CONCEPT ANALYSIS OF THE DEVELOPMENT GUNUNG API MERAPI MUSEUM SLEMAN YOGYAKARTA BASED ON EDU-NATURE HISTORICAL MUSEUM

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ABSTRACT

Mount Merapi Museum is one of the geological museums in Sleman Regency, Yogyakarta. Although as the only geological museum, the development of the museum is still not optimal as an educational tourism museum. This study aims to identify the tourist attraction of the Mount Merapi Museum and develop a conceptual model of development that follows the characteristics of the museum and the needs of tourists. This study uses a survey research approach. Observation, interviews, and documentation collected data. Informants were determined by purposive sampling. The data analysis method used interactive model analysis assisted by SWOT analysis. The results of this study identify the strength of Mount Merapi Museum in the form of content attractiveness, architectural attractiveness, and attractiveness in the form of landscape and market analysis. This research also produces the concept of developing the Mount Merapi Museum based on the Edu-Nature Historical Museum, namely through the application of the interactive product concept. The interactive product development strategies are: dividing content into two thematic spaces; redesigning the plaza of the Mount Merapi simulation space; creating the best spots to enjoy the scenery; involving the public in staging the story of Mount Merapi, which is packaged in a show

Keywords: Development; Museum; Nature Historical Museum; Interactive Product

ANALISIS KONSEP PEMBANGUNAN MUSEUM GUNUNG API MERAPI SLEMAN YOGYAKARTA BERBASIS EDU-NATURE SEJARAH MUSEUM

ABSTRAK


Kata Kunci: Pembangunan; Museum; Nature Historical Museum; Produk Interaktif
INTRODUCTION
There are many different types of museums in Indonesia. It is formed from a very long historical background that has made many historical museums built. In addition, Indonesia is located in a ring of fire that contains a lot of volcanoes. Volcanic eruptions on every island in Indonesia have made many geological museums built to record traces of volcanic eruptions. The establishment of a museum has many roles and functions according to the type of museum. Museums in Indonesia have a policy foundation contained in Pancasila, GBHN, and the 1945 Constitution which have the functions and roles of three main pillars, namely educating the nation's life, as the nation's personality, and maintaining national and cultural resilience through archipelago insight (Asmara, 2019).

The development of museums in Indonesia is quite good, but there are some museums that cannot develop optimally. This is because educational museums have a very monotonous display or product display. The existence of an education-based museum should innovate regularly because it is a learning center for visitors, especially school children. Unlike the case with thematic museums, which are targeted for photo spots with different tourist targets as well. A special approach is very necessary in managing the Natural-Historical Museum to provide education to children or Alpha Generation, one of which is the implementation of pedagogical game scenario lessons with effective methods and techniques so that they can provide varied experiences (Klymysyn & Pozynych, 2020).

Based on this description, the purpose of this research is to identify tourist attractions at the Merapi Volcano Museum in Yogyakarta. Next, develop the concept of a development model that is in accordance with the characteristics of the museum and the needs of tourists based on a situation analysis.

LITERATURE REVIEW
Museum definition according to the International Council of Museums, 2004 (ICOM) museum is an agency or institution that functions to publish and exhibit research results and knowledge about an object that has cultural, historical, and scientific value. According to PP No. 19 of 1995, the definition of a museum is an institution or institution as a place to store, care for and store cultural objects or products, both human, natural, and environmental for the preservation and protection of a nation's cultural assets or wealth.

There are several types of museums according to the International Council of Museums divided into six categories. A historical Museum is a museum whose function is to reveal the chronology of historical events based on a certain order or time. While the definition of a Natural History Museum is a museum whose goal is to reveal events or natural conditions, and the chronology of natural phenomena such as zoological museums, biological museums, botanical gardens, geological museums, and so on. The Museum of Natural History as an inventory site is responsible for preserving natural heritage in the form of extraordinary features consisting in the fields of geology, mineralogy, and paleontology (de Weyer & Cornée, 2010). Edu-Nature Historical Museum-Based is a museum development concept by prioritizes the concept of nature and history in which there is an element of education so that visiting tourists can learn about history or natural phenomena displayed in a museum.
METHOD
This study uses a survey research approach. The research location is in the Merapi Volcano Museum, Sleman, Yogyakarta. Data collection methods used are observation, in-depth interviews, literature study, and documentation. The method of determining informants uses purposive sampling, namely the determination of informants with certain considerations, namely, someone is considered to know best about what is expected so that researchers can explore the object or social situation being studied (Sugiyono, 2020).

