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# THE ANALYSIS OF TOURIST RESPONSES TO MANDALA AIR FORCE CENTRAL MUSEUM LOCATION

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Abstract. The Central Museum of Dirgantara Mandala Air Force is one of the tourist destinations in Yogyakarta that has an educational tourism aspect. Based on the educational and historical appeal, this museum has interesting tourist attractions. However, access to the museum location must pass through the TNI AU complex so that some prospective tourists are reluctant to visit this museum. This study was conducted to determine the response of tourists visiting the TNI AU Dirgantara Mandala Central Museum based on four variables, namely Accessibility, Visibility, Parking Lots, and Complete Facilities. This study uses a qualitative descriptive method where in this study, researchers explain various phenomena that occur during the research period as they are based on four variables that researchers have previously determined. The results of this study indicate that the location of the TNI AU Dirgantara Mandala Central Museum in terms of accessibility, visibility, parking lots, and complete facilities received a positive response from the majority of visitors who were respondents in this study.

**Keywords:** Response; Location; Accessibility; Visibility; Parking; Completeness of Facilities

### RESEARCH BACKGROUND

Museums are institution which play an important role in preserving cultural, historical, and scientific heritage. Through their collections, museums are not only places to store historical artifacts and documents but also serve as educational and recreational facilities for the wider community. In the context of tourism, museums act as destinations that can enrich visitors' insights and strengthen the cultural identity of a nation. The strategic role of museums in shaping historical awareness makes it important to continue to be developed, both in terms of content and governance, in order to attract the interest of people of all ages and backgrounds.



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One of the museums that has high historical and educational value is the Dirgantara Mandala TNI AU Central Museum located in Yogyakarta. This museum is part of the Indonesian Air Force (TNI AU)'s efforts to document and introduce the history of Indonesia's aerospace struggle. With a collection that includes historic fighter planes, replicas, dioramas, and various military artifacts, this museum presents the TNI AU's long journey in maintaining Indonesia's air sovereignty. The collections displayed are not only visually appealing, but also have high educational value for students, university students, and general tourists. However, despite its great potential as an educational tourist attraction, the Mandala Aerospace Museum faces challenges in terms of location accessibility. The museum is located within the Adisutjipto Air Force Base military complex, which although geographically strategic, often creates a perception of exclusivity and limited access for the general public. This factor is feared to affect the number of visits and tourist perceptions of the comfort and ease of accessing the museum location.

This study focuses on tourist responses to the location aspects of the Mandala Aerospace Museum, especially in four main indicators: accessibility, visibility, availability of parking, and completeness of supporting facilities. These aspects are considered important because they directly affect tourist satisfaction and visiting decisions. By understanding visitor perceptions of these aspects, it is hoped that museum management and related agencies can formulate more effective strategies to increase the attractiveness and comfort of visiting this museum.

This study also has an urgency to fill the gap in studies on tourist perceptions of museums located in military areas, which have so far rarely been touched on in tourism literature. Thus, the results of this study are not only useful for the development of the Mandala Aerospace Museum but can also be a reference for the management of other museums facing similar challenges.

#### 1. Tourism and Tourists

Tourism is a multidimensional sector that plays an important role in the economic, social, cultural, and environmental development of a country. This sector has proven to be able to drive economic growth, create jobs, and strengthen national identity through the promotion of local culture and heritage. In a global context, tourism has even become one of the largest foreign exchange contributors in many developing countries. In Indonesia itself, tourism is included in the priority sectors of national development because of its very rich and diverse geographical, cultural, and historical potential.



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According to the Republic of Indonesia Law Number 10 of 2009 concerning Tourism, tourism is defined as various kinds of tourism activities and supported by various facilities and services provided by the community, entrepreneurs, and the government. This definition emphasizes that tourism is not just a travel or entertainment activity, but also includes educational, economic, social, and cultural aspects. Furthermore, Article 5 of the Law states that the purpose of tourism development in Indonesia is to improve community welfare, preserve nature, the environment and resources, and advance national culture. Therefore, tourism must be managed sustainably by involving all stakeholders.

