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Author Guidelines

- The manuscript should be original and has not been published or under review elsewhere.
- Manuscript should be between 25 and 30 pages long, 1.5-line spacing, Arial, font size 12.
- The title should be concise and clear consisting of not more than 15 words, typed in all capitals with font size 12.
- No academic degree should be attached to author names. In cases where the authors come from different institutions, an index should be used after each name.
- Below the author name(s) should be written their academic affiliation and corresponding email address.

The manuscript should contain the following:

(1) **Abstract**, between 250 and 300 words with keywords ordered according to their importance.

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(3) **Method**, containing detailed and clear description of the instrument(s) and methods of data collection and analysis used in the study.

(4) **Discussion**, containing results of the study and their discussion. The discussion should be related to the previous findings, both of the author's past research or other researchers'. Avoid repetition of the same statement previously mentioned.

(5) **Conclusion and Suggestion**, containing summary of main findings of the study and suggestion for further study. Avoid repetition of the same sentences written previously under Results and Discussion section.

(6) **Acknowledgement**, addressing those who have provided assistance in the form of either research facilities or funding, as well as those who have helped during the manuscript preparation.

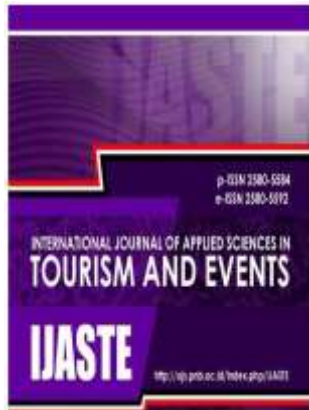
(7) **References**, should be in APA style and presented inside the main body of article, ordered alphabetically according to author names and publication year, and contains only those works cited in the text.

Destination Marketing to Improve Domestic Tourists' Return Intention

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Abstract

Purpose: This study aims to analyze tourist return intention through destination attribute (attraction, accessibility, and amenities), promotion, and destination image mediated by tourist satisfaction.

Research methods: The study used 410 respondents who were domestic tourists who had visited Borobudur Temple using purposive sampling. The Partial Least Square-Structural Equation Model (PLS-SEM) is used to test hypotheses.

Results and discussions: All hypotheses are accepted, that the attributes of the destination (attraction, accessibility, and amenities), promotion, and destination image significantly influence on tourist return intention mediated by tourist satisfaction.

Conclusion: It is necessary to improve the quality of destination attributes at Borobudur Temple, promoting not only international tourists but also domestic tourists.

Keywords: *Destination attributes, destination image, promotion, tourist return intention*

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INTRODUCTION

The tourism sector is currently one of the largest and fastest growing sectors in the global economy (Mahbubani, 2013). In fact, the competitiveness of the tourism sector especially in Indonesia continues to increase (BPS RI, 2018). The number of trips made by domestic tourists during 2018 reached 303 million trips, an increase of 12.37 percent compared to 2017 trips. This increase is considered a result of relatively improved economy and easier accessibility to tourist destinations throughout Indonesia (BPS RI, 2018).

However, despite the increasing number of domestic tourists visiting domestic destinations in Indonesia, domestic tourists prefer to go abroad. By 2019 there had been a record breaking of 10 million domestic tourists who go abroad (Patriella, 2019). Supported by Azril Azahari's statement, Chairperson of the Indonesian Tourism Intellectuals Association (ICPI), the trend of increasing domestic tourist arrivals abroad might be influenced by the rising airline prices for domestic routes, so domestic tourists preferred to go abroad with relatively affordable airplane price (Bahar, 2019).

Specifically, this study will focus on one of the destinations of domestic tourists, Borobudur Temple. It shows that most domestic tourists visit Borobudur Temple only once

(Pranowo, 2019). This might also be caused by the low satisfaction of domestic tourists in visiting Borobudur Temple, because satisfied customers will usually be willing to make another visit in the future. In line with the statement of Kotler & Keller (2012) that one way to retain customers is to create customer satisfaction, which in the scope of tourism is tourist satisfaction.

As stated in the Annual Report of PT TWC Borobudur, Prambanan and Ratu Boko 2018, that the main obstacle in achieving the targeted number of tourists is the lack of innovation in tourism objects. In fact, the success of developing tourist destinations is to maximize the destination attributes of tourism through 3A's (*Attraction, Accessibility, Amenities*) (Yahya, 2019). Attraction is an attractive factor for tourist destinations that can invite tourists to visit (Pantiyasa, et al., 2018). Added, the Marketing Director of PT TWC Borobudur, Prambanan and Ratu Boko, Siahaan (2017) mentioned about accessibility factor. Supported by the statement of the Governor of Central Java, Pranowo (2018), one of the causes of the lack of facilities in supporting tourists who attend the event held at Borobudur Temple in terms of accessibility. According to Setyanto & Pangestuti (2019), accessibility requirements are the availability of public transportation, easy access where destinations must be easily found and reached and road conditions along the road to tourist destinations. Finally, amenity is a supporting element in tourism activities that allows tourists to enjoy tourist visits and provide comfort during their visit (Suharto, 2016).

In addition, lack of promotion is a factor that causes Borobudur Temple to be visited less by tourists (Pitana, 2016). With the promotion available, potential tourists can easily see, compare, and choose the destination they want to visit (Lai & Vinh, 2012), the impact can increase awareness of potential tourists to visit the destination being promoted (Melania & Ellyawati, 2018).

Besides being a cultural tourism destination, Borobudur Temple also attracts domestic tourists for the sanctity of the temple, which is a special influence factor for domestic tourists to visit Borobudur Temple. However, for tourists who have visited the temple, the sanctity of Borobudur Temple is no longer a special factor that distinguishes Borobudur from other tourist destinations (Hermawan, et al., 2016). Therefore, it is important that a tourist attraction has a destination image that can distinguish it from other destinations (Ksouri, et.al., 2015). Moreover, the destination image is very important in influencing tourist decisions in choosing a destination to visit (Zhang, Xu, Leung, & Cai, 2016) can also attract visitors for a repeat visit (Khansa & Farida, 2016). This is important because if tourists can build a positive destination image in their minds, then they will most likely visit the destination again (Stylos, et al., 2017). A pleasant experience in visiting a destination that exceeds their expectations will lead to tourist satisfaction (Sangpikul, 2018) and can make tourists return to visit (Wibowo, et al., 2016; Zhang, et al., 2017) further emphasizes the importance the experience of tourists in generating the intention of visiting again.

In addition, the intention of tourists to re-visit is not only influenced by their experiences at the destination, but also by promotional efforts such as the spread of news about tourist attractions to others (Wu, et al., 2018). Considering the importance of what was mentioned above, this study aims to examine the influence of destination attributes (attraction, accessibility, and amenities), promotions, and destination images through tourist satisfaction on return intention of domestic tourists visiting Borobudur Temple. The framework in this study can be seen in Figure 1.

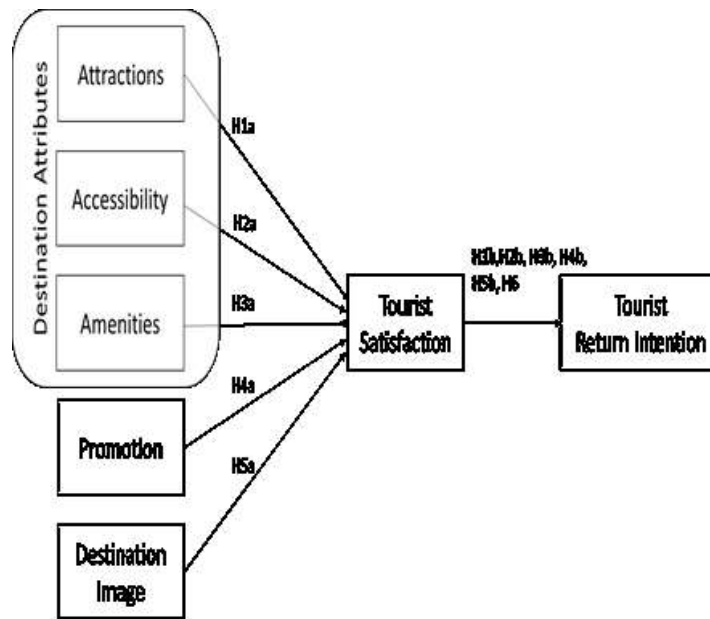


Figure 1: Research Framework

Source: adaptation from Rajaratnam, et al., 2015; Allameh, et al., 2015; Hanif, et al., 2016

RESEARCH METHODS

The methodology used by this research is quantitative methods. Analysis of statistical or numerical data collected through questionnaires by analyzing existing statistical data and using computerized techniques. In this study the population will use domestic tourists who have visited Borobudur Temple in the last two years. The sampling technique used in this study is purposive sampling.

According to Sarwono (2015) and Hair et al., (2014) the minimum sample size is 10 times the largest number of formative indicators used to measure 1 latent variable or 10 times the largest number of structural paths aimed at certain latent variables in the structural model. So, the minimum respondents for this study are 70 respondents. In collecting data, this study received 410 questionnaires which were returned and used for analysis. This study uses a Likert Scale to measure questions. According to Oh & Kim (2017), a good Likert scale for the tourism industry is 7 (seven) points, thus this study uses 7-point Likert scale. A software of *Smart Partial Least Square* (SMART-PLS) from Ringle, et al., (2015) used in this study to analyze data and to test hypotheses. PLS-SEM is used to assess complex models consisting of mediation and moderation variables (Hair, et al., 2014; Sarwono, 2015). Furthermore, this software is also used by several tourism and hospitality journals (Mohaidin, Wei and Ali Murshid, 2017; Rajaratnam, Nair, Sharif and Munikrishnan, 2015). Design of the questionnaire in this study are listed in Table 1.

