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DEVELOPING AN INDONESIA HERITAGE CONCEPT FOR INTERIOR DESIGN OF THE JAKARTA NATIONAL LIBRARY

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ABSTRACT

The National Library of the Republic of Indonesia, which is also known as Perpusnas, sets the standard for library facilities in the country and plays a crucial role in preserving and sharing cultural heritage and knowledge that belongs to the Indonesian people. The purpose of this study is to develop a design concept for the interior of Perpusnas as a public facility responsible for maintaining Indonesia's rich cultural heritage. This study employs a descriptive qualitative research methodology, utilizing creative thinking approaches such as mind mapping, convergent-divergent, and data collection techniques like literature studies, interviews, and field observations. The data analysis process involves organizing, sorting, synthesizing, searching, finding patterns, identifying what is important, and making decisions. The redesign of Perpusnas aims to reflect the richness of Indonesia's cultural heritage, providing an inspiring atmosphere, shape, interior materials, and functional facilities that are comfortable for educational activities and information to the citizens of Indonesia. The conclusion of the interior design concept preparation for the National Library of the Republic of Indonesia is the "Indonesia Heritage" theme. Various creative thinking methods such as mind mapping and convergent-divergent can produce clearer ideas for the next stage of development. These methods can help designers outline all aspects of the design, with viewpoints both objectively and subjectively.

Keywords: interior design, design concept, indonesian heritage, national library

1. INTRODUCTION

In this era of very rapid technological advances, the world is experiencing digitalization globally (Leonard, 2013). People easily have information accessibility through electronic devices. However, with these various facilities, traditional libraries began to be abandoned. (Lukman et al., 2021). With rapid technological changes, it makes it easier for people to access information (Jordi & Ismanto, 2018). This is a new challenge for libraries as educational and cultural institutions. The redesign of the national library is a strategic initiative to ensure the relevance and attractiveness of this institution in the digital age.

The globe is undergoing global digitalization at a period of rapid technological advancement (Leonard, 2013). People can quickly get information using modern devices. However, with these new amenities, conventional libraries began to be abandoned (Lukman et al., 2021). Rapid technological advancements make it easier for people to obtain knowledge (Jordi & Ismanto, 2018). This is a new problem for libraries, both educational and cultural organizations. The national library's redesign is a strategic undertaking to ensure its relevance and attractiveness in the digital age.

The national library serves not just as a repository of knowledge, but also as a hub for a country's intellectual and cultural sustainability. In tackling the challenges of changing times, it is critical to guarantee that the national library is more than just a storehouse of historical volumes; it must also reflect Indonesia's strong identity and cultural heritage. The redesign of the national library with the notion of Indonesian Heritage is an essential step toward preserving cultural heritage.

The interior design of the library must be addressed because today's users require a more comfortable environment to obtain information in addition to gathering and sharing. The interior design of the library must be able to pique the interest of today's society, and an innovative concept must be developed.(Rifauddin & Halida, 2018).

Interior design is one of the attractions of users to come to the library. Interior design also contains a holistic view that an individual or a person uses in enjoying the room, a professional interior designer can add a new dimension to the beauty of the room (Simon, 2009). The optimal arrangement of library interiors must consider functional aspects, user psychology, aesthetics, and safety of library materials (Suwarno, 2009). Libraries should be built and designed in such a way not only by paying attention to the aesthetic aspect but more important than that is the functional aspect (Fahmi, 2013). Some important factors that affect library interior design are spatial layout, color layout, lighting, air circulation, and sound (Ariyanti, 2015).

The concept is one of the most crucial and fundamental elements in the design process. Students sometimes encounter difficulties in identifying the appropriate design concept for their interior projects. Concept design refers to the phase of an interior design process where fundamental ideas, themes, and approaches are developed. It involves brainstorming, exploration, and the creation of a foundational framework that guides the rest of the design process. Many designers may find it difficult to verbalize design because much of the design process is intuitive and non-conscious, relying on metaphors and implied knowledge rather than explicit and logical thinking. (Haddad, 2014).