Tourists in the tourism industry are divided into two main categories, namely domestic tourists (Indonesian citizens traveling to other areas within the country) and foreign tourists (visitors from abroad who enter the territory of Indonesia). According to Goeldner & Ritchie (2012), tourists are individuals who travel to a place outside their residential environment for a certain period of time, with non-commercial purposes, such as recreation, education, culture, or spirituality. Tourist activities not only reflect individual preferences, but are also influenced by motivation, socio-cultural background, and the availability of information and facilities at the destination.

In the context of museums as educational tourism destinations, the diversity of tourist characteristics is an important aspect that must be understood. Museums are not only visited by tourists looking for entertainment, but also by students, academics, cultural communities, and families who are interested in historical and educational values. Therefore, museum management must consider various aspects such as the comfort of facilities, the availability of interesting educational information, ease of access, and an approach to interpreting exhibitions that can reach various visitor segments. In addition, the tourist experience at the museum is greatly influenced by the quality of service, interaction with staff, and the narrative or storyline of the collections displayed. According to Swarbrooke & Horner (2007), tourist satisfaction is influenced by the match between initial expectations and the actual experience obtained during the visit. If the museum is able to present an informative, interactive, and enjoyable experience, then the possibility of repeat visits or the spread of positive information through word-of-mouth will increase.

Thus, understanding the concept of tourism as a whole and the characteristics of tourists is very important in designing a strategy for developing museums as educational destinations. Museums such as the TNI AU Dirgantara Mandala Central Museum have great potential to develop historical and educational tourism that focuses not only on increasing the number of visits, but also on the quality of tourist experiences and their contribution to preserving national values.



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#### 2. Response and Its Forming Factors

Response is a psychological concept that describes an individual's reaction to a particular stimulus, whether in physical, verbal, or emotional form. According to Schiffman & Kanuk (2008), human responses to stimuli can be divided into three main aspects, namely affective (including emotions and feelings), cognitive (related to perception and understanding), and conative (related to intention or action). These three aspects are interrelated and form a person's behavioral pattern in responding to the experiences they have. In the context of tourism, tourists' responses to a destination are closely related to the quality of experience during the visit, which includes visual aspects, comfort, service, and values obtained, such as knowledge or cultural meaning.

Tourist responses can appear in various forms, such as satisfaction, recommendations to others, the desire to return to online reviews. According to Robbins & Judge (2017), responses do not only appear spontaneously but are formed from a combination of internal and external factors that influence each other. Internal factors include the psychological and biological conditions of individuals, such as perception, motivation, personal interests, and previous experiences. For example, tourists who have a high interest in military history will find it easier to form a positive response to an aerospace museum than those who do not have a similar background or interest.

Meanwhile, external factors include the environmental conditions of the destination, such as accessibility, available facilities, interaction with officers or guides, to the quality of visual displays and information presented. In the digital era, initial information obtained by tourists through social media, official websites, or testimonials from other visitors is also an important stimulus in forming expectations and initial responses to a place. The better the external stimulus received, the greater the possibility of tourists having a positive perception before and during the visit.

In managing educational tourism destinations such as the Dirgantara Mandala TNI AU Central Museum, understanding the process of response formation is very important. Tourist perceptions of ease of access, environmental security, availability of facilities, as well as educational value and visualization of collections will shape the overall image of the museum. For example, if a museum is considered difficult to reach because it is located in a military area, this perception can reduce interest in visiting, even before tourists gain direct experience in it. Furthermore, visual stimuli, such as the exterior design of buildings, directional banners, to the layout and lighting in the exhibition space, contribute greatly to the formation of initial perceptions. Several studies in environmental psychology state that a comfortable and informative physical environment can increase emotional comfort and encourage more active visitor involvement (Bitner, 1992). Therefore, the arrangement of physical and non-physical elements in the museum environment needs to be designed by considering the diverse responses of target visitors.