The informants in this study were the managers of the Merapi Volcano Museum, the people who sell around the Mount Merapi Museum, and the employees who work at the Merapi Volcano Museum. The number of informants was 20 people, consisting of 7 managers and employees and 13 people from the community. The data analysis used is qualitative data analysis Interactive Model. The analysis include data collection, data reduction, data display and conclusion drawing (Miles and Huberman, 2009).

RESULTS AND DISCUSSION
Overview of the Merapi Volcano Museum
The Merapi Volcano Museum (MGM) is one of the mainstay tourist destinations in Sleman Regency. The museum is located on Kaliurang Street Hargobinangun village, Pakem sub-district, Sleman district, Yogyakarta. The purpose of establishing this museum is to increase Geo-tourism with educational value about volcanic science. MGM was built in 2005 in collaboration with the Ministry of Energy and Mineral Resources, the DIY Provincial Government, and the Sleman Regency Government. The museum was inaugurated on October 1, 2009, and the soft opening was on January 1, 2010, with the Technical Implementation Unit under the Department of Culture and Tourism of Sleman Regency assisted by the Center for Research and Development of Volcanic Technology (BPPTK). The building area is about 4,470 m² which stands on a land area of 3.5 hectares. The Merapi Volcano Museum is known as the motto "Merapi Window of the Earth".

MGM has been used as a means of education, and dissemination of information on volcanic aspects in particular and other recreational-educational geological disasters for the wider community with the aim of providing insight and understanding on scientific, as well as socio-cultural and other aspects related to volcanoes and disaster sources. other geology. The Volcano Museum has a mission, namely to be an alternative solution as a very important and potential facility as a center for volcanic information services in an effort to educate people's lives, as well as a medium in increasing public awareness and awareness about the benefits and threats of volcanic eruptions and other geological disasters.

The information obtained in the MGM includes scientific information on volcanic earthquakes and ground motion; Information on volcanic phenomena formed as a result of geological processes; information on mitigation of volcanic disasters, earthquakes, tsunamis, ground movements; volcanic resources information; information on socio-cultural aspects. The museum has 2 main floors, namely Floor 1: Covering the philosophy of volcanoes and earthquake props as well as a collection and archiving place for valuable objects related to Mount Merapi and volcanoes in general; and Floor 2: Includes displays of the eruption of Mount Merapi, tsunami props, as well as a screening room for films about volcanoes. The facilities at MGM include bathrooms; a large parking lot, souvenir stalls, a canteen, cooperatives, and an audio-visual room.

Figure 1. Floor 2 Display
MGM has a quite unique opening schedule, namely on Tuesday - Sunday at 08.00 - 15.30 WIB and Friday at 08.00 - 14.30 WIB, while on Monday MGM is closed. The entrance fee (ticket) is IDR 5,000 per person for local tourists and IDR 10,000 for foreign tourists. To enter the audiovisual room in order to watch the movie “Mahaguru Merapi” tourists are charged an additional fee of IDR 5000 per person for local tourists and IDR 10,000 per person for foreign tourists. To watch the film, the minimum number of viewers must be 10 people, if it doesn't reach 10 people then they are not allowed to watch because of the regulations from MGM.

Edu-Nature Historical Museum-Based Museum Development Concept

The determination of the concept of development based on the Edu-Nature Historical Museum was determined after conducting several analyzes starting from the concept of museum attractions, market analysis, and development.

Identification of Merapi Volcano Museum

Identification consists of strengths, attractiveness, original beliefs, and things that support the Merapi Volcano Museum. This description can be taken into consideration to determine the main strengths and attractions that are most favored by the Merapi Volcano Museum.

The Strength of the Merapi Volcano Museum

The Merapi Volcano Museum is a museum that presents knowledge related to volcanoes, especially Mount Merapi. As it is known that Merapi stores abundant natural resources, besides that Merapi also stores history as well as stories and relationships with the surrounding community. This is with the Merapi Volcano Museum which was built according to the concept of cultural design. The architectural concept of the museum building comes from a shape that resembles a volcano, visually in the form of a cone centered on it and triangular elements and facing directly to Mount Merapi. The design implementation applies the architecture and local cultural concepts in the Merapi Volcano Museum building. This can be seen in the conical shape of the museum building, shrinking at the top and broad or large at the bottom.