The concept is essentially the result of processing the designer's mind mentally, to combine all elements of interior design into one abstract whole to solve existing problems and achieve design goals (I Kadek, 2018). Developing a design concept involves selecting from a vast number of ideas, forms, and materials that exist in the designer's mind. Using concept and mind maps can improve the efficiency of the design process and inspire creative ideas by visually representing the concepts. The process of creating concepts to solve design problems is called "concept development." It can help designers with a range of topics, from the initial idea stage to the selection of shapes, colors, textures, and materials that bring the design to life (Pelin & BİLGİÇ, 2020).

Creativity is an expression of the collective and sensitive inner life in different ways in the artistic, scientific, and living process of creation (Çellek & Sağocak, 2014) Creative thinking is associated with novelty, the ability to develop something, implement new forms, generate a large number of inventive talents, or transform something that currently existing into something new (Greenstein, 2012). Students' diverse creative thinking talents require a learning condition involving a learning experience to build the potential of creative thinking (Zubaidah et al., 2017).

Some designers have been observed to begin the design process with a specific and clear concept

and to develop the design based on that concept. In other cases, there is a lack of understanding of complex and unclear concepts, and the design process can lead to the development of concepts and designs (Turan, 2002). Every designer must visually articulate the ideas that come to his mind. The designer must consciously select the ideas that will create the concept by passing them through his thought filters.

A theme is a specific pattern or idea that is repeated in every design on a design project. Themes can be 'surface', or 'superficial' which is intended to provide a direct understanding to the community about the 'title' of the visualization of a design (I Kadek, 2018).

Indonesia is the world's largest archipelago, with about 17,000 islands. This green region, positioned on the equator and surrounded by volcanoes, has been an important commercial center since at least the 7th century. During this time, Srivijaya, and later the Majapahit Kingdom, traded with Chinese and Indian traders. Local monarchs gradually incorporated foreign beliefs, culminating in the establishment of Hindu, Buddhist, and Islamic kingdoms that supplanted earlier animistic religions. Nowadays, Indonesia is home to various ethnic groups, with 95% attributing their roots to indigenous Indonesian heritage, the most prominent of which being Javanese.

2. RESEARCH METHOD

Qualitative techniques are based on methods used to assess subjective qualities of experience such as interviews and observations. Its outcome is a verbal analysis such as identifications of themes, concepts, and issues (Haddad, 2014).

According to the literature, there are two major forms of creative thinking: convergent thinking and divergent thinking. Convergent thinking is based on familiarity with what is already known, and it works best in situations where a ready-made answer exists and only needs to be recalled from stored information, or worked out from what is already known using conventional and logical search, recognition, and decision-making strategies. Divergent thinking, on the other hand, is coming up with several alternative responses based on available information. It entails creating unexpected combinations, recognizing relationships between remote associates, transforming information into unexpected forms, and so on (Cross, 2006).

Mind mapping is one way to visualize ideas regarding design problems. A mind map is a type of writing-based brainstorming technique that allows for wide thinking while focusing on a subject, idea, or thing. A concept map is a method in which the concepts related to a topic are learned and investigated, and in which studies that have been carried out are seen together (Kırısoğlu, 2009).

The process of determining a concept can be categorized into two methods: convergent and divergent thinking (Table 1.) Convergent thinking incorporates environmental, technical, and human data, forming the basis for spatial functionality. Subjective concepts, such as creativity development methods, cultural influences, art movements, and designer curiosity, can unveil creativity through divergent thinking (Pelin & BİLGİÇ, 2020)

Table 1. Concept Determination Through Convergent and Divergent Thinking (Pelin & BİLGİÇ, 2020)

Convergent Thinking	Divergent Thinking		
Function	Methods of Creativity		
Interspatial Relations	Concept and Mind Maps		
User Profile	Brainstorming		
Number of users and so forth	Synectics		
	Reversing Assumptions and so forth		
Environmental Data	Connotation and Figurative		
Terrain conditions (Data such as the	Meaning of the Word		
geographical position, orientation, wind,	Historical Analyses		
and sun)	Artistic and Architectural		
Spatial data (Data such as the user	Movements		
profile, number of users, and	Fine Arts and Architecture		
measurement)			
Technical Data	Culture		
Structure	Mythology		
Safety	Legends		
Acoustics	Epics, Stories		
Heating/Ventilation	Songs, Ballads		
Installation	Dances		
Lighting	Local Clothes		
Material	Architectural elements and so forth		
Laws,	Brand/Corporate Identity		
Regulations and so forth			
Human Data User Requests/Profile			
Health	Designer		
Psychological	Experiences/Requests/Curiosity and		
Social	so forth		
Ergonomics and so forth			

