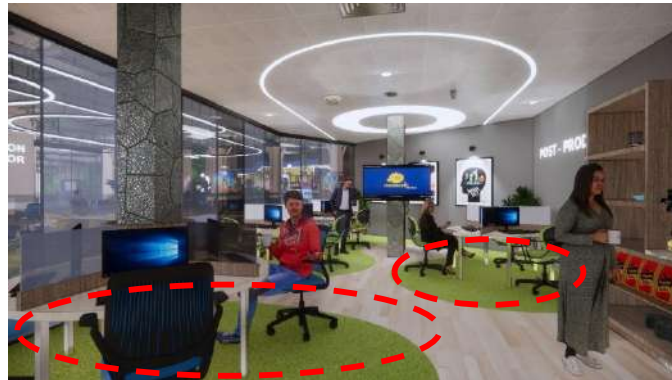


Fig. 10. Post-production room perspective

The post-production room, shown in Figure 10, emphasizes comfort and natural aesthetics. The flooring is made of vinyl with grass-like carpeting, creating a comfortable and inviting environment. Ergonomic furniture is used to ensure the safety and comfort of employees during prolonged work periods, which is crucial for maintaining productivity and well-being.

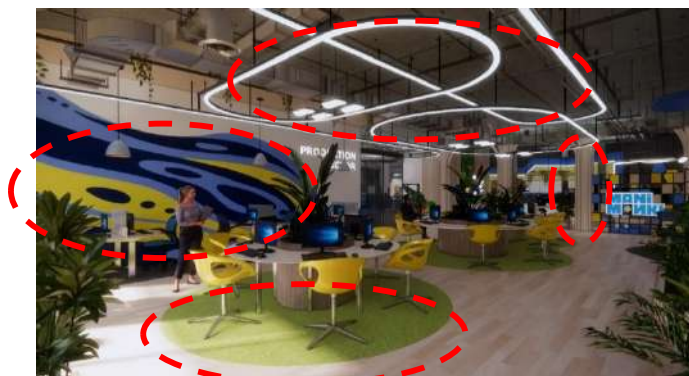


Fig. 11. Cafeteria perspective

The production room, depicted in Figure 11, prominently features the Jungle Book theme through various design elements. The walls are adorned with river-themed murals, creating a serene and inspiring backdrop. The ceiling features LED lights with cloud patterns, adding a whimsical touch to the space. The flooring consists of grass-textured carpets, enhancing the natural ambiance. Additionally, tree-like pillars and plant beds are used to create an immersive jungle environment, making the production room both functional and visually appealing.

3.5 Analysis of Thematic Integration and Functional Design

The interior design of Manimonki Animation Studio effectively integrates the Jungle Book theme into every aspect of its layout and furnishings, resulting in an environment that not only meets functional needs but also promotes creativity and productivity. Below is a detailed analysis of how each design element contributes to the studio's objectives and overall thematic consistency.

3.5.1 Functional Zoning and Space Utilization

The strategic division of the studio into distinct functional zones ensures that each area serves its intended purpose while contributing to the overall efficiency and workflow (Bae et al., 2019). The main production area, with its dynamic and curved furniture, fosters a collaborative and creative atmosphere.

The use of open spaces and carefully planned workstations facilitates communication and teamwork among employees, which is crucial in an animation studio where collaborative efforts are key to successful projects.

The recreational and support areas, such as the lobby and cafeteria, provide essential spaces for relaxation and social interaction. These areas are designed to help employees unwind and recharge, which is vital for maintaining high levels of productivity and preventing burnout. The thematic elements in these spaces, such as plant decorations and animal murals, create a pleasant and inspiring environment that aligns with the studio's creative ethos.

3.5.2 Material Selection and Safety Considerations

The careful selection of materials for flooring and furniture underscores the studio's commitment to creating a safe and comfortable working environment. Materials such as vinyl, carpet, ceramic, marble, granite, and parquet are chosen not only for their aesthetic qualities but also for their practical benefits. These materials are easy to clean, non-toxic, and safe to prevent accidents, making them ideal for a high-traffic workspace.

The furniture materials, including wood, silicone, leather, foam, and polyester, are selected for their comfort and durability. This consideration is particularly important in an animation studio where employees may spend long hours working. By ensuring that the furniture is both comfortable and safe, the design helps to reduce physical strain and improve overall well-being.