Table 1: Questionnaire Design

| Latent Variable | | Statement (indicator) |
|------------------------|---------------|-------------------------------------------------------------------------------|
| Destination Attributes | Attractions | Borobudur temple has beautiful natural scenery (AT1) |
| | | Borobudur has an interesting history (AT2) |
| | | Borobudur has an interesting cultural features (AT3) |
| | Accessibility | There are many public transportation options to reach Borobudur Temple (AC1). |
| | | Road conditions to Borobudur Temple are good (paved, smooth, etc.) (AC2). |
| | | Access to Borobudur Temple is relatively easy (AC3). |
| | | The time needed to reach Borobudur Temple is short (AC4). |

| | | |
|--------------------------|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| | Amenities | It is very easy to find a tour guide at Borobudur Temple (AM1). |
| | | It's easy to find handicraft / souvenir shops in Borobudur Temple (AM2). |
| | | Public toilets in Borobudur Temple are clean and comfortable (AM3). |
| | | It's easy to find a hotel / homestay in the Borobudur Temple area (AM4). |
| | | There are various places to eat / restaurants in Borobudur Temple (AM5). |
| | | The price and portion of food in the restaurant at Borobudur Temple according to my preference (AM6). |
| Promotion | I got information about Borobudur Temple from the Borobudur Park website and social media (PR1). | |
| | It's easy to find information about Borobudur Temple online (PR2). | |
| | I often see Borobudur Temple advertisements on TV, Banners, Social Media, etc. (PR3). | |
| Destination Image | My visit to Borobudur Temple created a good impression (DI1). | |
| | I felt comfortable during my visit to Borobudur Temple (DI2). | |
| | The experience of my visit to Borobudur Temple was in line with my expectations (DI3). | |
| Tourist Satisfaction | I am satisfied with the scenery, history and cultural features of Borobudur Temple (TS1). | |
| | I am satisfied with the accessibility of Borobudur Temple (transportation, road, easy access, time) (TS2). | |
| | I am satisfied with the Borobudur Temple facilities (TS3). | |
| | I am satisfied with the promotion efforts of Borobudur Temple (TS4). | |
| | My decision to visit Borobudur Temple is worth my time and effort (TS5). | |
| | In general, I am satisfied with my decision to visit Borobudur Temple (TS6). | |
| Tourist Return Intention | I will definitely re-visit Borobudur Temple (RI1). | |
| | I will re-visit Borobudur Temple if it offers new things for me to experience (RI2). | |
| | I will prioritize Borobudur Temple compared to other cultural tourism destinations (RI3). | |
| | I would recommend Borobudur Temple to friends, relatives, family and others (RI4). | |
| | I have the desire to invite others to visit Borobudur Temple (RI5). | |

In analyzing the data in SMART-PLS, there are two steps must be considered, outer model and inner model. According to Sarwono (2015) the outer model is measured by connecting all manifest variables (indicators) with their latent variables using the measurement models of convergent validity, discriminant validity, and reliability (Table 2). While, the measurement of inner model called the structural model aims to show and explain the relationship between each latent variable in the research model. Measurement models in PLS-SEM evaluated using the coefficient of determination, the path coefficient and the goodness of fit to see the value of R^2 value of t statistics, and Q^2 . The hypothesis can be accepted if the statistical t value is greater than 1.96 and the P value is less than 0.05 or 5% for each pathway.

Table 2: Parameter Measurement Model Validity and Reliability

| Test | Parameters | Rule of Thumb |
|-----------------------|-----------------------------------------|------------------|
| Convergent Validity | <i>Loading Factor</i> | Factor > 0.708 |
| | <i>Average Variance Extracted (AVE)</i> | Extracted > 0.50 |
| Discriminant validity | <i>Heterotrait-Monotrait (HTMT)</i> | < 0.90 |
| | <i>Variance Inflation Factor (VIF)</i> | ≤ 5 |
| Reliability | <i>Cronbach Alpha</i> | > 0.70 |
| | <i>Composite Reliability</i> | > 0.70 |

RESULT AND DISCUSSIONS

The results of this study the majority of respondents came from West Java and DKI Jakarta, female between the ages of 21-25 years old. In terms of employment, the majority of respondents are students and employees. According to Hair, et al., (2019), the loading factor should be above 0.708 recommended, however, there are two constructs (AM2 and RI2) that have loading factor value of less than 0.708, then are removed from the model. Based on parameters on the outer model to assess convergent validity, discriminant validity, and reliability, the results found that all parameters met the requirements (see Table 3 and Table 4).

Table 3: Validity and Reliability Result

| Measurements | Outer Loadings | AVE | VIF | Cronbach Alpha | CR | Final items (Initial items) |
|--------------|----------------|-------|-------|----------------|-------|-----------------------------|
| AC1 | 0.797 | 0.644 | 1.653 | 0.815 | 0.878 | 4 (4) |
| AC2 | 0.817 | | 1.797 | | | |
| AC3 | 0.816 | | 1.854 | | | |
| AC4 | 0.779 | | 1.592 | | | |
| AM1 | 0.714 | 0.600 | 1.442 | 0.833 | 0.882 | 5 (6) |
| AM3 | 0.802 | | 1.783 | | | |
| AM4 | 0.797 | | 1.772 | | | |
| AM5 | 0.766 | | 1.751 | | | |
| AM6 | 0.790 | | 1.859 | | | |
| AT1 | 0.807 | 0.642 | 1.384 | 0.722 | 0.843 | 3 (3) |
| AT2 | 0.792 | | 1.398 | | | |
| AT3 | 0.804 | | 1.494 | | | |
| DI1 | 0.901 | 0.819 | 2.608 | 0.890 | 0.932 | 3 (3) |
| DI2 | 0.911 | | 2.762 | | | |
| DI3 | 0.903 | | 2.465 | | | |
| PR1 | 0.793 | 0.633 | 1.469 | 0.711 | 0.838 | 3 (3) |
| PR2 | 0.786 | | 1.287 | | | |
| PR3 | 0.809 | | 1.493 | | | |
| RI1 | 0.856 | 0.757 | 2.304 | 0.892 | 0.925 | 4 (5) |
| RI3 | 0.827 | | 1.99 | | | |
| RI4 | 0.902 | | 3.076 | | | |
| RI5 | 0.892 | | 3.007 | | | |
| TS1 | 0.775 | 0.647 | 1.868 | 0.889 | 0.916 | 6 (6) |
| TS2 | 0.751 | | 1.954 | | | |
| TS3 | 0.701 | | 1.817 | | | |
| TS4 | 0.861 | | 2.695 | | | |
| TS5 | 0.862 | | 3.178 | | | |
| TS6 | 0.861 | | 3.155 | | | |

Table 4: HTMT Result

| Construct | AC | AM | AT | DI | PR | RI | TS |
|-----------|--------------|--------------|--------------|--------------|--------------|--------------|----|
| AC | | | | | | | |
| AM | 0.835 | | | | | | |
| AT | 0.541 | 0.531 | | | | | |
| DI | 0.557 | 0.613 | 0.656 | | | | |
| PR | 0.655 | 0.781 | 0.594 | 0.539 | | | |
| RI | 0.425 | 0.565 | 0.699 | 0.704 | 0.634 | | |
| TS | 0.752 | 0.762 | 0.821 | 0.869 | 0.754 | 0.752 | |

Then this research continues on the inner model to answer the hypothesis shown in Table 5. In the results of the inner model, there are eleven hypotheses and all of them are accepted in this study with a t value greater than 1.96 and a P value (sig) less than 0.05 for every path. R² of tourist satisfaction was 0.451 meaning that tourist satisfaction can be explained by the exogenous latent variables (attractions, accessibility, amenities, promotion, and destinations image) as for 45.1%. Meanwhile, the R² for the return intention to visit was 0.778 meaning that return intention to visit can be explained by the exogenous latent variables (tourist satisfaction) as much as 77.8% and the remaining 22.2% is explained by other variables outside of this study. Value of Q² is 0.878 (> 0) meaning that attraction, accessibility, amenities, promotions, and destination image accounted for 87.8% which explains the effect on the intention to revisit through tourist satisfaction. While the remaining 12.2% is explained by other variables outside this study. In addition, the results of this study have a large predictive relevance, because the Q² value is above 0.50.

Table 5: Results of Hypotheses

| Hypotheses | Relations | t | Sig | Results |
|------------|---------------------------------------------------------------------|--------|-------|----------|
| H1a | Attractions->Tourist Satisfaction | 7.393 | 0.000 | Received |
| H2a | Accessibility ->Tourist Satisfaction | 4.622 | 0.000 | Received |
| H3a | Amenities ->Tourist Satisfaction | 2,590 | 0,010 | Received |
| H4a | Promotion->Tourist Satisfaction | 4,433 | 0,000 | Received |
| H5a | Destination Image ->Tourists Satisfaction | 11.497 | 0.000 | Received |
| H1b | Attraction->Tourists Satisfaction ->Tourist Return Intention | 7,050 | 0,000 | Accepted |
| H2b | Accessibility ->Tourist Satisfaction ->Tourist Return Intention | 4.707 | 0.000 | Received |
| H3b | Amenities ->Tourist Satisfaction ->Tourist Return Intention | 2,561 | 0,011 | Received |
| H4b | Promotions ->Tourist Satisfaction ->Tourist Return Intention | 4,111 | 0,000 | Received |
| H5b | Destination Image ->Tourist Satisfaction ->Tourist Return Intention | 9,067 | 0,000 | Received |
| H6 | Tourist Satisfaction ->Tourist Return Intention | 18,159 | 0,000 | Received |

The analysis results for destination attributes are seen from Hypothesis 1,2,3 which are all accepted. In terms of attractions, Reitsamer & Brunner-Sperdin (2016) has the same results also a study from Guntoro & Hui (2013) where attraction significantly influences the return intention. For accessibility result, Setyanto & Pangestuti (2019) put forward similar result, also Rajaratnam, et al. (2015) and Chin, et al. (2018) also found that accessibility mediated by tourist satisfaction significantly influenced the intention of tourist return intention. For amenities, the result of this study in harmony with Darsono (2013) and Dilrukshi, et al. (2019) revealed that amenities had a significant influence on return intention with a very large effect.

Hypothesis 4 result shows that promotion has a significant influence on the satisfaction of domestic tourists in visiting the Borobudur Temple. Similar results were also present by Magatef (2015) and Ovita, et al. (2019) mentioned promotion has the most significant influence mediated by satisfaction with return intention. The result of Hypothesis 5 testing shows that destination image has a significant influence on the satisfaction of domestic tourist tourists visiting Borobudur Temple in line with research by Allameh, et al. (2015) also Zhang, et al. (2017) using the mediation variable of tourist satisfaction confirms that there is a positive and significant influence of the destination's image on the return intention which is mediated by an impressive tourism experience.

Hypothesis 6 results show that tourist satisfaction has a significant influence on the return intention of domestic tourists in visiting the Borobudur Temple. This is supported by previous studies from Bagus & Utama (2015) and Singh & Singh (2019) which provide empirical evidence that tourist satisfaction is a strong factor in influencing tourists' desire to

return due to increased levels of satisfaction, returning consistency and willingness to recommend to other people.