The development concept shows that the strength of the Merapi Volcano Museum can be seen as a representation related to nature, especially Mount Merapi, and the relationship between nature and the surrounding community. The power can be depicted in the figure below:

Figure 2. Museum Strength

The relationship between nature and Mount Merapi can be illustrated when the cycle of Mount Merapi which erupts periodically makes the people around it live in anxiety in everyday life. The worries that have occurred for years have made the community friendly with the Merapi, which is known for its valor and ferocity, but on the other hand, it provides great benefits for the surrounding community, such as agriculture, education, and tourist attractions that increase economic income. Furthermore, people living outside the Mount Merapi area create a sense of admiration for the life of the people around Merapi Mountain. Viewed from the other side, Mount Merapi is no longer a network but makes Mount Merapi a friend, family, and life teacher for the local community.

The utilization of natural resources that has occurred so far has made people no longer worried about the Merapi, people assume that if Mount Merapi erupts then the community has made a mistake from the Supreme Master,
both in the excessive use of natural resources around Mount Merapi. This relationship can be seen from the eruption of Mount Merapi which caused destruction such as the destruction of settlements and community agricultural land and the death of community farms. However, after the incident, it will have a tremendous positive impact such as very fertile agricultural land, industrial and tourism developments, and a lot of Mount Merapi materials that can be used as mines for development purposes. This event shows the harmonious relationship between society and nature.

Merapi Volcano Museum Attractions

The strength of the Mount Merapi Museum is a representation related to nature, especially Mount Merapi and the relationship between nature and the surrounding community. The attractions of the Mount Merapi Museum can be divided into content, architectural, and landscape attractions. This attraction can be explained as follows:

Content Attraction

The content must be able to present content related to nature and its relationship with the surrounding community. The following is an explanation of the content:

Collection or display of Mount Merapi activities, tourists who visit the Merapi Volcano Museum can see the appearance of Mount Merapi clearly from a geological perspective, so tourists can learn about volcanoes at the same time. In this museum, there are advantages of the results of the eruptions of Mount Merapi as well as tools for detecting the eruption of Mount Merapi from year to year, besides that there is also a display of the history of the eruptions of Mount Merapi so that changes occur in Mount Merapi.

Collection or display of local community culture: living in harmony with disaster risk. The Merapi Volcano Museum also provides information on the mitigation of volcanic disasters, earthquakes, tsunamis and ground movements. Tourists can learn how to be a disaster-responsive community living in KRB (Disaster Prone Areas) areas.

Has an attraction in the form of performances such as mini theater or open theater. The Merapi Volcano Museum has a large area behind the museum to hold a theater. The stage created is also not permanent so it can be changed according to the user's wishes.

Architectural Attraction

The construction of this museum uses an architectural design that is built based on the culture of the local community so that the architectural form is a representation of temples and traditional Javanese architecture. This philosophy can be explained by the design of the Merapi Volcano Museum as follows:

The concept of local culture is applied to the tower above the building which is a representation of the shape of the Yogyakarta Monument. The stairs in front of the main door are inspired by the Ratu Boko Temple Gate. The direction of the building facing north-south is a representation of Javanese cultural philosophy. The large terrace in front of the entrance refers to the courtyard of the Sambisari Temple.
Attractions in the form of a Landscape

The location of MGM is at the foot of Mount Merapi which faces south. Seen from the front side of the entrance of the MGM, this museum is set against the backdrop of Mount Merapi, which is a strength in terms of landscape. Not to mention the Turgo hill which also adorns the beauty of the MGM background and also functions as a barrier if the lava spilled by Mount Merapi during the eruption leads to the south, so the impact on MGM is not so bad. The shape of the land at MGM is in the hills, so the irrigation system has been well planned, in this case, disasters such as floods are very unlikely to occur in MGM.

Originality Review

In terms of originality, the Mount Merapi Museum is the first volcanic museum in Indonesia. In addition to responding to the enthusiasm of tourists who have an interest in mountains, geological studies, volcanoes in a global context, and Mount Merapi itself, MGM has an authentic international appeal, whereas several other museums with this theme are located in Italy (Messner Mountain Museum) and Nepal (International Mountain Museum).