3.5.3. Thematic Integration and Biophilic Design

The integration of the Jungle Book theme through elements like tree-like pillars, grass-like flooring, cloud-shaped lighting, and animal-themed decorations creates an immersive environment that fosters creativity and inspiration. The use of biophilic design principles, such as incorporating natural elements and plant motifs, enhances the connection between employees and the natural world. This connection has been shown to reduce stress, increase productivity, and improve overall job satisfaction.

The thematic consistency across different zones ensures that the studio's identity is clearly communicated and experienced by everyone who enters the space. This thematic approach not only differentiates the studio from others but also reinforces the brand's unique character and vision.

3.5.4. Enhancing Creativity and Productivity

The design elements chosen for the studio are specifically intended to stimulate creativity and enhance productivity (Abouelela, 2022). The use of vibrant colors, natural textures, and thematic motifs creates a stimulating environment that encourages innovative thinking and artistic expression. For instance, the river-themed murals and tree-like pillars in the production room provide visual inspiration that can spark new ideas and creative solutions.

Moreover, the layout and design of the studio are intended to minimize distractions and create a focused work environment. The separation of work and recreational spaces ensures that employees can concentrate on their tasks without unnecessary interruptions. The availability of comfortable and well-designed spaces for breaks also helps employees to relax and return to work with renewed energy and focus.

3.5.5. Impact on Employee Well-Being and Collaboration

A well-designed workspace has a significant impact on employee well-being and collaboration. By creating a pleasant and supportive environment, the studio helps to foster a positive work culture where employees feel valued and motivated. The thoughtful design of the workspace, which includes areas for both individual work and group activities, encourages collaboration and teamwork. This collaborative spirit is essential for an animation studio, where different departments need to work together seamlessly to bring projects to life.

In conclusion, the interior design of Manimonki Animation Studio exemplifies how a well-thought-out thematic approach can transform a workspace. By integrating functional requirements with creative and biophilic design elements, the studio provides a unique and inspiring environment that supports both the practical needs of animation production and the well-being of its employees. This holistic

approach not only enhances the studio's operational efficiency but also reinforces its brand identity and commitment to creativity and innovation.

4. Conclusion

The interior design of Manimonki Animation Studio in Surakarta, inspired by the Jungle Book theme, successfully merges functionality with thematic creativity, resulting in a workspace that fosters both productivity and well-being. The design employs strategic zoning, dynamic and curved furniture, and thoughtful material selection to create an environment that supports the unique needs of an animation studio.

Key thematic elements, such as tree-like pillars, grass-textured carpets, cloud-shaped lighting, and animal murals, are integrated throughout the studio, creating a cohesive and immersive experience. The application of biophilic design principles, including the incorporation of natural elements and plant motifs, enhances the connection between employees and the natural world, promoting relaxation and creativity.

The study demonstrates that a well-designed workspace, aligned with a strong thematic concept, can significantly impact employee productivity and satisfaction. The Jungle Book theme not only provides a unique and engaging aesthetic but also supports the practical needs of the studio, offering a balanced and harmonious environment that inspires innovation and collaboration.

By addressing both functional requirements and thematic consistency, the interior design of Manimonki Animation Studio sets a benchmark for creative workspaces in the animation industry. The findings highlight the importance of integrating thematic elements into interior design to create an inspiring and effective working environment that aligns with the studio's identity and enhances the overall work experience for its employees.

In conclusion, the Jungle Book-themed interior design of Manimonki Animation Studio exemplifies how thoughtful and innovative design can transform a workspace, making it a place where creativity and productivity thrive. This study contributes valuable insights into the field of interior design for creative industries, emphasizing the benefits of thematic and biophilic design approaches.

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Comparative Analysis of Space Efficiency in Three Co-Working Spaces in Jakarta

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ABSTRACT

In Indonesia, many companies operate from their own offices, whether in buildings or shop houses. However, co-working spaces have emerged since 2010, providing a viable alternative for entrepreneurs, particularly start-ups, freelancers, and small business owners who lack the capital to lease traditional office spaces. Co-working spaces have seen significant growth, especially in Jakarta, driven by the need for flexible and cost-effective workspace solutions. This research aims to examine the effectiveness of space utilization in co-working spaces in Jakarta, focusing on three specific locations: InHype.Co, UnionSpace, and Ko+labora. By employing both quantitative and qualitative methodologies, including surveys, direct observation, and interviews, this study provides a comprehensive analysis of space efficiency in these co-working environments. The findings reveal key factors that contribute to effective space utilization, including layout design, furniture functionality, and the balance between private and communal areas. The insights from this research are intended to inform entrepreneurs and designers on optimizing co-working spaces to enhance productivity and user satisfaction.