CONCLUSION

This study concludes that destination attributes (attractions, accessibility, and amenities), promotion, and destination image have an influence on tourist satisfaction in Borobudur Temple. Further, through tourist satisfaction has an influence as a mediator to the tourist return intention of domestic tourists at Borobudur Temple. This implies the fact that domestic tourists are satisfied and willing to return because of their good experience with the scenery, history and cultural features of Borobudur Temple. Added, domestic tourists are satisfied and willing to return because they found Borobudur Temple has a variety of public transportation services, good road conditions, easy access, and the short time needed to reach the destination. In terms of amenities, domestic tourists are satisfied and want to return because the availability and quality of facilities at Borobudur Temple are able to give a good impression so they are satisfied and want to visit again. The promotion of Borobudur Temple that provides information and expectations to domestic tourists will be followed by an increase in tourist satisfaction, which will attract them to visit again. Finally, the destination image mediated by tourist satisfaction has a significant influence on the return intention of domestic tourists to Borobudur Temple. This implies the fact that cognitive and affective images during the visit of domestic tourists to Borobudur Temple affect the level of satisfaction and return intention to this destination.

According to the results of this study, there are a number of recommendations given. For the Indonesian government and PT TWC Borobudur as the Borobudur Temple developer should pay more attention to improving the quality of attractions, accessibility, and amenities at Borobudur Temple, conducting promotions that will not only attract international tourists but also domestic tourists. It is also important to provide innovation at Borobudur Temple, because domestic tourists will be more likely to make repeated visits when there are new things for them to experience. For the next research it is necessary to analyze other factors which not examined in this study and are expected to get more information in determining important factors that influence tourist satisfaction and return intention to visit Borobudur Temple which later can also be implemented in research to other tourist destinations.

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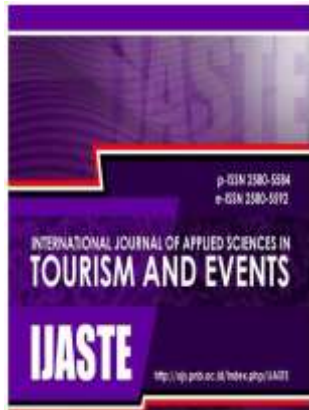
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Religious Tourism Development Model in Banyuwangi

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Abstract

Purpose: This study aims to identify the distribution of religious sites, develop religious tourism models, and determine the right development strategy for religious tourism in Banyuwangi Regency.

Research methods: The data analysis technique uses qualitative data analysis techniques which include data collection, data reduction, data presentation, and drawing verification and the SWOT analysis which includes the preparation of the IFAS (Internal Factor Analysis Summary) matrix and the EFAS (External Factor Analysis Summary) matrix which is followed by the preparation of the SWOT matrix.

Results and discussions: Banyuwangi has many religious sites which are potential to be developed as religious tourism objects, including the Lingga and Yoni relics in Jambewangi; Alaspurwo; Rowu Bayu Site; Ompak Songo; Aningpatih Site; Kawitan Sites; Goa Site at Alaspurwo; Image Worship Site; Goa Maria; Tomb of Sayid Yusuf; Tomb of Mbah Dowo; Tombs of the Regent of Banyuwangi; Konco Hoo Tong Bio; Tomb of Jogopati Rempeg; Sri Tanjung Well; Mbah Kopek's Grave; Giri Salaka Temple.

Conclusion: Banyuwangi has many religious sites that have the potential to be developed into religious tourism objects.

Keywords: *Religion, Religious Tourism, Development, Model*

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INTRODUCTION

Banyuwangi has a huge tourism potential ranging from natural, cultural, spiritual, agro-tourism, village tourism and historical tourism. These potentials have not yet been fully developed by the Banyuwangi District Government. This can be seen from the direction of tourism development in Banyuwangi Regency, which was developed in three groups of development areas called "The Diamond Triangle" (Bappeda, Banyuwangi Regency, 2018). Of the three development areas, most are natural and cultural tourism in the form of traditions and festivals. One of the tourism potentials that can be developed as alternative tourism in Banyuwangi is Religious Tourism. Dewhurst (2001) mentions that the Sustainable Tourism Development is a concept in tourism which aspired by the people who understand the importance of sustainability, the emphasis on the sustainability of the development of a tourism area, with three aspects, environmental, social, cultural and economic (Nikolova & Hens, 2013; Mihalic,

2016). Then in September 2015, officially at the United Nations Sustainable Development Summit meeting in New York, attended by more than 190 countries, a new chapter for sustainable development with a concept called Sustainable Wysokińska (2017).

Referring to his opinion Pendit (2004: 41) said that religious tourism or pilgrimage tourism is more or less related to the customs, traditions, religions and beliefs of people or groups in society. Related to the statement of the pendit is very much in accordance with the potential that exists in Banyuwangi district. This is supported by his opinion Miskawi, et al (2016) said the potential to develop religious tourism in Banyuwangi is very large because Banyuwangi has a variety of relics from religious sites ranging from pre-literacy, classical and Islamic. for example the Aningpati petilasan in Seloh giri Ketapang, the tomb of Rempegi Jogopati, the tomb of the Banyuwangi Regents, Anantha Boga Temple at the foot of Raung Mountain, Rowo Bayu, Alas Purwo and many other religious sites scattered in almost every region in Banyuwangi Regency. In addition, A. Yoeti (2008) tourism is very influential on people's income. Furthermore Pendit (2009: 128) tourism has an impact on the socio-cultural and economic life of the surrounding community. Thus, the development of religious tourism will indirectly have an impact on the distribution of people's income. With the concept of developing religious tourism will empower more people around the site to be developed.

In addition, the purpose of tourists to travel is not only motivated to seek pleasure, but also to seek knowledge, for example "to increase knowledge about foreign destinations" (Muhammad and Puad, 2010). Meanwhile, according to Kotler and Armstrong (2008: 129), there are six models of purchasing decisions made by tourists, namely the choice of product or service, choice of brand (brand), choice of visit channels, choice of visit time, number of visits, and payment methods. What was conveyed by Muhammad and Puad and Kotler and Armstrong seem to be related to the phenomenon in Indonesia, that the Indonesian people have different motivations for traveling, namely to package travel in the form of religious travel. In the Charter for Sustainable Tourism (1995), sustainable tourism development is the development that can be supported ecologically well as economically viable, Steer & Wade-Gery (1993) reveals at least more than 70 definitions of sustainable development. Inevitably

Many potentials are also overshadowed by the emergence of problems, for example there are still many religious sites that are not maintained, and many are damaged by ignorant hands irresponsible and many caretakers do not understand the history of religious sites. Among the general public, many do not understand the history and values that exist on religious sites so that it impacts the sustainability of the religious sites (Anwar, 2017: 187). In addition, the numbers of religious sites that have not been inventoried are also an obstacle to the development of religious tourism.

Referring to the potentials, opportunities and problems, the development of religious tourism becomes very important and urgent to do not only because of the importance of equitable distribution of income of Banyuwangi people but also the mission of conservation and sustainability of religious sites so that they can be enjoyed by future generations, especially the character values contained in religious site.

RESEARCH METHODS

This research takes place in Banyuwangi Regency, especially areas that have religious sites such as Wongsorejo, Kalipuro, Banyuwangi, Kabat, Rogojampi, Muncar, Sempu, and Songgon. The forms and strategies used in this research are descriptive qualitative.

The data sources of this research are: (1) Archives and Documents: such as magazines, newspapers, research results, articles and books related to religious sites in Banyuwangi Regency; (2) Informant: The technique used in determining the informant is purposive sampling, namely the key gatekeepers at religious sites, cultural figures, historians, community leaders around the religious sites, and the communities around the religious sites; (3) Place of Event can be used as a source of data because it deals directly with the object to be studied.

Data collection techniques include: 1) In-depth interviews are used to obtain oral information through conversation and face to face with people who can provide information to researchers (Sukmadinata, 2009: 216; Sarosa, 2012: 45; Mulyana: 2004: 180; Sugiyono,

2009: 233). In conducting interviews using several instruments, namely interview guidelines, recording devices in the form of block notes and ballpoints, voice recording devices, cameras, and video recording devices; 2) Observation technique is done by observing the ongoing activities (Sukmadinata, 2009: 220; Bungin, 2009: 115). What is observed in this study are places or historical sites that have religious values in Banyuwangi Regency; 3) Document study technique is data collection by collecting and analyzing documents, both written documents and electronic documents (Sukmadinata, 2009: 221; Sarosa, 2012: 61; Mulyana, 2004: 195). Documents used such as magazines, newspapers, research results, articles and books even chronicles or papyrus.

In qualitative data, validity used is triangulation technique (HB Sutopo, 2006: 92; Patton; 1980: 161; Denzin, Lincoln, 2009: 271) which includes: 1) Triangulation of data (Data Triangulation) which is carried out by: Comparing data observations with interviews, compare what people say in public with what is said privately, compare what people say about the research situation with what is said all the time, compare interviews with the contents of a related document (Bungin, 2009: 257); 2) Triangulation of researchers (Investigator Triangulation) uses a number of researchers or evaluators in research. Then the relevant research results will be compared with the problems to be studied; 3) Theory of triangulation is done using patterns, relationships, and includes explanations that arise from the analysis to look for themes or comparative explanations with theories based on the assumption that the facts cannot be verified with a single theory without multi perspectives (Bungin, 2009: 257 Sutopo, 2006: 4); and 4) Methodological triangulation (methodological triangulation): Similar data collected by different methods are compared and data conclusions are drawn with stronger validity by checking the degree of trust in research findings, data collection techniques, and data sources (Sutopo, 2006: 95; Bungin, 2009: 257).

The data analysis technique used in this study is the SWOT (Strengths, Weaknesses, Opportunities, threats) technique used in research into the development of tourism models. SWOT analysis is a qualitative analysis that is used to systematically identify various factors to formalize strategies in an activity.

This SWOT analysis is used to identify strengths, weaknesses, opportunities and threats from external factors that influence an appropriate strategy for the development of religious tourism in Banyuwangi Regency. According to Rangkuti (2011) Before conducting a SWOT Analysis, an Internal IFAS (Internal Strategic Factor Analysis) Summary and EFAS (External Strategic Factor Analysis) Summary matrix preparation will be carried out.

RESULT AND DISCUSSIONS

Potentials of Banyuwangi Religious Tourism

Cultural heritage and artefacts in the form of religious sites in Banyuwngi Regency are widely distributed in every region.