Supporting things

The community around the Mount Merapi Museum also supports the sustainability of the museum, namely by selling in the area provided by MGM, then some are parking managers, as well as guides. In addition, the technology used is good enough to support the attraction and character of the museum, such as a simulation vehicle for a volcano erupting, where we can hear the sound of a volcano erupting, see smoke, and feel the vibrations. earthquakes caused by volcanic eruptions. In this case, tourists get a different experience compared to visiting other destinations.

Market Analysis

The market analysis consists of the analysis of the existing market and analysis of the potential market. The purpose of the market analysis is to find out the market of tourists who have been visiting the Merapi Volcano Museum. A potential market analysis was carried out to determine the target market that could be achieved by the Merapi Volcano Museum.

Existing Market Analysis and Market Behavior

The market that is being targeted by the Mount Merapi Museum manager is still general in nature, not limited to age and others. This aims to open up market opportunities as much as possible to increase visits to museums. When viewed from its development, visitors are dominated by elementary-high school-student students with the type of visit in the form of groups. Student groups generally come because they have assignments from schools or colleges. The form of the visit is generally in the form of a study tour, where a visit to the Mount Merapi Museum is included in one of their series of activities while visiting destinations in Yogyakarta. These things are marked by visits which are usually crowded in the middle months of the school semester.

Another small group that comes from families, usually parents bring their children who are still in school to visit the museum. For parents
who bring small children under the age of 7 years or have not yet gone to school, they usually go around looking at the collections in the museum, they don't just choose to participate in activities such as watching film screenings in theaters because they think they will not feel at home if they linger - long watched the movie. As for tourists with the Individual Traveler category, it is usually done by foreign tourists. They chose the museum as one of the tourist destinations to be visited while on vacation in Jogja. They are interested in knowing the history of Mount Merapi, which is one of the largest active volcanoes in Indonesia.

Potential Market Analysis
According to Kotler (2009), the market potential is the limit approached by demand when industry competition approaches infinity for a given environment. Further mention in analyzing market opportunities can be obtained by Identifying:

Geographic Segmentation
The division of the market into different geographical units can be divided into three, including local tourists (Yogyakarta), foreign tourists, and foreign tourists. What is meant by local tourists are residents in Yogyakarta. Meanwhile, the most foreign tourists who come from the area around Yogyakarta Province include East Java and Central Java. Meanwhile, foreign tourists come from European tourists. Geographical market segmentation which is considered less than optimal is local tourists (Yogyakarta) and foreign tourists. When viewed from the results of publications by the media regarding the level of local tourist visits to museums in Yogyakarta, it is still considered very high, namely as much as 2% of the population of Yogyakarta visiting museums. Meanwhile, foreign tourists are still lacking because judging from the appearance offered by MGM, it has not facilitated the needs of foreign tourists such as in communication or language.

Demographic Segmentation
Divide groups based on several variables including age, family size, income, and social class. in the age category, the Mount Merapi Museum is suitable for children aged from 7 years to adults aged 50 years. This is based on visits that generally come from students to parents.

The Mount Merapi Museum does not limit certain social classes, because MGM was built as an information center for the general public so the pricing provided is still very affordable. There is no special treatment for certain social classes in visiting the Mount Merapi Museum.

Psychographic Segmentation
Grouping different buyers based on lifestyle or personality will. This is known through the interests and activities of tourists in the form and responses to the product. Technological developments make a shift in someone's motivation to visit museums. Currently, the information in the museum or information related to the content in the museum is very easy to obtain on the Internet.

The Concept of Developing the Merapi Volcano Museum based on the Edu-Nature Historical Museum
One development concept that is considered relevant to be applied at the Mount Merapi Museum is the Edu-Nature Historical Museum concept. This concept is considered to be in accordance with knowledge because the Mount Merapi Museum is not only a place of information and to add about volcanoes related to Mount Merapi, but more than that, this museum must also bring up historical values behind the existence of nature itself such as the social culture of the community and existing ones. behind the majestic volcano. This concept is also expected to be able to describe the relationship between society and nature that is able to live in harmony. How they "live in harmony with the risk of disaster" and survive until now. Furthermore, to support this concept, an interactive product concept is needed. The products offered are not only presented in one direction such as offering displays and other information but visitors (audience) can also be involved with these products. a growing
trend that this can be achieved by packaging activities that are attractive to tourists.

In line with interactive products, its application must pay attention to the quality of the experience obtained by visitors. One concept that is able to support this is the Experiential Marketing approach according to Schmitt (1999), namely building experience through Sense, Feel, Thinking, Act, and Relate.