KEYWORDS

Space Efficiency
Co-Working Space
Workspace Design
Productivity

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1. Introduction

Jakarta, the capital city of Indonesia, is a prominent business hub, hosting numerous entrepreneurs and established businesses (Lubis, 2023). According to the Executive Director of CORE Indonesia, 50 percent of Indonesia's economic turnover is centered in Jakarta. Despite plans to move the capital to Palangkaraya, Jakarta remains the focal point of business activities. The city's dynamic business environment attracts significant investments from entrepreneurs, making it an ideal location for both large and small enterprises.

Co-working spaces have emerged as a popular solution for Small and Medium Enterprises (SMEs) and freelancers (Nisrina & Handoyo, 2021). The COVID-19 pandemic significantly impacted sectors such as retail, hospitality, and traditional office spaces, causing a decline in revenue and productivity. New start-ups and entrepreneurs, particularly those with limited capital, found renting conventional office spaces increasingly impractical. Co-working spaces offer a cost-effective alternative by providing shared facilities, reducing the need for substantial expenses on electricity, water, cleaning, security, and other utilities.

The advancement of technology and the widespread necessity of internet access have further diminished the reliance on traditional office setups. As Jakarta's population grows, so do the rental costs of office buildings, making co-working spaces an attractive option for new businesses (Tan & Lau, 2021). These spaces enable entrepreneurs to focus on core business activities by alleviating the burden of high operational costs and offering support with business licensing.

However, the effectiveness of co-working spaces hinges on more than just financial savings. The design and maintenance of these spaces play crucial roles in ensuring user comfort and productivity. While some co-working spaces provide comprehensive facilities, issues such as cleanliness and space



utilization need constant attention. Neglecting these aspects can lead to negative user experiences and poor reviews, which can deter clients and affect business performance. Therefore, it is essential to address the layout, cleanliness, and accessibility of co-working spaces to enhance user satisfaction and efficiency.

Comfort in co-working spaces is multi-faceted, encompassing psychological, physiological, and behavioral dimensions. Factors such as temperature, air quality, and sensory comfort significantly influence the user experience. The continuous development and popularity of co-working spaces in Jakarta necessitate further research into their spatial effectiveness.

This study aims to enhance the understanding of space utilization in co-working environments by analyzing three co-working spaces in Jakarta: InHype.Co, UnionSpace, and Ko+labora. The research employs both quantitative and qualitative methods, including surveys, direct observations, and interviews, to evaluate the spatial efficiency of these co-working spaces. The insights gained from this study are intended to guide entrepreneurs and designers in optimizing co-working space layouts, ensuring no wasted space, maintaining cleanliness, and ultimately fostering productive, effective, and efficient work environments.

2. Method

This study employs a mixed-methods approach, combining both quantitative and qualitative research methods to provide a comprehensive analysis of space efficiency in three co-working spaces in Jakarta: InHype.Co, UnionSpace, and Ko+labora. The research design includes surveys, direct observations, and interviews to gather data on the spatial utilization and user experiences within these co-working spaces.



Fig. 1.InHype.Co Logo

(<https://inhype.co/>)



Fig. 2.Union Space Logo

(<http://unionspace.my/PIK-Avenue>)

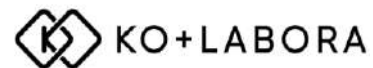


Fig. 3.KO+LABORALogo

(<https://id.linkedin.com/company/ko-labora>)

2.1 Data Collection

2.1.1 Surveys

Surveys were conducted among users of the three co-working spaces to collect quantitative data on their experiences and satisfaction with the space efficiency. The survey included questions related to the usability of the space, the adequacy of facilities, and overall comfort. Respondents were selected through a convenience sampling method to ensure a diverse representation of users.