1. Relics of the Lingga Yoni at Jambewangi

In this site found yoni phallus stone and a neat stack of ancient bricks arranged. Archaeologically it is the site of the Hindu-Buddhist period. Linga which is a symbol of the masculine organ. The portrayal of the phallus-yoni as a symbol of Shiva. Lingga basically has meaning, role and function which is very important in the life of the past society, especially for Hindus.

The bricks around the Yoni phallus are messy and the arrangement is irregular, so it is difficult to explain the name and function of an object. However, this object is widely used by the Balinese Hindu community as a place of ritual to this day. This megalithic site is very alarming because it is not supported by a caretaker or caretaker so that many visitors have difficulty relating to information related to the megalithic site. For more details can be seen in the following picture.



Figure 1. Megalithic Stone and Yoni Lingga
Source. Researcher Documentation, 2019

2. Goa Site in Alas Purwo National Park

One area in the eastern tip of the island of Java which has a great spread of religious sites is the Alas Purwo National Park in the form of caves and niches. In addition there are also lots of pyramid and temple. The caves in the area of Alas Purwo National Park which recorded about 40 caves. But only five caves are the most visited and widely known by the public. Namely the Palace Cave, Padepokan, Mayangkoro, Mangleng, and Kucur. Apart from being easy to reach, the four caves are believed to have mystical value. When examined again among the five caves, the Palace Cave is the most visited. In addition, there was a lot of news circulating that the Palace Cave was the place of the first president of the Republic of Indonesia (Ir. Sukarno) in seeking inner peace. Currently this cave is visited by many people who want to be imprisoned and seek peace.

3. The Rowo Bayu Site

Rowo Bayu is a swamp in Bayu Village, Songgon District, Banyuwangi Regency. According to information from local residents in this location is believed to be a place of battle between the kingdom of Blambangan with the Netherlands. In this place there is also a petilasan which is believed to be a hermitage prabu tawang alun which has now been erected a temple / temple. The petilasan form is a cylindrical natural stone with a size of approximately 60cm. This swamp is a meeting place for three springs, namely Sendeng Kaputren, Sendang Wigangga and Sendang Kemulyaan. Until now the spring was saved by the community.

In his book Sri Margana (2012) Ujung Timur Jawa 1763-1813 The Seizure of Blambangan Hegemony mentioned that Bayu was once the capital of the Kingdom of Blambangan. This can be seen in the following image.



Figure 2. Blambangan Kingdom Location Map
Source: Sri Margana (2012)

4. Site of Ompak Songo and Pura Dalem Blambangan

According to Soimin (50) this site was first discovered by his grandfather in 1916. Since it was first discovered, the site's form is in the form of stones lined up on higher ground and if drawn a line will form a square shape like the foundation of an ancient pavilion building. It is estimated that Songo opak was a former pavilion from the Blambangan Kingdom. This indeed makes sense because the kingdom of Blambangan has several times experienced the movement of the royal capital, such as Panarukan, Puger, Bayu, White Tiger, Kuta Lateng, Ulupampang, and Banyuwangi. In addition, taking into account the shape of the stone that has similarities with the foundations of ancient buildings.

At first this site was used by Hindus as a place for prayer. By the local Hindu community this site is considered as Pura Dalem. Because this site is a cultural preserve, the government is not permitted to pray at that place. As a substitute, Pura Dalem Blambangan was built.

5. Aning Patih Site in Kalipuro

In this site there are several points, namely the hermitage selogiri, the tomb of Aning Patih. What's interesting about Aning Patih's hermitage and tomb, to the location through the hill that is packed like a punden terraces and the environment there are various kinds of large trees so that the environment looks natural and cool. The general public knows the Aning Patih site as Aning Patih's burial place which during his lifetime had influence and at the same time spread religion. It is said as a tomb still needs to be studied in more depth because in this site found Lingga Yoni. In Indonesian tradition it is not uncommon for Lingga and Yoni to be in the tomb. The existence of a foundation stone structure at each corner of the site can be estimated this is a place of rubbing. Because most of the material is made of wood, it is damaged by time, while the bottom is made of stone, we can still find it today. Around the tomb there are several large bricks. From the foundation structure using bricks with a large size of 40 cm long, 15 cm wide and 5 cm thick with a perfect combustion process, unlike the current small size 20 cm long and 10 cm wide and 3 cm thick. Many visitors come to this location from various religions and beliefs.

6. Kawitan Site on Alas Purwo

Kawitan site is a temple derived from Jawi which means old. This is related to folklore that Alas Purwo was the earliest land created on Java. The site of kawitwan was discovered in 1967 by residents who cleared the forest as agricultural land, but it is definitely not known since when. Kawitan site close to Pura Giri Salaka. Historically kawitan sites have links to Kawitan sites. In this site there are bricks with a large size with a length of 40 cm, width 15 cm and thickness of 5 cm with a perfect combustion process. The bricks are arranged but irregularly covered in black and white cloth. What's interesting is that there is a brick in the middle there is a picture of a dagger and beside the site there is a large toad sculpture. According to the frog keeper as a symbol that this forest used to have a large frog when opening the forest.

7. Image Worship Site

Image worshipping grave is in the middle of PTPN XII (Persero) Wongsorejo plantation. Not yet known with certainty about the origin of image worship. But some people say that this tomb is one of the sacred tombs and is believed to be the one who opened the plantation land. So that many Banyuwangi communities and outside the Banyuwangi regency carry out salvation, recitation at the image worshipping tomb. This can be seen from the spacious tomb space or terrace which is used as a place for visitors, approximately 3.5 square meters. Between the terrace and the separate tomb room, so visitors can only get outside.

8. Goa Maria in Grajagan

Maria Cave is used by the Catholic community. Which makes from the poor diocese. Many people use it as a place of prayer and also used as a place of meditation because of the atmosphere that supports away from the crowd. Usually in certain months, namely the month of Maria (May-October). This cave is a form of homage to the Virgin Mary. Interestingly There is an artificial cave, a sacred well in which there is a statue (Mother of Mary) with natural stone

ornaments arranged in such a way that looks like natural. On the other hand this building shows a variety of uniqueness starting from the building and the natural environment.

The existence of this place actually has existed since the Netherlands was entrenched in Banyuwangi. This place might be the beginning of the existence of Christianity in this area. But more research needs to be done in connection with this matter.

9. Tomb of Sayid Yusuf

There are two tombs located on the coast of Sembulungan Peninsula. The building looks quite prominent among the other huts. The core structure of the tomb is surrounded by a wall and covered by a tiled roof (cupola), meals are made on a staircase and the area around the tomb is fenced. The floor of the building is coated in white ceramic. The tomb is thought to be the tomb of Mbah Agung Kalong. Local people call it the tomb of Gandrung and some say the tomb of Sayid Yusuf. It is said that Mbah Agung Kalong was an elder from the Muncar area who died while following the Sea Picking ritual (this needs to be done further research related to the role of mbah kalong or Sayud Yusuf during his lifetime). At each Muncar sea picking activity, a pilgrimage to the tomb is always held. During his lifetime, Sayid Yusuf liked Gandrung, so his grave was called the tomb of Gandrung. In fact, in every Sea Picking event, Gandrung art is performed here.

10. Tomb of Mbah Dowo

Mbah Dowo's Tomb is located in the middle of teak forest in the area of Alas Purwo National Park, Kalipait Village, Tegaldlimo District. Mbah Dowo's Tomb is called because the grave is not as long as the tombs in general. Some say that the meal was actually a spear that was buried. So, related to the existence of this tomb is not known with certainty its history. Asmat (55 years) as the guardian of the tomb does not clearly know the existence of this tomb. He is the 9th guardian of the tomb. Until now many people have come to pray or ritual. Besides the tomb there is also an old well whose water is used for all medicines for those who have faith. This can be seen every visitor who comes and goes home, visitors always bring water after praying at Dowo's mbah grave.

11. The Graves of the Banyuwangi Regent

Banyuwangi Regent's grave site is in a rather closed area behind the Great Mosque of Baiturrahman Banyuwangi. The location is behind the Baiturrahman Banyuwangi Mosque administratively included in the Kepatihan Village, Banyuwangi District. In this tomb five Banyuwangi regents are buried, namely Tumenggung Wiroguno II (1782-1818), Tumenggung Suronegoro (1818-1832), Raden Tumenggung Wiryoadi Danuinggrat (1832-1867), Raden Tumenggung Pringgokusumo (1867-181881), Raden Tumenggung Ary Sugono (1881-1888). Each tombstone has a uniqueness of each of these things seen from the shape between one tomb and the other tomb are not the same.

12. Konco Hoo Tong Bio

At first, the very first temple built for Chen Fu Zhen Ren was located in Lateng. However, after Blambangan was attacked by the Dutch in 1765, the center of the kingdom was moved in the present City of Banyuwangi (previously around Muncar). Chinese citizens migrated and moved the location of Chen Fu Zhen Ren Temple to the current Hu Tang Miao Temple. The Dutch took control of the new Banyuwangi area in 1774 so that Banyuwangi was abandoned by its inhabitants until the Dutch returned to employing 100 Chinese in Banyuwangi to develop agriculture. Therefore, it is estimated that this temple was built around 1768-1784. The date of the establishment of TITD Hu Tang Miao is unknown due to the absence of records. The oldest known inscription is a wooden panel dating from Qianlong Jiachen (1784) which contains Tan Cin Jin (Chen Fu Zhen Ren) calligraphy.

Another source from the doctor's note Franz Epp German nationality states that Hu Tang Miao was renovated again in 1848. According to Epp: " Their Pagoda and the Gods in it are the oldest in Java and have stood before the arrival of Europeans. Like Lateran in Rome, this temple can be called "Mother or head of all Cities and the whole World" in connection with

other temples on Java, because the temples subsequently consider themselves to be descendants or branches. The Chinese have a great respect for the temple. However, on Friday, June 13, 2014 the place of worship in Hoo Tong Bio suffered a great fire in. The fire caused the main worship building and several other buildings to be severely damaged. The fire was known around 06.00 am. As a result of this fire, around 80% of the buildings were damaged including Kongco Tan Hu Cin Jin statue.