3. RESULTS AND DISCUSSIONS

Design scope

The National Library of the Republic of Indonesia has an area of 40.5 meters x 58.7 meters. The total area of the building is 7,811,245 square meters or 2,178 square meters per floor. In the discussion of this study, the redesign on the 21st floor which is an open monograph collection service class 000-499. On the 21st floor, it has a collection of 23,594 books (Atmodiwirjo & Yatmo, 2009).

Corporate Identity

The National Library of the Republic of Indonesia's vision is to "Empowering the potential of libraries in improving the quality of life of the nation". Its mission is (1) to promote, produce, and use all forms of libraries. (2) Preserving library materials (printed and recorded works) as a reflection of the nation's culture. (3) Organizing library services.



Figure 1. Perpusnas Logo

The meaning of the National Library logo: (1) Star: Symbolizes the height of the science of glory; Symbolizes the light at midnight; Symbolizes directions; The five-pointed star symbolizes Pancasila. (2) Open book: Symbolizes science that is always evolving. The book that opens to the right symbolizes that science brings benefits to the welfare of mankind. (3) Green color: Symbolizes growth and regeneration; Symbolizes books as a source of knowledge. (4) Blue color: Symbolizing calmness of thought, and the depth of knowledge possessed is the foundation of service to the community, archipelago, and nation.

User profile

On average every day the Perpusnas is visited by 2000 visitors every day with the percentage of visitor categories as follows:

Age Group	Percentage	
Late Adolescence (17-25 years)	5,9%	
Young Adulthood (26-35 years)	21,8%	
Middle Adulthood (36-45 years)	57,9%	
Middle age (45 – 55 years)	9,6%	
Seniority (+56 years)	4.8 %	

Table 2. Visitor Statistics Data of the Perpusnas

Services and activities

The Perpusnas has various types of services:

Table 3. Services & Activities of the Perpusnas

Servi	ces	Activities
1.	General Services	Mobile Electronic Library Services; Membership Services; State-of-the-art Periodical Collection Service; Information and Visit Services; Social Science Collection Services; Applied Science Collection Services; Reference Collection Service; Bound Magazine Collection Service; Bound Newspaper Collection Service; Open Service; Exhibition
2.	Publisher Services	Library Data Throughout Indonesia; ISBN Service; Handover Information Portal
3.	Catalog Services	Indonesian National Bibliography; National Indduk Catalog; OPAC (Open Public Access Catalog)

Location

Located on Jalan Medan Merdeka Selatan, Gambir District, Central Jakarta City. Located in a strategic area in the heart of Jakarta and the central area of government agencies. Adjacent to the National Museum of Indonesia, National Monument, Istiqlal Mosque, United States Embassy, Transjakarta Bus Stop City Hall, and Gambir Station.



Figure 2. Map of National Library of the Republic of Indonesia Building

SWOT analysis is a strategic planning technique utilized to identify and examine the strengths, weaknesses, opportunities, and threats associated with a particular project. Mapping SWOT (Tafahomi & Nadı, 2021) enhances understanding by consolidating and visualizing data across multiple locations, connections, sizes, and scales.

It assists in comprehending the internal and external factors that may influence the success of the project. The analysis based on the location of the National Library of the Republic of Indonesia Building states: (1) Strength: Located in the heart of Jakarta, the center of government agencies and state institutions, the center of culture. (2) Weakness: It is in an area prone to congestion and demonstrations. (3) Opportunity: Easy to access, close to public transportation access. (4) Thread: Adjacent to the area of the preserved building.

Building and Interior

The National Library of the Republic of Indonesia has 24 floors with a total height of 126 meters. This national library has a land area of 11,975 meters square and a building area of 50,917 meters square. It has various facilities such as the lobby, collection area, reading area, discussion place, etc.