2.1.2 Direct Observations

Direct observations were carried out to collect qualitative data on the physical layout, cleanliness, and usage patterns of each co-working space. The observations focused on the arrangement of furniture, the flow of movement, and the accessibility of different areas. Photographs were taken to document the physical settings and support the analysis. These photographs were also used to visually document the physical settings of each co-working space.

2.1.3 Interviews

Semi-structured interviews were conducted with the receptionists and staff members of the co-working spaces to gain insights into the operational aspects and challenges related to space management. The interviews provided valuable context to the survey and observational data, helping to understand the rationale behind certain design choices and maintenance practices.

2.2 Data Analysis

The collected data were analyzed using both quantitative and qualitative techniques. Survey responses were statistically analyzed to identify trends and patterns in user satisfaction and space

efficiency. The observational data and interview transcripts were thematically analyzed to extract key themes and insights related to the layout, functionality, and cleanliness of the co-working spaces.

2.3 Theoretical Framework and Design Considerations

According to Soerjani (Zulkarnain & Sumarsono, 2015), an office supports leadership and goal achievement through dynamic activities such as data processing and information management. Co-working spaces, defined by Anastasia (2018), provide flexible, innovative workplaces for SMEs and freelancers, fostering creativity and collaboration (Nisrina & Handoyo, 2021; Setiani et al., 2020).

Design considerations were examined to understand their impact on space efficiency. White walls, as noted by Ćurčić et al. (2019), create a comfortable work environment, while appropriate lighting levels (200-500 lux) are essential for productivity (Handayani et al., 2013). Ergonomic furniture, including office chairs and work desks, is crucial for functional workspaces (Haire & Lobel, 2022; Colenberg et al., 2021). Movable and demountable walls offer flexibility and cost savings (Zavani & Rahardjo, 2017), and carpets provide soundproofing and durability in high-traffic areas (Piotrowski & IIDA, 2010; Siikonen, 2021). Suspended ceilings with fiberglass tiles are commonly used for their acoustic properties and cost-effectiveness (Piotrowski & IIDA, 2010).

By integrating these methods, the study aims to provide a holistic understanding of space efficiency in co-working environments, offering practical recommendations for entrepreneurs and designers to enhance the functionality and user experience in co-working spaces.

3. Results and Discussion

The analysis of space efficiency in the three co-working spaces—InHype.Co, UnionSpace, and Ko+labora—revealed several key findings. These findings are supported by a review of relevant literature, which provides a theoretical framework for understanding the dynamics of co-working spaces.

According to Soerjani (Zulkarnain & Sumarsono, 2015), an office is a place with many activities to support leadership and achieve organizational goals. Offices involve dynamic tasks such as receiving, summarizing, processing, storing, and distributing work. The main element of an office is managing data and information. In contrast, a co-working space, as described by Anastasia (2018), is a modern workplace for creative, flexible, and innovative start-up businesses. Co-working spaces cater to SMEs and freelancers, providing a collaborative environment that fosters innovation and productivity (Nisrina & Handoyo, 2021; Setiani et al., 2020).

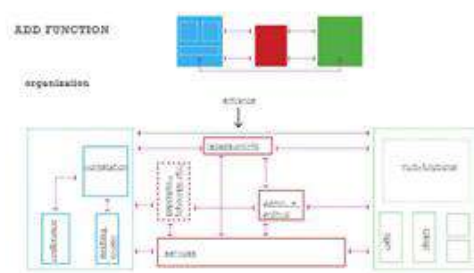


Fig. 4. Room Division of Coworking Space (Duygu. E, 2013)

Figure 4 illustrates the room division of co-working spaces as categorized by Ergin (2013):

- **Primary Space:** Areas where group work activities occur.
- **Service Space:** Facilities such as reception areas, libraries, and printing stations.
- **Hidden Service Space:** Private areas like staff rooms and workshops.

- **Secondary Space:** Public areas with commercial value, such as cafeterias and shops.