Interestingly this building, the main gate to enter the Ho Tong Bio temple area has three doors, namely two side doors for the people and the main door in the middle which is used for rituals. There are also three main entrances to the temple. The main entrance gate of the Hoo Tong Bio Temple in the form of a gate is dominated by the red color symbolizing excitement, happiness, and prosperity. The main entrance concept in this temple is based on the principle of Yin and Yang, which is the left is the entrance (symbolized by the symbol of the dragon) while the right is the exit (symbolized by the white tiger). There is a belief for Chinese citizens to enter through the dragon door and out of the door of the tiger, because it has a symbolic meaning to enter luck (dragon) and out of misfortune (tiger). The door in the middle is for the Holy Spirit.

13. Tomb of Jogopathy Rempeg

Jogopathy rempeg tomb sites are rarely known by the surrounding community. Even though it is located not far from where the community lives. As experienced by the author himself, when asking where this site is mostly shaking his head not knowing. As we know, Mas Rempeg alias Pangeran Jogopati is the knight of the blambangan tlatah who during his lifetime was an antipathy figure with foreign domination. Both the invaders from inside / mataram or from outside like the Netherlands. One characteristic of Blambangan warriors is that they do not want to be defeated or conquered by outsiders. Until the appearance of Rempeg Jagapati and Sayu Wiwit. Not satisfied with the regent's administration showing that the VOC turned out to be corrupt, Jagapati gathered the Blambangan people in the Bayu fortress. Thousands of residents are willing to leave their villages to join Jagapati. And Puputan Bayu broke down, which caused huge losses on both sides.

14. Sri Tanjung Well

Sri Tanjung Well is one of the sites in Banyuwangi Regency, East Java, Indonesia. This well is located on Jalan Sidopekso 10, Kelurahan Temenggungan, District of Banyuwangi Kota. The Sri Tanjung well is adjacent to the grand mosque, the Regent's grave, and the Sri Tanjung park, precisely in the alley east of the pavilion, which is inside the residents' house. The Sri Tanjung well was discovered during the Raden Tumenggung Notodiningrat (1912-1920). This well was initially merely a trial of residents to make wells in their homes. Suddenly while digging a well behind Mr Darusman's house, a fragrant (fragrant) smell came out of the well. And it is believed that the fragrance is the smell of Sri Tanjung which was drowned by Sidopekso into the river which is located under the house of Mr Darusman.

The Sri Tanjung well is rectangular in shape with a length of about 1.4 meters and a width of 0.8 meters and a depth of no more than 7 meters. The width of the well is the same as the width of the alley that the visitors passed when they reached the Sri Tanjung well because this well became one of the houses of the owner of this well.

Sri Tanjung is a legend telling how a princess who was very beautiful and loyal to her husband, Sidopekso, was slandered by a king named Sulokromo. Sri Tanjung's loyalty to Sidopekso was also a legend in the formation of the name Banyuwangi.

15. Mbah Kopek's Grave

This site is located in a public cemetery owned by the local community. Related to the existence of this site is not very clear. The surrounding environment is a burial place. It's just that on the right side of the tomb there is a spring which is currently used by residents as a public bathing place.

16. Giri Salaka Temple Located in Alas Purwo National Park

Pura Giri Salaka is located in Lassa Purwo National Park, Tegal Delimo Sub-district, Kaliagung, Kendalrejo, Tegaldlimo, Pura Giri Salaka alas purwo forest for farming. It is precisely on the founding of the Alas Purwo Temple that the community found a mound of earth that contained large lumps of brick piled up, like a small gate. It is believed that the place was used for the monastic mage of the ancient Hindu Saints. To honor the ancestors, the people of the temple area performed religious rituals and built an additional 65 meters temple for the worship of the visiting public.

Integrated Religious Tourism Model in Banyuwangi Regency

Mill and Morrison (Scarpino, 2009) say the tourism development model that links it to the context of the tourism planning/ management process, by revealing the four components forming a tourism system, namely the market (market), marketing (marketing), destination (destination/ tourist destination), and travel.

Another tourism development model is The Global Tourism System (Cornelissen, 2005). Cornelissen argued that global tourism requires a different / specific market based on the exchange between tourism producers and consumers. On the demand side, it consists of social groups with socio-economic and socio-cultural characteristics, interests, needs, and desires. On the supply side, it consists of producers who interact, innovate and compete. Linkages between producers are monitored and regulated by institutions that regulate tourism development. Furthermore, according to Sukadijo (2000: 28) In the tourism industry, there are a number of variables, namely consumers, producers, demand, and supply.

The development of integrated tourism is by combining various potentials owned by Banyuwangi to become a tourist attraction both natural, cultural, historical, and religious tourism potential. The integrated concept is used to provide its own color for tourists so they don't get bored in watching tourism. In visiting tourists not only invited to enjoy religious tourism but also other tourism destinations in Banyuwangi.

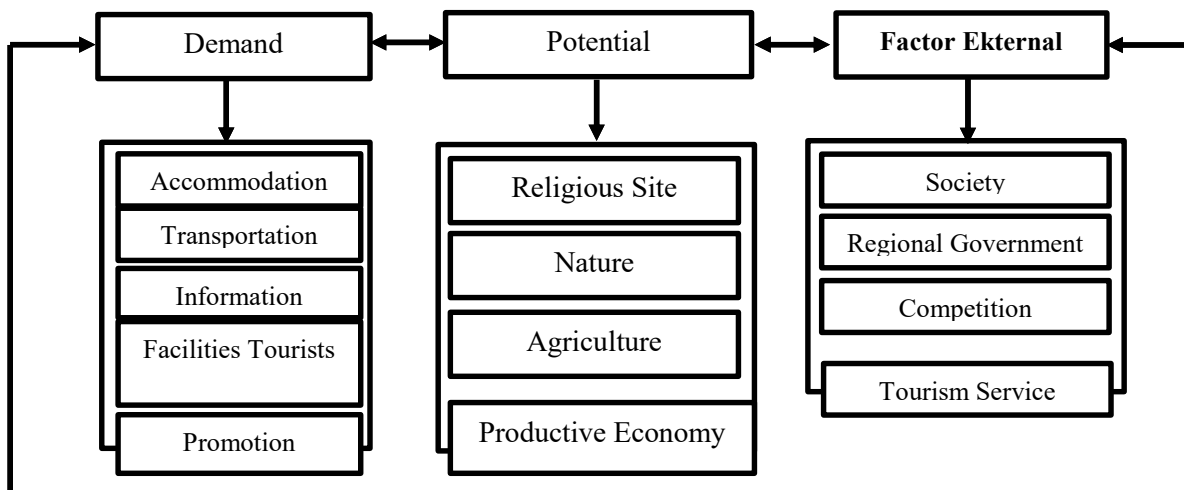


Figure 3. Religious Tourism Model in Banyuwangi Regency
Source: Primary Data 2019

For the development of religious tourism in the Banyuwangi Regency, the location or area of tourism development must be determined. This is very necessary so that what is developed can develop and significantly influence the economy of the community around the area of tourism development. So, the model developed is a model of tourism based on the community. In general, tourism is developed by using investors as developers and financiers, but with this concept it will be very different because the investors themselves are the investors themselves. So that the results of tourism can be enjoyed by the public directly.

The demand for tourism especially in Indonesian people is very much because of a unique phenomenon in Indonesian society which is to package a religion trip on a tour. This certainly affects the development of tourism in Indonesia. Banyuwangi as one of the areas on the eastern tip of the island of Java which has various religious heritage sites will certainly get its own place among religious tourism lovers in Indonesia. In addition, tourism development in Banyuwangi is developing rapidly in the last few years. This is because it is supported by local governments who are serious about developing tourism. So that transportation is being built and tried to be integrated between one tourist attraction with other attractions. Infrastructure as one of the requirements for the development of a tourism destination is also good. Besides, at some points as a tourism promotion place, it is also accompanied by a tourism information center so that the public or tourists get complete information related to tourism destinations in Banyuwangi.

Integrated Religious Tourism Development Strategy in Banyuwangi Regency

According to Rangkuti (2011) said that the SWOT analysis is a qualitative analysis used to identify various factors systematically to formalize strategies in an activity. This SWOT analysis is used to identify strengths, weaknesses, opportunities and threats from external factors that influence an appropriate strategy for the development of cultural tourism based on religions of Religious Sites in Banyuwangi Regency. Before entering into the SWOT analysis, a IFAS (Internal Strategic Factor Analysis) Summary and EFAS (External Strategic Factor Analysis) Summary analysis must be made first.

In the development of tourism, internal factor analysis is very important to see the strengths and weaknesses of the objects that will be developed in the tourism model. In the development of Summary's Internal Strategic Factor Analysis (IFAS) Strength used several indicators namely natural, socio-cultural, historical, recreational facilities, and accommodation infrastructure. Starting from this, Summary's Internal Strategic Factor Analysis (IFAS) can be seen in Table 1.

Table 1. Summary of Internal Strategic Factor Analysis (IFAS) on Strength

| No. | Variable (Strength) | Scor | Rating | Total |
|------------------------------------|----------------------------------------------------------|-------------|---------------|--------------|
| 1 | Tourism is extremely diverse | 0.150 | 4 | 0.60 |
| 2 | Access to tourism objects the nucleus easy | 0.130 | 3 | 0.36 |
| 3 | Having natural beauty of what was interesting about it | 0.150 | 4 | 0.60 |
| 4 | High having historical value | 0.150 | 4 | 0.60 |
| 5 | Mileage objects not too far | 0.130 | 3 | 0.36 |
| 6 | Various kinds of businesses order of the local community | 0.140 | 4 | 0.56 |
| 7 | Uniqueness any object site religious | 0.150 | 4 | 0.60 |
| Total score <i>Strength</i> | | 1.00 | | 3.68 |

Source: Data Processed by Researchers 2019

The table above shows Summary's Internal Strategic Factor Analysis (IFAS) score of 3.68 can be said to have significant strength. Based on these data it can be concluded that seen from the internal strength of the development of cultural tourism based on the religiosity of the Religious Sites in Banyuwangi Regency a considerable opportunity.

Whereas summary of Internal Strategic Factor Analysis (IFAS) table of Weakness can be seen in the following table.