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Ultimately, a comprehensive understanding of how responses are formed and how they can be modified becomes an essential tool in a destination management strategy. For an educational museum, success is not only measured by the number of visits, but also by the quality of the experience and the impact of the knowledge provided to visitors. Therefore, a holistic approach that considers both the psychological dimensions of tourists and the design elements of the destination is key to increasing positive responses and strengthening the museum's position in the national tourism landscape.

#### 3. Location and Its Attributes

Location is one of the main determining factors in the success of a tourist destination. A strategic location not only facilitates visitor access but also influences the initial perception of the destination. Heizer and Render (2015) stated that location is an important decision in operational management because it impacts operational costs and revenue potential. Locations that are easily accessible by public or private transportation will be preferred by visitors, compared to locations that are difficult to find or have limited access.

The location attributes that are often assessed by tourists include:

- a) Accessibility, namely the ease of tourists in reaching the location, either from the city center, terminal, station, or airport (Kotler, Bowen & Makens, 2017).
- b) Visibility, namely the extent to which the location is easy to find and recognize, either through signs, digital media, or visual promotions. Low visibility will reduce tourist interest even though the destination has high appeal.
- c) Availability of Parking Space is a basic but important facility that is often considered by tourists, especially those who use private vehicles (Yoeti, 2008).
- d) Supporting Facilities, including toilets, rest areas, canteens, souvenir shops, and information centers. The presence of these facilities can increase the comfort and length of tourist visits (Mill & Morrison, 2012).

In the study of destinations located in special areas such as military areas, the existence of these attributes becomes even more important, because visitors often face restrictions or non-commercial constraints that are not found in ordinary destinations. Therefore, research on tourist perceptions and responses to museum locations is relevant to support sustainable destination management and development.



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## RESEARCH METHOD

This study uses a qualitative descriptive method supported by simple quantitative data. This approach was chosen to comprehensively describe the responses of tourists to the location of the TNI AU Dirgantara Mandala Central Museum, especially in terms of accessibility, visibility, parking availability, and supporting facilities. The qualitative descriptive approach allows researchers to capture tourists' perceptions, experiences, and assessments in more depth and contextually. Meanwhile, quantitative data is used as a complement to provide a measurable statistical picture of respondents' responses through distributed questionnaires.

The population in this study were all tourists who visited the TNI AU Dirgantara Mandala Central Museum during the last 30 days since data collection began. The selection of this one-month period aims to obtain more representative data on visitor trends and the diversity of visitor profiles. Based on the estimated number of visitors during this period which reached around 1,000 people, the determination of the number of samples was carried out using the Slovin formula with a margin of error of 10%. The calculation results show that the minimum number of samples needed is around 91 people. However, to strengthen the validity of the data and facilitate analysis, the number was rounded up to 100 respondents.

The sampling technique used was accidental sampling, which is a method of collecting data based on anyone who happens to be found at the location and is willing to be a respondent. This technique is considered appropriate to the characteristics of the research location which is public and dynamic. Data were collected through three main techniques, namely direct observation in the field, distribution of closed and open questionnaires to visitors, and short interviews with several selected respondents to explore the answers given in the questionnaire. The results of the questionnaire were classified and processed quantitatively in the form of percentages to describe the tendency of responses, while qualitative data were analyzed narratively to highlight the unique views and experiences of tourists. By using this approach, the study is expected to be able to provide a comprehensive picture of how tourists respond to the location of the Mandala Aerospace Museum and the factors that influence their comfort and decision to visit.

### FINDINGS AND DISCUSSION

The results of the study showed that the accessibility of the Indonesian Air Force Dirgantara Mandala Central Museum was considered quite good by the majority of respondents. As many as 45% of respondents stated that the distance from the entrance to



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Adisutjipto Air Force Base to the museum was relatively close and easily accessible, although initially some visitors felt hesitant due to concerns about the presence of military security in the area. The vehicle route to the museum is adequate, but access for pedestrians and people with disabilities still needs improvement in order to create a more inclusive and visitor-friendly environment.

In terms of visibility, the majority of respondents (60%) stated that the museum was quite easy to find because it is located on the main Yogyakarta-Solo route. Its location not far from the main road is an added value, although some respondents considered that the directions to the museum were still not very prominent. The lack of clear signs or visual information has the potential to reduce the interest of visitors who are not familiar with the area.