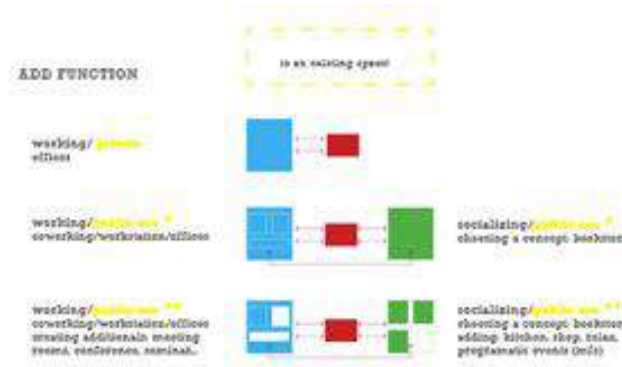


Fig. 5.Function-Based Room (Duygu. E, 2013)

Figure 5 depicts function-based room organization, emphasizing the importance of furniture functionality, room circulation, and support components like air conditioning and Wi-Fi (Bouncken & Görmar, 2023). Effective co-working spaces ensure comfortable movement and encourage social interaction among users.

Color and lighting significantly impact the user experience in co-working spaces. White walls, as noted by Ćurčić et al. (2019), create a comfortable environment, though they may sometimes lead to work errors. Appropriate lighting levels (200-500 lux) are essential for productivity, especially in environments where users work extensively with computers (Mumpuni, 2023; Handayani et al., 2013).

Furniture design also plays a crucial role for effectiveness, efficiency, safety and comfort (Sumarno & Prasetyo, 2022). Ergonomic office chairs, guest chairs, bookshelves, and adequately lit work desks are necessary to facilitate effective workspaces (Haire & Lobel, 2022; Colenberg et al., 2021). Movable walls and demountable wall systems offer flexibility and cost savings, allowing spaces to be reconfigured as needed (Zavani & Rahardjo, 2017).

Flooring materials like carpets provide soundproofing and comfort, especially in high-traffic areas. Carpets are beneficial for offices with open space systems, protecting floors from damage caused by wheeled chairs (Piotrowski & IIDA, 2010; Siikonen, 2021). In premium areas, materials like wood or ceramics are preferred for their durability and aesthetic appeal. Ceiling systems also contribute to the overall environment. Suspended ceilings with fiberglass tiles are common for their acoustic properties and cost-effectiveness (Piotrowski & IIDA, 2010).

3.1 Comparison of Co-Working Space Areas

3.1.3 InHype.Co

InHype.Co is located on the 5th floor of Baywalk Mall, Jl. Pluit Karang Ayu 1, Pluit, Kec. Penjaringan, Kota Jakarta Utara. This co-working space is situated near a cinema and has a relatively quiet atmosphere. The space is spacious and well-lit, with numerous chairs and tables for users. The communal area can be rented daily, monthly, or yearly and includes many power outlets to accommodate visitors with laptops.



Fig. 6.InHype.Co Coworking Area (Salim, 2022)

However, the arrangement of furniture appears untidy and unorganized, leading to an imbalanced look when users occupy different seating areas. The meeting table features dim lighting, while the large communal table benefits from natural lighting. The combination of green colors and dark ceiling creates a dark impression, which could be improved by using white paint to enhance comfort (Ćurčić et al., 2019). The flooring is made of strong material to prevent damage from frequent use (Piotrowski & IIDA, 2010).



Fig. 7.InHype.Co Outdoor Coworking Area (Salim, 2022)

The outdoor area at InHype.Co, depicted in Figure 7, is commonly used for smoking and features seating furniture designed for relaxation. This space offers a comfortable environment for users to unwind and take breaks. However, the use of grass-textured carpet presents a significant drawback. While aesthetically pleasing and intended to mimic natural grass, this carpet material retains moisture when wet, such as during rain, leading to prolonged drying times. This issue reduces the practicality and usability of the outdoor area, as users are likely to avoid sitting on wet surfaces. To enhance the functionality of this space, it would be advisable to replace the grass-textured carpet with a more water-resistant and quick-drying material.



Fig. 8.InHype.Co Coworking Area with Sea View (Salim, 2022)

Figure 8 showcases the sea-view communal area at InHype.Co. This area is favored by users for its scenic view, offering a serene and visually appealing environment. The large windows provide ample natural light, creating a bright and inviting atmosphere. However, the space faces several challenges that limit its effectiveness as a working area. The seating position is excessively bright, which can cause discomfort and glare for users working on screens. Additionally, the furniture in this area is not ergonomically designed to support long periods of work. The seating arrangements are more suitable for rest and casual interactions rather than focused work tasks. To improve the functionality of this space as a productive working environment, it would be beneficial to incorporate ergonomic furniture and consider shading solutions to reduce glare and improve visual comfort.

