

## The Interpretation of Tropical Architecture in Designing Culinary and Music Centre in Medan

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**ABSTRACT** : The design of a creative industry development center that focuses on the culinary and music subsectors aims to facilitate the growth and development of creative industry players in these two subsectors, so that they can contribute positively to the local economy. The facilities in this center will be designed to meet the needs of production, training, exhibition, and sales in the culinary and music subsectors. It is expected that the design of the Creative Industry Development Center will encourage local economic growth, create new jobs, improve the skills of industry players, and support the image of Medan City as a quality creative industry center. By connecting the culinary and music subsectors in one center, the synergy between the two can produce unique and inspiring collaborations, enrich local culture, and present products that are competitive in the global market. By applying a tropical architecture approach, the design will consider aspects of local culture, climate, and environment in designing optimal buildings and spaces to support the growth of creative industries.

**Keywords:** Culinary, Music, Creative Industry, Tropical Architecture

### 1. INTRODUCTION

In the last decade or so, the growth of creative industries has become a global alternative countermeasure, as well as a global strategy in maintaining the development of the global economy. global economic development. Creative industries that are based on the utilization of knowledge, skills, and creativity are believed to have become a new force that determines the development of the global economy, and creativity are believed to have become a new force that determines competition and the direction of economic development. The term creative industry was first was recognized through the book "The Creative Economy: How People Make Money with Ideas" (2001) written by John Howkins. Howkins realized the emergence of this this new economic alternative after seeing in 1997 that the United States of America had generated \$414 billion worth of Intellectual Property Rights (IPR) products, which triggered Intellectual Property Rights to become the number one force in America.

Based on data obtained from Statistik Ekonomi Kreatif 2020, there are three subsectors of the creative industry. There are three main creative industry subsectors that are most in demand by creative industry players in North Sumatra, namely the creative industry subsector. creative industry players in North Sumatra, namely the music subsector (24.98%), culinary (19.71%), and performing arts (9.17%). According to data from Kementrian Pariwisata dan Ekonomi Kreatif, Medan City contributes the largest contribution of creative industry players in North Sumatra, at 54.93%. The Tourism Office of Medan City recorded that the most most engaged in Medan City is the culinary subsector at 48%, followed by fashion subsector at 28%,

and crafts at 4%.

In Medan City, many creative actors are engaged individually. Until now, Medan City does not have an ideal platform to accommodate these activities. Marketing of creative industry products in Medan City is still done through bazaars that are often held in public places. This type of event is a temporary means. These creative industry players face challenges because they do not have enough tools and not enough space for creativity. So, a place or platform is needed where creative activity actors can gather and develop.

The culinary and music subsectors are an important part of the creative industry, and are the top two subsectors in North Sumatra. A development center can provide a place for culinary and music industry players to gather, collaborate, and grow their business. Medan City has a rich culture and culinary specialties. Designing a development center for the culinary subsector can promote and support the development of local culinary heritage. In addition, factors that can support the design of this Creative Industry Development Center are as a space for expression and talent development, local economic empowerment, increased tourism, local economic empowerment, promotion of local culture, and growth of Micro, Small and Medium Enterprises in Medan City.

## **2. LITERATURE REVIEW**

The purpose of designing the Creative Industry Development Center Subsector Culinary and Music Subsector Development Center in Medan City is to design a place or container that can be the development of the potential of the creative industry in Medan City and that can be the development of the potential of the creative industry in Medan City and can be a gathering place for creative people in Medan City. can be a gathering place for creative people in Medan City in the culinary and music subsectors. culinary and music subsectors. The benefits of designing the Culinary and Music Subsector Creative Industry Development Center in Medan City are that it can increase the economic income of Medan City through the culinary and music subsector creative industries, create a place or place that supports creative industry players who can develop the potential of the local creative industry, create a creative community environment and can open employment opportunities for the community.

### **A. Creative Industry**

The creative industry is a process of creating ideas and creativity done by individuals or groups of people to produce a work that will be used as an economic product. This economic product is expected to generate profit or profit by not exploiting natural resources by not exploiting natural resources.

Creative center can be defined as the base or the pump in things that have creative power. The definition of a creative center as a focal point in creative endeavors includes not only the physical aspect, but also the network of creative communities formed by creative actors and activities. Physically, the center provides a place with spaces to work for creative communities as well as an incubator for creative industry businesses. Physically, a creative industry center only covers one place according to its essence as a center. However, the activities within a creative center bring together the talents, skills and disciplines of creative actors within a local creative community. Creative industry centers form a network that drives the growth of creative industries at the local level, which then continues to the regional level.