In terms of parking facilities, 70% of respondents stated that the parking area at the museum was adequate, spacious, and safe. This shows that the museum has provided basic facilities that are quite good for visitors who come by private vehicle. However, some first-time visitors felt confused in finding access to the parking area due to the limited signs or clear location indicators. In terms of completeness of facilities, visitors gave positive responses to the availability of toilets, clean water, trash cans, and electricity. In addition, the existence of a souvenir shop is considered to be able to add value to the visiting experience and strengthen the function of the museum as an educational and cultural tourist destination. Adequate facilities like this are an additional attraction that supports the comfort of tourists while at the location.

Based on the overall findings, it can be concluded that the location of the TNI AU Dirgantara Mandala Central Museum is generally quite strategic and has great potential to develop as an educational destination. However, public perception regarding the existence of a museum within a military complex is still a challenge, especially in terms of building an image of accessibility and openness. Therefore, increasing visibility through public information and education regarding visiting procedures is important. This finding is in line with the location theory put forward by Fitzsimmons (2014), which emphasizes that accessibility and completeness of facilities are the main factors in the success of a tourist location. By strengthening these two aspects, the museum can increase its appeal and reach more visitor segments, both from students, domestic tourists, and foreign tourists.

### **CONCLUSION**

The location of the TNI AU Dirgantara Mandala Central Museum is considered quite strategic by most tourists because it is on the main route connecting the cities of Yogyakarta and Solo and is close to a number of educational areas and other tourist attractions such as Adisutjipto Airport, Yogyakarta State University, and Prambanan Temple. Its location on the east side of the city makes this museum easy to reach by private vehicle or online transportation. However, the entrance which is in the military area creates an exclusive



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perception for some visitors. This concern mainly arises from tourists who are visiting for the first time, because they tend to feel doubtful or unsure whether the museum can be freely accessed by the general public without having to go through strict procedures like military agencies. However, tourists' responses to the accessibility aspect are generally quite positive. The vehicle route leading into the museum complex is considered smooth and feasible, especially for motorized vehicle users. However, several notes emerged regarding the limited pedestrian-friendly access and supporting facilities for people with disabilities. This shows that although the geographical location of the museum is supportive, the physical and non-physical aspects of accessibility still need improvement to be more inclusive and reach all groups.

In terms of visibility, many respondents said that the museum is quite easy to find because it is located not far from the main highway and there are several signs. However, the effectiveness of the signs is considered less than optimal, because the design is not striking enough or easy to read, especially for tourists from outside the area who rely on road signs to reach the location. Several respondents suggested the need to add banners, larger signboards, or other visual promotional media at strategic points such as airports, terminals, and tourist information centers. Regarding to the parking availability, the majority of tourists gave a positive assessment. The available parking area is quite large and quite safe, able to accommodate two-wheeled and four-wheeled vehicles in sufficient numbers. However, the arrangement of entry and exit routes and parking location instructions can still be improved, especially to help new visitors who are not familiar with the layout of the complex.

Meanwhile, in terms of completeness of facilities, most respondents were satisfied with the services and supporting facilities available. The availability of clean toilets, access to clean water, trash bins, and a stable electricity supply were considered to have met comfort standards. In addition, the presence of a souvenir shop selling aerospace-themed souvenirs also adds value to the visiting experience and strengthens the attraction of the museum as an educational destination. However, there is also hope that the management will provide a more comfortable waiting room or rest area, especially for families and groups of students.

Overall, tourist responses to the location of the museum from the four main aspects tend to be positive, although there is still significant room for improvement, especially in terms of strengthening the museum's public image as an open, safe, and easily accessible place. This museum has great potential as a means of learning about aerospace history that not only houses high value collections but is also capable of becoming a leading cultural tourism destination in Yogyakarta. Therefore, a more effective communication strategy, improving public facilities, and partnerships with various parties (including the tourism and education sectors) are important steps to increase the competitiveness and number of visits to the museum in the future.

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