3.1.2 UnionSpace

UnionSpace is located at PIK Avenue, Level 6, Jl. Pantai Indah Kapuk, Kota Jakarta Utara, close to a parking area, making it easily accessible for users. This co-working space is also near a gym, cinema, and other easily accessible dining places.



Fig. 9.UnionSpace Coworking Area (Salim, 2022)

The furniture in UnionSpace is practical for freelancers or employees working in groups, with narrow tables and closely placed chairs fostering a sense of collaboration. The cement-textured flooring is durable and supports high-traffic use, making it suitable for a busy co-working environment. The bright, white-painted walls and open ceiling design contribute to a sense of openness and ease of movement, enhancing the overall workspace experience. The space is predominantly used by students working on their theses, indicating its suitability for focused, academic work. The open design and practical furniture arrangement facilitate interaction and collaboration among users, promoting a productive atmosphere.



Fig. 10. Union Space Coworking Area 2 (Salim, 2022)

The larger Private Office at UnionSpace accommodates up to 6 people and is directly connected to the pantry and Co-Working Area, facilitating networking among different companies. This larger office space provides ample movement circulation, allowing for comfortable working conditions for small teams. The integration of the Private Office with communal areas such as the pantry and co-working space enhances the functionality of UnionSpace, providing a balanced mix of private and shared work environments. The cement-textured flooring continues in the Private Office, maintaining durability and ease of maintenance. The lighting primarily uses artificial sources, making the area bright and conducive to work, while the white-painted walls add to the spacious feel.

3.1.3 KO+LABORA

KO+LABORA, located at Hayam Wuruk Plaza, Jl. Hayam Wuruk, Maphar, Kec. Taman Sari, Kota Jakarta Barat, has separate areas that are not interconnected, requiring users to pass through the reception area to reach the Break Area. Unlike the other two co-working spaces, KO+LABORA is situated in an office building rather than a mall.



Fig. 11. KO+LABORACoworking Area (Salim. N, 2022)

The co-working area at KO+LABORA is characterized by diverse colors and comfortable seating. The design includes chairs, tables, and ottoman sofas for various activities, from chatting to solitary work. The wood-patterned ceramic flooring matches the light wall colors, creating a harmonious contrast with the darker floor. Lighting includes both artificial and natural sources, enhancing the space's productivity and comfort (Ćurčić et al., 2019). The careful selection of colors and materials contributes to a welcoming and productive environment. The variety of seating options allows users to choose according to their needs, whether they require a quiet space for focused work or a comfortable area for casual conversations.



Fig. 12. KO+LABORACoworking Area 2 (Salim, 2022)

The second co-working area features a long table, preferred by e-commerce companies for its open and well-lit environment. This space is surrounded by Private Offices and Meeting Rooms, with consistent floor and wall materials throughout. According to Husein, the marketing manager of KO+LABORA, the open atmosphere and bright lighting increase productivity for groups working at the table. The area benefits from both natural and artificial lighting, creating a balanced and conducive environment for work. The design emphasizes openness and collaboration, with ample space for movement and interaction among users. The consistent use of materials throughout the space ensures a cohesive and professional look, enhancing the overall user experience.

In summary, InHype.Co, UnionSpace, and KO+LABORA each offer distinct environments tailored to different user needs. InHype.Co provides spacious areas with scenic views but requires improvements in organization and ergonomic design. UnionSpace excels in creating a collaborative atmosphere suitable for academic work, with practical furniture and integrated communal areas. KO+LABORA stands out for its vibrant design, diverse seating options, and emphasis on comfort and productivity. Each space's unique features highlight the importance of balancing functionality, comfort, and aesthetic appeal to maximize user satisfaction and productivity in co-working environments.

3.2 Comparison of Private Offices

3.2.1 InHype.Co Private Office



Fig. 13. InHype.Co Private Office (Salim, 2022)

The Private Office at InHype.Co is directly connected to the Co-Working Area, which allows users to move to the communal space if they feel too hot inside. This integration provides flexibility for users who may need to alternate between private and communal work environments. The light-colored walls and downlight lighting provide adequate illumination, creating a conducive environment for productive work. The spacious furniture arrangement offers more than 90 cm of movement circulation, accommodating 5-6 people comfortably. This setup is ideal for start-up entrepreneurs with a small number of employees, offering ample space for collaboration and individual tasks. The comfortable desk and work chairs enhance user experience, and the proximity of Private Offices encourages communication and networking between different companies, fostering a collaborative community.