#### B. Culinary

The culinary subsector is the development of the most basic needs of humans, namely food and drink. In the process, each region has a tradition that is passed down from generation to generation so that it becomes local wisdom or identity of a region. In this case, the tradition is in the form of food and drink which then becomes the culinary wealth of the region. In general, culinary can be defined as the preparation, processing, presentation of food and beverage products that make elements of creativity, aesthetics, tradition and/or local wisdom the most important elements in enhancing the taste and value of these products, to attract purchasing power and provide experiences for consumers.

#### C. Music

The music creative industry subsector is defined as all types of businesses and creative activities related to the education, creation/composition, recording, promotion, distribution, sale and performance of musical works. In its creative process, music is developed based on two major activities in the form of artistic fragments and industrial fragments. The artistic fragment is the process of creating works that involve artists, songwriters, lyricists and music arrangers to composers, producers, sound engineers and music directors. Meanwhile, the industrial fragment is the process of making music a product or service that can be enjoyed by the general public, such as recording studio rentals and musical instrument distributors, artist management, music reservation services, record labels, music publishers as licensees, and digital and conventional music stores.

#### D. Tropical Architecture

Tropical architecture according to Tri Harso Karyo is a building concept that refers to climatic conditions where throughout the building design leads to solving problems caused by tropical climates such as hot sun, high temperatures, rain and high humidity.

#### E. Creative Process



The creative process is a form of development of activities in the creative economy. The creative process is part of the creative industry ecosystem, which is the processes contained in the creative value chain. There are five stages in the creative process, namely the creation, production, distribution, consumption and conservation stages.

#### F. Principles of Design

Architecture that is oriented to the climate and weather conditions in an area where the building is located and is specifically designed to solve problems with the climate. air temperature and humidity which greatly affect user comfort.

#### G. Comparative Study Results

Table 1. Comparative Study Results

Building	Study Case Summary
<p>Budapest Music Centre</p> 	<p>The building is located in the new cultural district of Budapest. The BMC building was originally a one-story residential building with street-facing retail on the ground floor, built in 1890 in the 19th century neoclassical style. During World War II, the building was converted into a Russian military zone, then the old shops were converted into apartments. The building is not protected by local heritage but its height has remained the same over the years. The structural system is traditional with a central courtyard surrounded by three wings including a warehouse, ground floor, first floor and attic.</p>
<p>Basque Culinary Center</p> 	<p>The Basque Culinary Center is located next to the Miramon Technology Business Park. The building serves as an icon of the University of Gastronomic Sciences on the one hand and displays a technological and innovative leadership-based image on the outside. On the other hand, it respects and interacts with the scale of the low-density quartier in which it is settled. Due to this dual condition, the building makes maximum use of its slope to organize the functional program from the top side to the bottom, placing the public areas on the top side and the kitchen areas on the bottom side.</p>

### 3. METHODOLOGY

#### A. Location Selection Method

Site selection was done by conducting a survey and scoring with certain criteria. Several locations are selected by looking at certain criteria that are in line with the needs and functions of the building. The locations that meet the criteria are then compared again by looking at the best site conditions to later be selected as the design location and analyzed further. The following are the criteria for selecting the location of the design of the Creative Industry

Development Center for the Culinary and Music Subsectors, which are Overview of City Structure, Land Use, Attainment, Land Condition, Service Area, and Land Size.

It's crucial to decide on the design theme, target users (professionals, business players, the government, etc.), and particular geographic requirements before deciding on the design location. Spatial planning regulations, including GSB, GSS, KDB, KLB, KDH, and RDTR, are taken into consideration. To find the best site for the Convention Hotel in Medan with a Modern Architecture Approach, a variety of techniques are used, including locating undeveloped land, using satellite imagery, analyzing the size of the existing land, performing physical surveys, and weighing options according to different criteria.

#### B. Method of Data Collection

Data collection methods are ways or techniques used to obtain and collect data. This data collection is carried out to obtain the information needed in order to achieve the research objectives. The data is in the form of :

##### a. Primary Data

Primary data is data obtained from the field, both quantitative data and qualitative data. It is expected that the data obtained is the main data needed in the design, namely observation (field survey) and documentation.

##### b. Secondary Data

Secondary data is supporting data to support primary data in planning and designing objects. The data is obtained from literature studies which are literature studies related to the object of study by conducting comparisons of similar objects as a standardization reference in accordance with applicable laws and regulations. data collection methods used to obtain the data needed to achieve the objectives of this research are literature studies and comparative studies.

#### C. Data Analysis Stages

Data analysis is a process of classifying, looking at relationships, making comparisons, similarities and differences in data that is ready to be studied, and modeling data with the intention of finding useful information so that it can provide clues to make decisions on the problems and/or research questions raised. In architectural design, the analysis carried out is site analysis, building function analysis, user analysis, space requirements analysis, mass and appearance analysis, structural analysis, and utility analysis.