Table 2. Summary of Internal Strategic Factor Analysis (IFAS) of Weakness

| No. | Variable (Weakness) | Scor | Rating | Total |
|----------------------------|-------------------------------------------------------------------|-------|--------|-------|
| 1 | Accommodation are still inadequate | 0.150 | 4 | 0.60 |
| 2 | Many objects are not maintained | 0.150 | 3 | 0.45 |
| 3 | Lack of community awareness of the religious site | 0.150 | 3 | 0.45 |
| 4 | Lack of pentaan environment | 0.150 | 3 | 0.45 |
| 5 | The management of an object | 0.130 | 2 | 0.26 |
| 6 | Lack of information tourism | 0.140 | 3 | 0.42 |
| 7 | Tourism players ignorance about the history of the religious site | 0.130 | 3 | 0.39 |
| Skor Total <i>Weakness</i> | | 1.00 | | 3.02 |

Source: Data Processed by Researchers 2019

The table above shows that Summary's Weakness Internal Strategic Factor Analysis (IFAS) score is 3.02. This number is included in the high category of each indicator used as an assessment. This is because it is influenced by several factors such as lack of accommodation, many objects that are not maintained, lack of tourism information, and ignorance of the public and tourism actors about the existence and history of existing Religious Site objects with fairly high weights and ratings.

The analysis of external factors is intended to determine opportunities and threats in developing cultural tourism based on the relics of religious sites in Banyuwangi Regency. The indicators analyzed in EFAS, namely from the Opportunity perspective, increased local and foreign tourist arrivals, strategic location, legal certainty about cultural images, the need for alternative tourist destinations, the cooperation of local governments and investors, the support of actor's tourism, cultural uniqueness and local wisdom of the people. The results of the formulations that have been made, can be seen in Table 3.

Table 3. External Strategic Factor Analysis Summary (EFAS) Opportunity

| No. | Variabel (Opportunity) | Score | Rating | Total |
|-------------------------------|-----------------------------------------------------------------------------------|-------|--------|-------|
| 1 | Increase of visits local and international tourists | 0.150 | 4 | 0.60 |
| 2 | Strategic location | 0.150 | 4 | 0.60 |
| 3 | The legal certainty protection religious site | 0.150 | 4 | 0.60 |
| 4 | The need for an alternative form of tourist destination | 0.150 | 4 | 0.60 |
| 5 | Intertwining the cooperation between the government , investors and the community | 0.130 | 3 | 0.39 |
| 6 | Support the tourism | 0.130 | 3 | 0.39 |
| 7 | Cultural values local wisdom and local community | 0.140 | 4 | 0.56 |
| Skor Total <i>Opportunity</i> | | 1.00 | | 3,74 |

Source: Data Processed by Researchers 2019

The table above shows that the total score of opportunity (Opportunity) is 3.74. The figure shows that the development of cultural tourism based on relics of Religious Sites in Banyuwangi Regency has a very large opportunity.

As for the results of the threat formulation can be seen in Table 4.

Table 4. Summary External Strategic Factor Analysis (EFAS) Threats

| No. | Variabel Threats | Scor | Rating | Total |
|--------------------|------------------------------------------------------------------------------------|-------|--------|-------|
| 1 | Competition with other regions in the development of tourism | 0.150 | 3 | 0.45 |
| 2 | Damage to object religious site because nature and human | 0.150 | 3 | 0.45 |
| 3 | Change in the mindset community | 0.120 | 2 | 0.24 |
| 4 | Increasing the newcomers | 0.140 | 2 | 0.28 |
| 5 | Lack of the understanding of the community and actors about site religious tourism | 0.150 | 2 | 0.30 |
| 6 | he environment in unholy around the object | 0.140 | 2 | 0.28 |
| 7. | Security for participants and communities around the places. | 0.150 | 3 | 0.45 |
| Skor Total Threats | | 1.00 | | 2.45 |

Source: Data Processed by Researchers 2019

Table 4 shows the total threat score (Threats) is 2.45. Based on the table, there are two indicators that have a significant threat, namely competition with other regions and damage to religious sites.

From the overall Summary Internal Strategic Factor Analysis (IFAS) and Summary External Strategic Factor Analysis (EFAS) above, it can be concluded that Summary's Internal Strategic Factor Analysis (IFAS) score is 3.68, while the Summary's Internal Strategic Factor Analysis (IFAS) Weakness is 3.02. Thus the difference between IFAS (Strength and Weakness) scores is 0.66.

Also known is the score for the Summary External Strategic Factor Analysis (EFAS) table, the overall Opportunity total score is 3.74 while for Threats is 2.45. The total score difference between Opportunity and Threats is 1.29.

After knowing the results of the scores for each internal and external matrix, the next stage is the analysis phase. Internal-external analysis is carried out to sharpen the results of the evaluation and analysis that have been done before. This analysis will produce an internal-external matrix which is useful to determine the position of the development of cultural tourism based on the relics of Religious Sites in Banyuwangi Regency. The results of internal and external matrix analysis can be illustrated in the following diagram.

Information:

- Total Strength Score : 3.68
- Total Weakness Score : 3.02
- Total Opportunity Score : 3.74
- Total Treats Score : 2.45

Then the determination of the Cultural Tourism TOWS matrix based on the Religion of Religious Sites is as follows.

- Coordinate of Internal Analysis

X-axis = Strength Score - Weakness Score = 0.66

- Coordinates of External Analysis

Y-axis = Opportunity Score - Threat Score = 1.29

So, it can be concluded that the position of the coordinates lies in. For more clearly drawn with TOWS analysis can be seen in Figure 4.

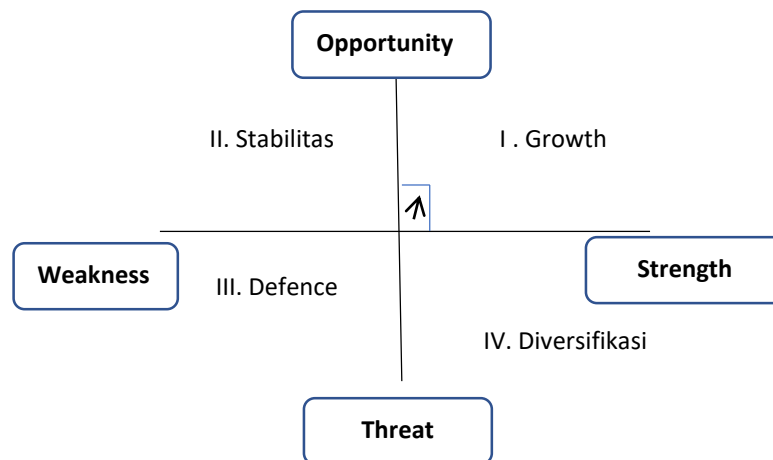


Figure 4. TOWS Analysis

Mapping of each total score from internal and external factors illustrates the position of the development of cultural tourism areas based on relics of Religious Sites in Banyuwangi Regency, which is the combined quadrant located on the coordination point (0.66: 1.29).

Judging from the external factors it seems that for the area at the eastern end of the island of Java, there is no area that can compete.

From some of the explanation above, the right strategy in developing religious tourism in Banyuwangi Regency includes:

1. Arranging the environment around the Religious Sites, preserving the relics of the Religious Sites and the environment, improving accommodation access to the Religious Sites area.
2. Improving facilities and infrastructure to support the religious sites tourism area; developing the area of Religious Sites; improve the management of the tourism sites Religious Sites.
3. Maintain and improve cleanliness, environmental security and the structuring and maintenance of Religious Site assets; provide assistance and training to the public and tourism actors related to the relics of Religious Sites.
4. Collaborating with other parties (investors) to develop the Religious Site area and other industries such as cinema, and tourism actors.
5. Establish tourism centers and information in each area of tourism objects and strategic places both in the Banyuwangi area and tourist attractions outside Banyuwangi.
6. Providing language training to the community around the object of Religious Sites.
7. Providing understanding to the public and tour operators about the history of Religious Site objects.

CONCLUSION

Banyuwangi has many religious sites that have the potential to be developed into religious tourism objects, including: the Lingga and Yoni relics in Jambewangi; Alaspurwo; Rowu Bayu Site; Ompak Songo; Aningpatih Site; Kawitan Sites; Goa Site at Alaspurwo; Image Worship Site; Goa Maria; Tomb of Sayid Yusuf; Tomb of Mbah Dowo; Tombs of the Regent of Banyuwangi; Konco Hoo Tong Bio; Tomb of Jogopati Rempeg; Sri Tanjung Well; Mbah Kopek's Grave; Giri Salaka Temple.

The development of integrated tourism is by combining various potentials owned by Banyuwangi to become a tourist attraction both natural, cultural, historical, and religious tourism potential. The integrated concept is used to provide its own color for tourists, so they do not get bored in watching tourism. Whereas the right strategy to develop religious tourism

is to organize the environment, improve the facilities and infrastructure to support tourism areas, collaborate with other parties (investors), establish tourism center and information. The recommendations that can be submitted are: The concept of the development of religious tourism is very relevant to be applied in Banyuwangi Regency, but it must be by using the concept of integrated religious tourism development and integrated with the potential of the village for example natural, cultural, and artistic potential.

There needs to be an integrated information center in Desa Patoman and strategic places such as Blimbingsari Airport as a place to carry out promotions related to the benefits of Banyuwangi Regency, both tourism and other potentials such as MSMEs, and agricultural products to support the development of Religious-based Religious Tourism.

There needs to be an increase in cultural and artistic attractions to attract tourists to visit Banyuwangi Regency. Banyuwangi Regency needs to be used as a model in managing religions so that conflicts do not occur but provide economic impacts for the community.

The development of the environment needs to pay attention to local customs so that it has the value of beauty and increases the attractiveness of tourists to visit. There is a need for training for the general public of Banyuwangi Regency in the development of attitudes related to the system of cramping and values in welcoming tourists who visit.

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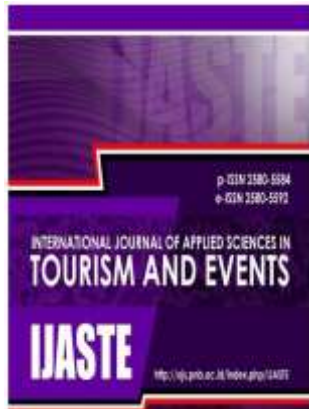
Creative and Innovative Community-Based Tourism Management in Tegal Waru, Bogor

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Abstract

Purpose: The purpose of this research is to see how the management of creative and innovative community-based tourism villages.

Research methods: The approach method used is an empirical normative approach and uses qualitative methods and direct field research on research objects that are related to the problem under study.

Results and discussions: Tegal Waru tourism village is a rural tourism area that has a variety of agricultural production businesses and entrepreneurs. Community participation in the development of tourism villages is very high. There are tour packages offered including entrepreneur training, charity creativity, outbound on the road, consumption packages, souvenir packages, shopping centers, tourist attractions, business tourism village locations.