Fig. 14. InHype.Co Private Office with Sea View (Salim, 2022)

The sea-view Private Office at InHype.Co offers favorable lighting conditions but comes with a high rental cost. The natural lighting from large windows is beneficial during the day, creating a bright and inviting atmosphere. However, the space is more suitable for rest due to the lack of ergonomic furniture for laptop use, which is essential for maintaining productivity during long work hours. The room only provides one set of desks and work chairs, with an open layout that is not ideal for a collaborative workspace. The scenic view, while aesthetically pleasing, does not compensate for the functional deficiencies in this office setup. To enhance its usability as a working environment, it would be beneficial to incorporate ergonomic furniture and possibly redesign the layout to support collaborative activities better.

3.2.2 UnionSpace Private Office

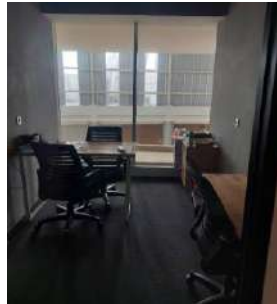


Fig. 15. UnionSpace Private Office (Salim, 2022)

The Private Office at UnionSpace features natural lighting from a window facing the mall. This workspace can accommodate 2-3 people due to its limited size, which restricts movement. The natural light provides a pleasant working environment, reducing the need for artificial lighting during the day. The carpeted floor offers soundproofing benefits, minimizing noise from adjacent offices and preventing damage from furniture movement. This setup is ideal for small teams that need a quiet and isolated working environment, allowing for focused and uninterrupted work.

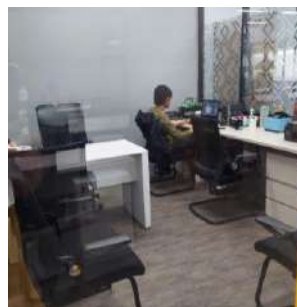


Fig. 16. UnionSpace Private Office (Salim, 2022)

The larger Private Office at UnionSpace can accommodate up to 6 people and is directly connected to the pantry and Co-Working Area, facilitating networking among different companies. This integration allows for easy access to communal areas, encouraging interaction and collaboration. The larger office space provides ample movement circulation, making it comfortable for small teams. The continuity of the cement-textured flooring from the co-working areas ensures durability and ease of maintenance. The lighting primarily uses artificial sources, making the area bright and conducive to work, while the white-painted walls enhance the sense of spaciousness. The design of this office supports both individual and collaborative work, making it a versatile space for various business activities.

3.2.3 KO+LABORA Private Office



Fig. 17. KO+LABORA Private Office (Salim, 2022)

The Private Office at KO+LABORA features complete and ergonomic work furniture designed to enhance user comfort and productivity. The use of ergonomic chairs and adjustable desks ensures that users can maintain proper posture, reducing strain during long work hours. The carpeted floor absorbs sound, creating a quieter working environment and preventing damage from furniture movement. This feature is particularly beneficial in a bustling co-working space where noise reduction is crucial for maintaining focus.

Glass wall partitions covered with cutting stickers provide the necessary privacy while still allowing natural light to filter through, maintaining a bright and open feel within the office. The use of glass partitions also creates a sense of transparency and openness, which can foster a collaborative atmosphere while still delineating private spaces. The gray walls enhance the sense of privacy and professionalism, contributing to a calm and focused work environment.

The office can accommodate 3-4 people in a smaller space and 5-6 people in a slightly larger room, making it versatile for different team sizes. This flexibility allows businesses to choose a space that best fits their needs, whether they require a compact office for a small team or a larger room for more employees. The layout is designed to maximize space efficiency, ensuring that every inch of the office is utilized effectively.

InHype.Co's Private Office stands out for its flexible integration with communal areas and scenic views, though it needs ergonomic improvements. UnionSpace offers practical and well-integrated office options that cater to both small, isolated teams and larger, collaborative groups, emphasizing durability and functionality. KO+LABORA excels in ergonomic design and sound management, providing a professional and flexible workspace suitable for various team sizes. Each co-working space successfully addresses different user needs, highlighting the importance of tailored office designs to enhance productivity and user satisfaction in co-working environments.