#### 4. RESULT AND ANALYSIS

Site location is on Jl. Gatot Subroto, Petisah Tengah, Kec. Medan Petisah, Medan City, North Sumatera. The site of this Creative Industry Development Center design has an area of 1.47Ha





Figure 1 Site Borderline

Table 2. Existing Analysis




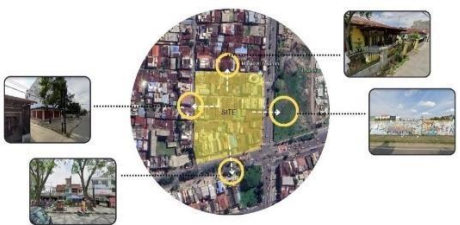

Existing Aspects	Description based on RDTR
Land Contour	Relatively flat
KLB	Max: 8
KDB	Max: 80%
KDH	Min: 20%

#### Site Analysis

Table 3. Site Analysis

Analysis Aspects	Figure	Result
Sun Path		The longest side of the site is towards the east of the solar orientation bordering Jalan Iskandar Mura Baru. This causes the source of heat coming from the side to affect the building. To minimize the heat coming from the east and west sides, secondary skin elements can be applied. On this side can also be placed spaces that do not require cool air conditions such as service rooms.
Wind Direction		The west and east monsoon periods and tropical climate in Indonesia cause winds to blow from the northwest to the southeast from October to April and from the southeast to the northwest from April to October.



Noise		The highest noise level comes from the south side of the site which borders Jalan Gatot Subroto. This is because on that road the intensity of passing vehicles is very high so that the sound of horns, vehicle engines, and so on is very audible from within the site. On the eastern side of the site bordering Jalan Iskandar Muda Baru, the noise comes from passing motor vehicles as well with moderate noise intensity. The noise level on the north and west sides of the site is relatively low because it is only the houses of the surrounding community.
Pedestrians		Pedestrian circulation (pedestrian) on the existing is around the site with different widths. Existing pedestrians are located on the south side (Jalan Gatot Subroto) and on the east side (Jalan Iskandar Muda Baru). On the west side there is a path that can be used by pedestrians, but not a pedestrian that is comfortable and safe to use. The existence of pedestrians on the south side of the site can also facilitate the achievement of users into buildings that use public transportation.
Circulation		The main circulation to the site is on the south side of the site, namely on Jalan Gatot Subroto which is a secondary arterial road with a width of 33 meters. This road is passed by many vehicles and is a two-way road. On the east side, the site borders Jalan Iskandar Muda Baru. This road is a two-way vehicle circulation that leads to Jalan Gatot Subroto and to Jalan Iskandar Muda. On the west side, the site borders Jalan PWS which has a low density. On the north side, the site is bordered by Gang Saidi which has a low density.
View from inside to outside the site		Views on the north and east sides can be blocked with vegetation and gardens on the site so that the views obtained are more varied.
View from outside to inside the site		The south side of the building (front/main facade), which leads to the main road, needs to be striking and eye-catching.