Feelings are related to experiences obtained through products that are captured by the five human senses, including sight, sound, smell, by designing a storyline in such a way through the division of space that is able to create people's emotions towards volcanoes and life.

Thinking is the delivery of products in the form of information that is applied in visual form. The submission can be in the form of a unique display. Act relating to the creation of foresight by visitors during the destination, whether they will get a view of life after visiting the museum such as increasing awareness of Mount Merapi and the community.

Link-related products offered, whether connected with visitors who come with the community or culture around Mount Merapi.
Table 1. Strategy for the Implementation of the Development Concept

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<tr>
<th>Development Strategy</th>
<th>Product/Educative Activity</th>
<th>Interactive Product</th>
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<tbody>
<tr>
<td>1. Content division into two thematic spaces</td>
<td>a) Study the process of formation and evolution of Mount Merapi</td>
<td>a) Content is presented in the form of posters and photos, mockups, props, and videos.</td>
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<td></td>
<td>b) Studying the process of the eruption of Mount Merapi</td>
<td>b) Each mockup and prop is designed to give a natural impression, such as the use of natural materials and audio assistance for interpretation and atmosphere creation.</td>
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<td></td>
<td>c) Studying the natural resources of Mount Merapi (biodiversity and geology)</td>
<td>c) Tourists can see the patterns and textures of rocks with the help of a magnifying glass or magnifying glass. In geological and biological space.</td>
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<td></td>
<td>a) Studying the daily life of local communities in the form of settlement patterns, traditional local livelihood systems (agriculture, mining)</td>
<td>d) Creating a Diorama of community life activities. The diorama can be in the form of (housing dioramas, community agricultural activities and ceremonies, art and cultural figures in the form of sculptures, and others). The diorama is accompanied by written and audio explanations.</td>
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<td></td>
<td>b) Studying the culture of the people around Mount Merapi (ceremonies, arts, cultural figures)</td>
<td>e) For the history and impact of the eruption of Mount Merapi, it is packaged in the form of documentation displays, the rest of the affected objects, and several sheets of recordings of conditions during the eruption of Mount Merapi in a special room.</td>
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<td>c) Studying the magnitude of the eruption of Mount Merapi that afflicts the community from year to year (the magnitude of the impact, casualties, and recovery after the eruption)</td>
<td>f) Screening of documentaries in indoor theaters.</td>
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<td>2. Redesigning the volcano simulation space plaza</td>
<td>a) Participate in the sensation of being on Mount Merapi up close</td>
<td>a) The square space is the main space for rides. This space is a volcano simulation room. Here visitors feel like they are in the ecosystem of the Mount Merapi area with the construction of a large active volcanic dome, vegetation, and rocks.</td>
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<td></td>
<td>b) Learn to see the structure of the volcano up close</td>
<td>b) The space is designed in such a way that it resembles a volcano with the help of natural materials such as soil, sand, stone, and also plants.</td>
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<tr>
<td>3. Make the best spot to enjoy the landscape</td>
<td>See the current landscape and topography in real time</td>
<td>c) This plaza space is designed in such a way as to be one of the best photo spots in museums and artificial parks.</td>
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<td>4. Involve the community in the performance of the story of Mount Merapi which is packaged in a show</td>
<td>Education about the life of the people of Mount Merapi</td>
<td>a) Visitors are invited to watch performances from community arts groups in the theater area.</td>
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<td></td>
<td></td>
<td>b) Showing performances of community stories about Mount Merapi in the form of cabaret, dance, and music performances.</td>
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CONCLUSION

The results of the analysis of the strength of attraction found that all forms of development carried out must have a relationship with nature, namely Mount Merapi and its relationship with people's lives. Every existing product must enter into a series of history and cannot be separated from one another. As in the division of existing space, it is not only a barrier but has a clear flow so that the experience gained can be maximized. This can be implemented through the division of two major themes, namely the 1st floor for matters related to nature, and the 2nd floor for themes related to people's lives. The proposed tourism development concept is the Edu-Nature Historical Museum.

The products offered must have educational value delivered through interactive products. The interactive product development strategy to support the development of the Edu-Nature Historical Museum, namely: division of content into two thematic spaces, redesigning the plaza of the Mount Merapi simulation room, making the best spots to enjoy the scenery, and involving the community in staging the story of Mount Merapi which is packaged in a show.

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