Conclusion: Community participation is very high in implementing this village tourism program, because they feel an increase in income and economic life.

Keywords: *Business, community participation, tourism village management model*

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INTRODUCTION

Indonesia is a beautiful country, especially the problem of tourism which contributes significantly to development. Tourism villages in Indonesia are currently well developed. In addition to increasing the number of tourism packages based on rural resources, at present there are many villages that have developed locality-based tourism, such as homestays. However, there are still many tourism activities in rural areas that tend to exploit existing resources. The purpose of building a tourism village is no longer for the welfare of the community and the preservation of the village environment but only to catch up with the number of tourist visits. As a result, many rural tourism attractions are damaged due to the forms of mass tourism that are carried out, even though this will damage long-term rural resource.

A tourism village is a form of integration between attractions, accommodation and facilities that are presented in a structure of community life that integrates with local traditions (Directorate General of Destination Mining, 2009). Tourism village is an alternative tourism

development approach, developing a tourism village as a center for economic, social and cultural activities, one of which can be done by utilizing local commodity-based resources. Tourism Development Strategy is needed for the realization of community welfare (Carlsen & Butler, 2011).

An important element of the development of a sustainable tourism village (Satrayuda, 2010) is training of the community from various levels of education, considering that the management of the village requires quality and professional human resources, another important element is the formation of local entrepreneur groups and their development so that they are able to produce local products such as handicrafts, food/ typical drinks, and other products that can promote the distinctiveness of a tourism village. Bogor Regency, one of the areas in West Java Province and is located in West Java, is a city as a destination for tourist visits that is quite large, reaching 8,625,299 people for domestic tourists and 166,071 people coming from abroad (BPS Bogor district, 2018). It can be said that Bogor district has an attractive tourist destination. One of the signs is the number of hospitality businesses and tourists who continue to experience growth every year and also the attraction of a tourism village where currently there are 25 tourism villages that are well coordinated by the Bogor Regency Tourism Office.

Bogor Regency can be categorized as an area with various potentials, one of which is the potential of a tourism village which is developed into one of the tourist destinations in Bogor Regency. The development of tourism villages cannot be separated from economic factors, namely by increasing the number of tourism villages, the welfare of the people in Bogor Regency will increase.

Based on the background of the problem above, the formulation of the problem is how is the Management Model of Tegal Waru Tourism Village Based on Creative and Innovative Communities in Ciampea Bogor Regency. While the purpose of this study is to see how the management of creative and innovative community-based tourism villages (or Creanova).

RESEARCH METHODS

The approach method uses qualitative methods as well as direct field research on the object of research that is related to the problem under study with the method of data collection through in-depth interviews. Research is carried out by interviewing the regional tourism office and the tourism awareness group that oversees the tourism village carried out with Focus Group Discussion (FGD) and also observation. The selection of informants is based on the criteria that the person concerned understands the business process being carried out and is a stakeholder in the Tegal Waru Tourism Village.

This research is located in Bogor Regency, West Java Province. The research object is a model of a tourism village in Bogor Regency. The type of data used is qualitative data. This type of data is taken from primary data sources which are obtained directly from the survey results. Qualitative data is data in the form of transcripts of interviews, comments from tourists, statements or categories that contain quality and are not numeric (Sudjana, 1996) which cannot be calculated using statistical or mathematical tools. The instrument used in this study, a closed list of questions in the form of interviews.

In developing a tourism village, community involvement is an absolute prerequisite. However, when it comes to involving the community so that they want to participate in the process of developing a tourism village, it cannot just happen. Because every society has its own characteristics. Every community has the potential for conflict and factions. The biggest obstacle usually lies in the issue of capacity and community understanding of the tourism village. Involving the community is the main prerequisite so the process of providing understanding and capacity building often takes a long time.

RESULTS AND DISCUSSIONS

Bogor Regency has several exotic tourist attractions, one of which is in Tegal Waru Village, Ciampea District, Bogor Regency. The business model of those who are often marginalized can also be a source of income.

Tegal Waru Village, which is located at the foot of Mount Salak Bogor, where the air is still very clean, free of pollution, makes us feel at home to stay there for a few days. In this Tegal Waru business tourism village (KWBT), there are several business centers that we can visit and can learn to know what business concepts and creative ideas are made by the village community.

Tegal Waru Tourism Village is a village that has succeeded in managing its natural and human resources so that it becomes a source of competitive advantage through the formation of a Business Tourism Village which is still rare in Indonesia. A unique business model, which offers entrepreneurship education with a value proposition to educate everyone to become an entrepreneur by relying on their core competences and resources with a philosophy to benefit many people. The communities around the village of Tegal Waru Bogor are given entrepreneurship education by directly practicing certain businesses using various mutually agreed methods. In the process and results of the social entrepreneurship practice of KWBT social entrepreneurs there have been 3 (three) types of empowerment, namely 1) economic empowerment; 2) educational empowerment; 3) social empowerment. By empowering the community in Tegal Waru Village by the KUNTUM Indonesia Foundation, the community can carry out their social roles well. The use of resources owned by a region can be a source of competitive advantage when managed properly, considering that each region has a different context.

Tegal Waru Village is a tourism village management activity, with a model of utilizing existing resources and can be a source of excellence and managing it differently from other places. The concept of Tegal Waru Village is to improve small and medium enterprises (UKM) in the context of empowering the surrounding community. This village was founded in 2010 and has been able to improve the village's UMKM business. A very simple and creative concept to build a tourism village area without having to think complicated to find investors, only with togetherness and enthusiasm to move forward, Tegal Waru villagers are able to make their village a business tourism village. Currently the village is described as a tourism village by mentioning the Tegal Waru tourism village. Tegal Waru tourism village currently has various businesses as in below table.

Table 1. Types of business in Tegal Waru Tourism Village

| No | Business Name | Information |
|----|--------------------------------------------|----------------|
| 1 | Processed medicinal plants/ herbs | |
| 2 | Ranch | |
| 3 | Ice Cream Making | |
| 4 | Craft Bags | |
| 5 | Cake | |
| 6 | Bronis Cake | |
| 7 | Craft Industry | |
| 8. | Accessories | |
| 9 | Patin fish, catfish seeds, freshwater fish | |
| 10 | Coconut Jam | |
| 11 | Nata de coco processing | Merk Wong coco |
| 12 | Paper recycling crafts | |
| 13 | Machete industry, hoe, booth | |
| 14 | Rabbit cattle | |
| 15 | Goat/ sheep, cow | |
| 16 | Yogurt production | |
| 17 | Various chips | |
| 18 | Puppet show | |
| 19 | Drum | |
| 20 | Flour trinkets | |
| 21 | Hijab industry | |
| 22 | Jacket craft | |
| 23 | Donut | |

| | | |
|----|--------------------------|--|
| 24 | Crackers | |
| 25 | Oyster Mushroom | |
| 26 | California Papaya, | |
| 27 | Crystal Guava and others | |

Source: Processed data (2020)

According to the pioneers, the establishment of this village, namely Tatic, mentions that there is a uniqueness of the village of Tegal Waru, since its establishment nine years ago, it has been visited by more than 500 thousand tourist visitors, to see the uniqueness of this tourism village so that visitors are inspired after visiting this tourism village. The partnership that has been established by the Tegal Waru tourism village is with 15 types of MSMEs from 35 UKM products. It turns out that the uniqueness of this village looks different from other villages in Bogor district, namely, from various types of businesses, there are all here and including to learn the theory of the marketing business. In addition to various businesses in Tegal Waru village, there are also residents who focus on providing training for residents and visitors who come and want to learn about processing medicinal plants, cakes and so on, and not only that, they are often invited to various regions to provide this training.

As explained by the pioneers of business activities in the village of Tegal Waru, in addition to partnerships, the pioneers of this tourism village also provided capital assistance to business actors and assisted in their marketing which was carried out both traditionally and online marketing of products produced through online services has been to several countries such as for herbs sent to Malaysia, Hong Kong, and Saudi Arabia. Not only for foreign consumption, but domestic products have also entered all regions with the cheapest price of 10,000-200,000 from various types of herbs. With the condition of MSMEs where their management is still conventional, in order to improve the quality and quantity of products that are competitive, Tegal Waru MSMEs from time to time need to be branding through trademark registration, association creation and e-commerce optimization.

From the product which is quite good to the turnover value. In the bag business, for example, they get a net profit of up to 20 million rupiah per week. as well as the nata de coco business, crackers, animal husbandry, etc. So far, there are several products that are routinely marketed in sub-districts such as crackers and other foods. Some go through an agent to Pasar Senen like a bag. There are also traders such as catfish seeds. Then through the online shop and various media and TV. For this media, it does not incur any advertising costs at all but through diligently writing and inviting journalists to raise the business profile of the Tegal Waru village and with this media the upstream and downstream chains can be directly connected. Every event, inviting journalists to cover and to survey and hold visiting students and their retired guardians. There is also an association of PAUD (kindergarten) teachers, POLDA (regional police) throughout Indonesia, and even schools outside West Java.

The visitor response was satisfied with all the training provided and inspired to do a home industry-based business. Over time, SMEs with new products continue to grow. The turnover of Tegal Waru's UMKM reaches 2 billion rupiah, there is a profit sharing, as the manager gets the benefits of the event, and the SMEs get a fee (ticket) from every visitor, while the transaction results from the sale of the product are fully owned by the UKM. Every purchase from visitors who come, at least each UKM can get sales of at least 700 thousand rupiah and even up to 2 million rupiah. All women caretakers and the mission of this foundation is to advance rural women and provide creativity training for them to have skills and be economically independent in their families. This means that without having to work outside the home, they have been able to provide additional income for their families. Several SME centers that become partners are believed to be the best herbal centers in Bogor Regency and have participated in several provincial competitions.