## Design Concept

### A. Programming Concept

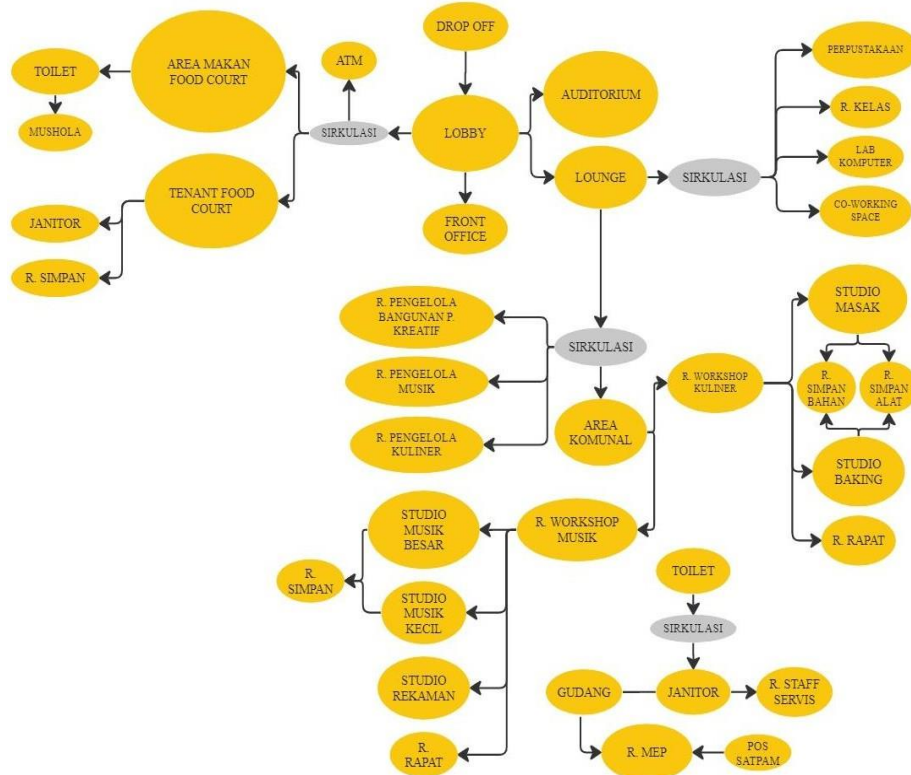


Figure Diagram 2. Programming

### B. Site Circulation Concept

Access in and out of cars is positioned on the east and west sides of the site. Jalan Gatot Subroto, which is a high-density one-way street, has the potential to experience congestion. The car vehicle entry and exit position (yellow lane) is made in the east to avoid the density of vehicles at the intersection on Jalan Gatot Subroto. The blue colored lane is the circulation of service vehicles.

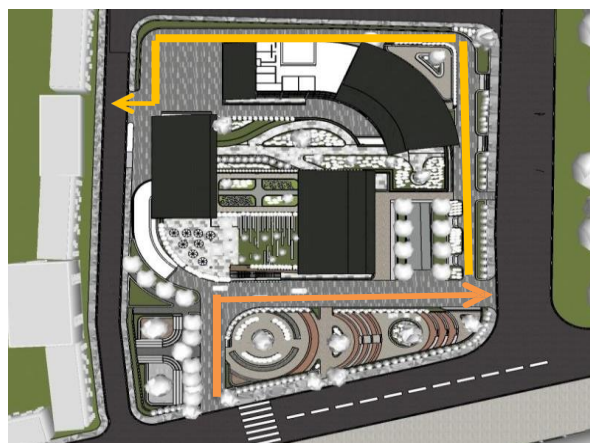
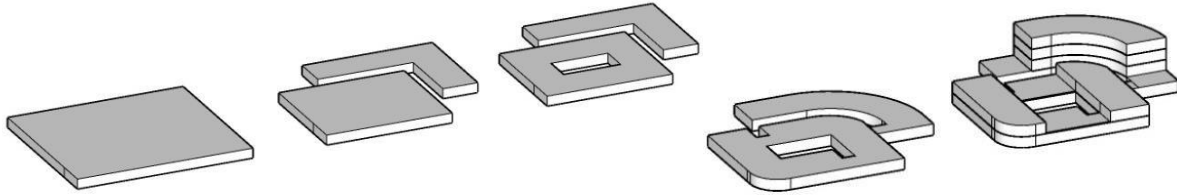


Figure 3. Site Circulation Concept



### C. Mass Composition Concept

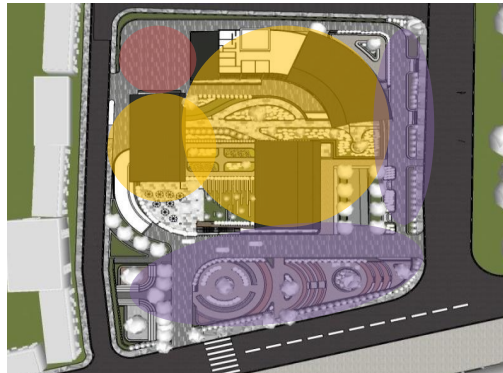
The initial mass of the building is taken from a basic rectangular shape. The shape of the mass is divided in two and cut in the middle to give it a more flattened shape. After that, the end of the mass is formed with an arch, and the mass of some parts of the mass is added vertically upwards as a form of a multi-storey building.



*Figure 4. Mass Composition Concept*

### D. Zoning Concept

There are three zones divided on the site of this building design. The yellow color is the building area. Purple color is the outdoor space area in the form of pavement, parks, and sitting areas. The red color is the service area.



Description	
	Building
	Landscape
	Service

*Figure 5. Zoning Concept*

### E. Façade Concept

The tropical architecture theme is applied to the facade in the form of windows as natural lighting, roasters as natural ventilation, tropical roofs, and secondary skins to block excess light. Secondary skin is applied to the side of the building that has the potential to get direct sunlight at high intensity and for a long period of time.



*Figure 6. Zoning Concept*

## Result



*Figure 7. Final Design*

## **5. CONCLUSION**

The design of the Culinary and Music Subsector Creative Industry Development Center in Medan City will be a platform to connect creative communities, support creative economic growth, and enrich local income. It will play an important role in enhancing the city's image, increasing tourist attraction, and creating an inspiring environment for the development of creativity and innovation. The building is designed with a tropical architecture theme. This theme is one of the concept representations developed based on a response to the climate that occurs in Indonesia, namely the humid tropics. By adopting a tropical architecture approach, this building will not only be a place of productivity and creativity, but also a space that is harmonious with the surrounding environment.

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