3.3 Comparison of Meeting Rooms



Fig. 18. InHype.Co Meeting Room (Salim, 2022)

The meeting room at InHype.Co (fig. 18) features a U-shaped layout, which is effective for presentations and accessibility. This design includes a focal point in the middle, allowing easy access to various sides of the chairs and ensuring that all participants have a clear view of the presenter. However, the room uses glass partitions without cutting stickers, compromising privacy. The open and transparent design can make the space feel less confidential, which might not be suitable for all types of meetings. Despite this, the natural lighting and open layout contribute to a bright and inviting environment.



Fig. 19. UnionSpace Meeting Room (Salim, 2022)

The meeting room at UnionSpace (fig. 19) has a linear table arrangement, which can hinder movement circulation. This setup can make it difficult for participants to move around freely and access different parts of the room. The closed room without glass feels cramped and enclosed, with limited ventilation from other areas. This design choice can lead to a lack of natural light and a more oppressive atmosphere, which might affect the productivity and comfort of the meeting participants. The emphasis on privacy, however, makes it suitable for confidential discussions.



Fig. 20. KO+LABORA Meeting Room (Salim, 2022)

The meeting room at KO+LABORA features a combination of artificial downlights and natural light through curtained windows. The linear table arrangement impedes circulation, but the glass walls with stickers provide partial privacy. This setup balances openness with confidentiality, creating a

professional environment suitable for various types of meetings. The room benefits from both natural and artificial lighting, ensuring a well-lit space that remains comfortable throughout the day. The combination of these elements makes the room versatile for different meeting formats, although the linear arrangement might still limit ease of movement.

The comparative analysis of meeting rooms at InHype.Co, UnionSpace, and KO+LABORA highlights their distinct features and suitability for different meeting needs.

- **InHype.Co:** The U-shaped layout is effective for presentations and accessibility but lacks privacy due to the use of glass partitions without cutting stickers. The room benefits from natural light, creating a bright environment.
- **UnionSpace:** The linear table arrangement hinders movement and creates a cramped atmosphere in a closed room without glass, providing high privacy but limited natural light and ventilation.
- **KO+LABORA:** Combines artificial downlights and natural light with a linear table arrangement, providing partial privacy through glass walls with stickers. This room balances openness and confidentiality but may limit movement circulation.

Each meeting room design offers unique advantages and challenges, highlighting the importance of choosing a layout and features that align with the specific needs of the meeting participants.

4. Conclusion

Each of the three co-working spaces analyzed—InHype.Co, UnionSpace, and KO+LABORA—has its own advantages and disadvantages in each room and area. An effective workspace enhances user productivity and comfort, influenced by the choice of color, material, and finishing. These elements play a crucial role in the psychological well-being of users, impacting their behavior and efficiency while working. Although a formal work environment is necessary, aesthetic elements significantly influence user experience. The materials used must be sustainable and resilient to the environment, especially in public areas like co-working spaces, as opposed to private workspaces that require more privacy and soundproofing, such as carpeted floors.

Among the three co-working spaces, each offers different price ranges and diverse facilities. The research indicates that users tend to prefer private work areas because many users renting workspaces belong to companies that do not yet have sufficient capital to provide their own offices. This makes private workspaces more attractive to new companies or start-ups with a small number of employees, typically 4-10. Company owners renting private workspaces often choose rooms with glass walls, as these provide a sense of privacy while maintaining an open feel. Of the three co-working spaces studied, workspaces with glass walls are usually fully occupied, whereas those without glass walls often have vacancies. Despite the availability of windows in private workspaces, users still consider rental costs, preferring more affordable options. In the co-working areas, KO+LABORA has the highest number of users, predominantly e-commerce companies with employees working in groups at tables rented by the company.

Meeting rooms are also crucial for companies holding important meetings. Each of the three co-working spaces offers meeting rooms with different layouts and circulations. Although each space only has 2 to 3 meeting rooms, they are used regularly every week. Among the three, InHype.Co provides the most entertainment facilities, enhancing user satisfaction beyond work-related needs. In conclusion, each co-working space offers unique features that cater to different user needs. Effective workspace design, incorporating appropriate materials and finishes, plays a vital role in user productivity and comfort. By balancing aesthetics, functionality, and cost, co-working spaces can provide an optimal environment for various businesses, from start-ups to established companies.

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