According to the scope of design, observations were made in the 21st-floor area which is a Monograph Service area that has several types of rooms: Lobby lift, Entrance, Standing Open Public Access Catalog (OPAC), Reading Area, Collection Area, Working area, Discuss Area, Circulation Station, Office Staff, Photocopying facilities, Public Toilet.



Figure 3. Front view of The National Library Building



Figure 4. Reading Area – 21^{st} Floor



Figure 5. Collection Area – 21st Floor

From the aspect of the corporate identity, user, activities, location, building and interior of the National Library, some words taken as the initial idea of the design theme raised were:

Item Logo		Keywords		Result	
		•	Archipelago		
		•	Nation		
Vision		•	Quality of life		
		•	Public facilities		
Mission		•	Promote		
		•	Produce		
		•	Preserving Culture	Archipelago	
		•	Organizing Library Services	Culture	
User		•	Universal – Sepecial Needs	Modern	
		•	Cultural Background	Technology	
		•	Technologicaly minded		
Services	&	•	Recreation		
Activities		•	Education		
		•	Productive		
		•	Collaboration		
		•	Social/Community		
Location	•	•	Strategis		
		•	The heart of National Capital		
Building	&	•	Modern building		
Interior		•	Modern interior		

Table 4. Identify the interior design theme

Mind map developing design concept

The mind map was used to develop the initial idea of the interior design theme of the National Library using Miro, an online website-based software. Exploring themes with a mindmap allows designers to identify the style that best fits the project's personality and preferences, as well as incorporate aspects from other themes to create a unique and individualized interior design for space.

The design process (Thamrin, 2012) began with the creation of concept mind mapping. These initial design products were then evaluated by tutors and peers to determine if they could effectively solve the problem that was identified before designing. Additionally, the design applications were assessed to ensure they aligned with the formulated concept.

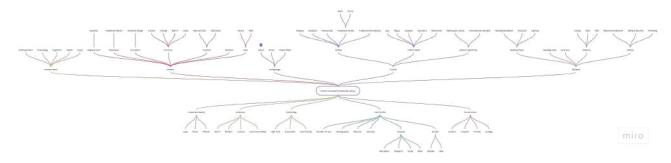


Figure 6. Mind Map – Developing Concept with Miro

General design concept

The general design concept is a global description that abstracts or describes the form of design to be worked on and used as a guideline for problem solutions (I Kadek, 2018). The National Library is a government institution that has the task of storing literary works, the heart of intellect, and participating in the sustainability of Indonesian culture. Currently, the National Library facing cultural changes, technological advances, and a growing young generation. So the concept of the design theme raised was "Indonesia Heritage" with a Modern Contemporary design approach

The interior concept of the library highlights the cultural heritage of the Indonesian state in addition to participating in the preservation of the nation's culture, the library becomes a space for communication, collaboration, and education for the community. Using the concept of contemporary modern style that shows current trends can be an attraction for young people who are the main users of national libraries. The look is modern and no longer seems old-fashioned by using ergonomic standard sizes. A modern library building that can operate must have principles, including (1) Openness, (2) Multifunctional, (3) Flexibility, and (4) Artistry (Yunliang, 2001).



Kontemporer, Dinamis

Figure 7. Moodboard "Indonesia Heritage"

Using the concept of geometric shapes inspired by various ornamental shapes in batik that use geometric repetition elements. This design uses the concept of an "Indonesian Heritage" atmosphere so that visitors feel more comfortable while in the library.

Interior elements

Floor: using a floor concept inspired by geometric shapes. By using materials with high durability, easy to clean, and not slippery in granite areas.







Figure 8. Floor visual concept

Wall: The wall uses the concept of geometric shapes with the play of fields to show the diversity of patterns, using a combination of texture paint materials and grid panels.







Figure 9. Wall visual concept

Ceiling: Using more flat ceiling gypsum concept with less leveling, material and color play.





Figure 10. Ceiling visual concept

Material and color

The material and color design employs a scheme that creates a natural and warm appearance, with green accents adding a calming and refreshing element. According to Zelanski and Fisher (2003), green light waves regulate the heart and circulatory system, promote relaxation, and treat ailments such as hay fever and liver disorders. Given the psychological and physiological impacts of green, it can be argued that when employed in the interior, it will have a relaxing, calming, and even rejuvenating effect on people who link green with nature and nature with tranquility.



Figure 11. Material & color visual concept

Furniture

The interior of Perpusnas features a reading room that utilizes the stairs area, with pillows adding to the comfort of the space. The collection area is adorned with bookshelves built along the walls. The design concept is illustrated through visual references of similar furniture ideas.



Figure 12. Furniture visual concept

Lighting, acoustic, and ventilation

The tables display the necessary tools, specifications, and requirements for the programmatic concept of lighting, acoustics, and ventilation.

Penghawaaan	Spesifikasi Pencahayaan Spe	Spesifikasi		
AC Central Daikin home central multi VRV ceiling mounted cassette	Capacity Cooling Btu/h 24,200 Running Current Cooling (Rated) - A 4.60		Philips Linea Indirect Light	31059 LED tape 3000K 18W 5m white LED
	 Sound level 40/38.5/37, 	isumption 7.1 kW el (H/HM/MML/L) 35.5/34 dB(A) i Panel Color : White	Hoftronic LED downlight	Watts: 5 Watt Luminous flux: 350-400lm daylight white
			Modular Lighting Instruments PISTA TRACK 48V	Watts: 13 Watt Volt: 48 V 3000K WARM WHITE
	ustik	Spesifikasi		
Arktura Vapor® Solid BAUX Pulp Panels		60cm x 120cm x 3.8cm Sustainably sourced and rup to 60% recycled conter	manufactured (100% recyclable PET p	plastic with
		Environment-friendly, recyclable material made from wood wool, cement and water.		

Figure 13. Programmatic concept of lighting, acoustic, and ventilation.

Security and safety

The table illustrates the programmatic concept of the equipment used, technical requirements, and range related to the security and safety of space.

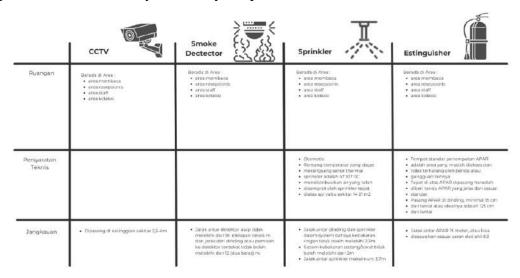


Figure 14. Programmatic concept of security and safety

Implementation of design concepts

Design is the realization of ideas organized into a design concept. During the design stage, there are several discussions about whether the concept is appropriate and whether all challenges have been identified, so that the process of executing the concept is still open to change and improvement.

The following drawings are the results of concept implementation in the final stage of design.



Figure 15. Circulation Area – 21st Floor



Figure 16. Working Area and Collection Area



Figure 17. Reading Area and Collection Area



Figure 18. Reading Area and Collection Area



Figure 19. Working Area and Collection Area



Figure 20. Reading Area and Collection Area

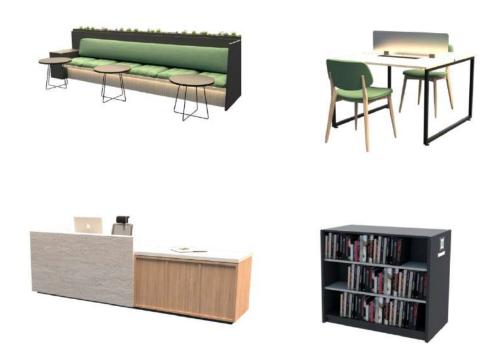


Figure 21. Furniture design

4. CONCLUSIONS AND SUGGESTIONS

Based on the results of the preparation of the interior design concept of the National Library of the Republic of Indonesia, the conclusion obtained is in producing the concept of the theme "Indonesia Heritage" which uses various creative thinking methods such as mind mapping and convergent-divergent can produce clearer ideas to be developed in the next stage. Using such various methods can help designers outline all aspects of design, with viewpoints both objectively and subjectively. Through convergent thinking to process environmental, building, technical, and user data, it forms the basis for the spatial function of interiors. The impulse of divergent thinking that subjectively designers undertake the development of creativity, seeking art-cultural influences, and curiosity, can reveal creativity through divergent thinking.

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