Table 2. UKM that have been covered by Media or TV

| No | Name TV | Activities |
|----|---------|-------------|
| 1 | ANTV | Great women |

| | | |
|---|---------------------|----------------------------------------------------|
| 2 | MNCTV | Morning coverage, Afternoon inspirations, Among us |
| 3 | Trans 7 | Unyil's laptop |
| 4 | Metro TV dan NET TV | Knitting Asa |

Source: Processed data (2020)

In addition to the development of SMEs, there are also tour packages offered, including entrepreneurial training, charity creativity, outbound on the road, consumption packages, gift packages, shopping centers. Facilities that do not yet exist in Tegal Waru are, among others, as in the following table

Table 3. The planned facilities were built

| No | Amenities | Allocation |
|----|--------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| 1 | Permanent training center | Procurement of training |
| 2 | PesantrenPreneur | BMI ex Hong Kong |
| 3 | Building a sharia financial institution | To be a pioneer |
| 4 | Community based business incubator | Which is used as an example for other regions |
| 5 | Continue to campaign for the role of female social entrepreneurs around the world. | |
| 6 | Want to build a new SME plasma in Tegal Waru | |
| 7 | Make the KWBT cluster as the core plasma (welcome area) | |
| 8 | Socializing to many parties about Tegal Waru's UKM | |
| 9 | Producing these UKM owners who are knowledgeable and able to transfer their experiences to many people | |

Source: Processed data (2020)

CONCLUSION

The results of the study are. Tegal Waru tourism village is a rural tourism area that is no less interesting and offers cultural potential. Has various agricultural production businesses as well as entrepreneurship

The model applied in the Tegal Waru tourism village is a village model that manages its natural and human resources so that it becomes a source of competitive advantage through the formation of a Business Tourism Village which is still rare in Indonesia.

Community participation in the development of tourism villages is very high. In addition to various business prospects, there are also tour packages offered including entrepreneurial training, charity creativity, outbound on the road, consumption packages, gift packages, shopping centers, tourist attractions, business tourism village locations, while visitors are from domestic and foreign.

Community participation is very high in implementing this tourism village program, because they feel an increase in income and economic life.

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Aspiring Pangandaran Geopark to Promote Sustainable Tourism Development

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Abstract

Purpose: The main purpose of this research is to identify and map geological and non-geological potentials based on three main pillars in the development of Aspiring Pangandaran Geopark, namely geodiversity, biodiversity and cultural diversity.

Research methods: Primary data were obtained through field observations and semi-structured interviews with actors directly involved in the tourism development of the Aspiring Pangandaran Geopark. Meanwhile secondary data collection through desk study. This qualitative study uses interactive analysis model and map analysis (using ArcGIS 10.3 software).

Results and discussions: There are 18 geological sites based on geodiversity, 2 sites which has biodiversity in the form of rare bird ecosystems, and also around 14 sites based on cultural diversity identified through desk study and field survey.

Conclusion: Each district in Pangandaran has enormous potential which is the basis for the formation of the Aspiring Pangandaran Geopark. In addition to geological sites, many non-geological sites can be developed into geotourism attractions with high cultural and biodiversity values.

Keywords: *aspiring geopark, geotourism, geopark, Pangandaran Regency, sustainable tourism*

INTRODUCTION

Pangandaran Regency is one of the regencies in West Java which is a new autonomous region resulting from the division of Ciamis Regency on October 25, 2012. In accordance with its vision of "Pangandaran Regency as a World Class Tourism Destination", making Pangandaran Regency one of the regencies that determine the sector tourism as the main economic driver. As also stated in the Tourism Development Master Plan (*RIPPARDA*) of West Java Province in 2016-2025 that Pangandaran Regency is one of the centers of Tourism Destinations in the southern part of West Java Province.

Contrary to this vision, according to the Big Plan of West Java Province World Tourism Destination Development document, published by the West Java Province Regional

Development Planning Board (*BAPPEDA*) in 2017, developing coastal tourism in the Pangandaran area tends to lead to mass beach recreation which is feared to cause potential problems if the development is left. For this reason, proper planning and policy direction is needed to develop the Pangandaran area in a sustainable manner.

Since 2015, the government, both at the central and regional levels, began to talk about tourism development priorities in Pangandaran Regency to become a world-class tourist destination that began with the initiation of the proposal for Pangandaran Regency as a *Kawasan Ekonomi Khusus (KEK)* and global geopark (Fitriani, et al. 2018). In addition to being a globally competitive destination, if these efforts (in particular the global geopark proposal) can be realized, it is hoped that the Pangandaran tourism area can further develop based on the principles of conservation, education, and sustainable economic development of the community. In accordance with the main objectives of the development of geopark.

According to Oktariadi (2015) three main pillars in the development of earth parks, namely geological diversity, biodiversity, and cultural diversity. The three pillars constitute an ecosystem order in geopark where there is a reciprocal system of abiotic elements (geodiversity) which affects the life order of biotic elements (biodiversity) and the culture of the surrounding community (cultural diversity). This is in line with research conducted by Pásková & Hradecký (2014) regarding Aspiring Rio Coco Geopark in Nicaragua where they argue that other geological and natural heritage as well as local indigenous cultures are basic capital drawings for aspiring geoparks to become part of the UNESCO Global Geopark Network for sustainable tourism destinations. Based on Republic of Indonesia Presidential Regulation (Perpres) number 9 of 2019 on geopark is:

“A single or combined geographic area, which has valuable geosites and landscapes, related to geoheritage, geodiversity, biodiversity, and cultural diversity aspects, and is managed for conservation, education and sustainable economic development of the community with the active involvement of the community and government so that they can be used separately to foster understanding and awareness of the community towards the earth and the environment” (Perpres number 9 of 2019).

Holistic concept of geopark is include conservation, education and sustainable development. All UNESCO Geopark have to promote educational activities for people all ages in order to raise awareness of geological heritage and its relationships with other aspects of natural, cultural, and intangible heritage. Nowadays based on Global Geopark Network created to education and to sustainable Development Goals for significantly contribute Sustainable Tourism development (Catana & Brilha, 2020).

Through the principles of conservation, education, and economic development for local community, geopark concept can make Pangandaran Tourism Destinasion more sustainable. Later, Aspiring Pangandaran Geopark can be determined as a national geopark, aspiring UNESCO Global Geopark, until it is determined as UNESCO Global Geopark.

Geopark involve locals in conservation's activities, and community believe that conservation the geopark improve the local economy. It can related According to the UNESCO's recommendations, the criteria for a geopark include size and setting, management and local involvement, economic development, education, protection and conservation, and global network (Farsani et al., 2011). Tavares et al., (2020) in “The Inventory of the Geological and Paleontological Sites in the Area of the Aspirant Geopark Bodoquena-Pantanal in Brazil” explained that the importance of geopark, beyond the social and economic benefit is the ability to tell geological history. To promote geopark to become sustainable tourism is considered story about geological site such as early metazoans etc.

This research is to seek and identification potential geotourism in Pangandaran to promote as sustainable tourism. In other hand, result previous research considering the presence 12 geosite among 51 inventoried with international scientific relevant to proposed to a geopark. In fact, there is no further research related to the identification of the potential of Aspiring Pangandaran Geopark based on three pillars of diversity. Previous research related to the Pangandaran Geopark aspiring was only enriched by the identification of the potential

diversity of rare bird species in prospective geopark areas to support biodiversity (Muladi et al., 2018) and the development of tourism models based on local wisdom tourism (Bakti et al., 2018).

To support the acceleration of the realization of Pangandaran Regency to become a UNESCO Global Geopark as envisioned by the local government, various initial activities must begin to uncover the potential of Pangandaran Regency to be proposed to become a geopark. In line with what was revealed by Oktariadi (2015), the Republic of Indonesia Presidential Regulation Number 9 of 2019 concerning the Development of Geoparks explained that, to make an area a geopark, adequate data and information are needed and meet the established criteria of having a geological heritage related to geodiversity, biodiversity, and cultural diversity. So this study aims to identify the potential of Pangandaran as an aspiring geopark and mapping the potential distribution based on geodiversity, biodiversity, and cultural diversity. Later it can be a reference in planning the development of geopark areas in the future Pangandaran Regency.

RESEARCH METHODS

This type of research is survey-based research. The approach used in this research is qualitative research, with an analysis unit of geodiversity, biodiversity, and cultural diversity potential (which refers to theories from Oktariadi, 2015 about the 'dimensions of geopark forming') at 10 districts in Pangandaran Regency (Cijulang Sub-district, Cimerak, Cigugur, Kalipucang, Langkaplancar, Mangunjaya, Padaherang, Pangandaran, Parigi, and Sidamulih Sub-district). This research was conducted from June 2019 to October 2019. The data used consisted of primary and the secondary data.

Primary data were obtained through field observations at Pangandaran Regency and semi-structured interviews. Secondary data collection through desk study in the form of spatial information, policy documents (*BAPPEDA*, the Department of Tourism and Culture of Pangandaran Regency, and etc), and previous studies related geoparks.

Observation activities aim to determine the position of geodiversity, biodiversity, and cultural diversity potential on satellites using some software like Global Positioning System (GPS) technology through Timestamp Camera Basic software (Version 1.101 for iOS 8.0 or later). The results of observational data are processed through data collection (coordinate transformation, digitization, and editing), data plotting, and data conversion using Geographic Information System (GIS) software (ArcGIS 10.3 for Windows 10).

Interviews were conducted with actors directly involved in the tourism development of the Pangandaran Regency, including managers of each geotourism attraction and the Tourism and Culture Office of Pangandaran Regency. The determination of data sources on the interviewee is done purposively (purposive sampling), which is chosen with specific considerations (Sugiyono, 2010). The scope of the questions in the interview related to the 'general description of tourism', 'the direction of tourism development', and 'tourism management' in the Pangandaran Regency.

This study uses interactive analysis model and map analysis. All of interview data were analyzed by applying content analysis in order to systematically exploring the content of information from the collected data (Robson, 2002; Hsieh & Shannon, 2005). The steps or stages in the interactive analysis model are divided into three concurrent flows of activity (Miles et al., 2014): (1) Data condensation (refers to the process of selecting, focusing, simplifying, abstracting, and/ or transforming the data that appear in the full corpus or body of written-up field notes, interview transcripts, documents, and other empirical materials), (2) Data display (display is an organized compressed assembly of information that allows conclusion drawing and action), and (3) Conclusion drawing. While the map analysis is done to design the Pangandaran Geopark Distribution Potential Map of Aspiring with the Steps previously described above.

RESULTS AND DISCUSSIONS

General Conditions of Pangandaran Regency

Pangandaran Regency is geographically located at coordinates 108° 41-109° E and 07° 41-07 50 S. Pangandaran Regency has 10 districts and 93 villages. In 2017, the population reached 406,898 people with an area of 168,509 Ha. Pangandaran Regency boundaries are Ciamis Regency and Banjarsari City on the north side, Parigi District on the west side, Cilacap Regency on the east side, and Indian Ocean on the southern side. Map of Pangandaran Regency administration can be seen on Figure 1.

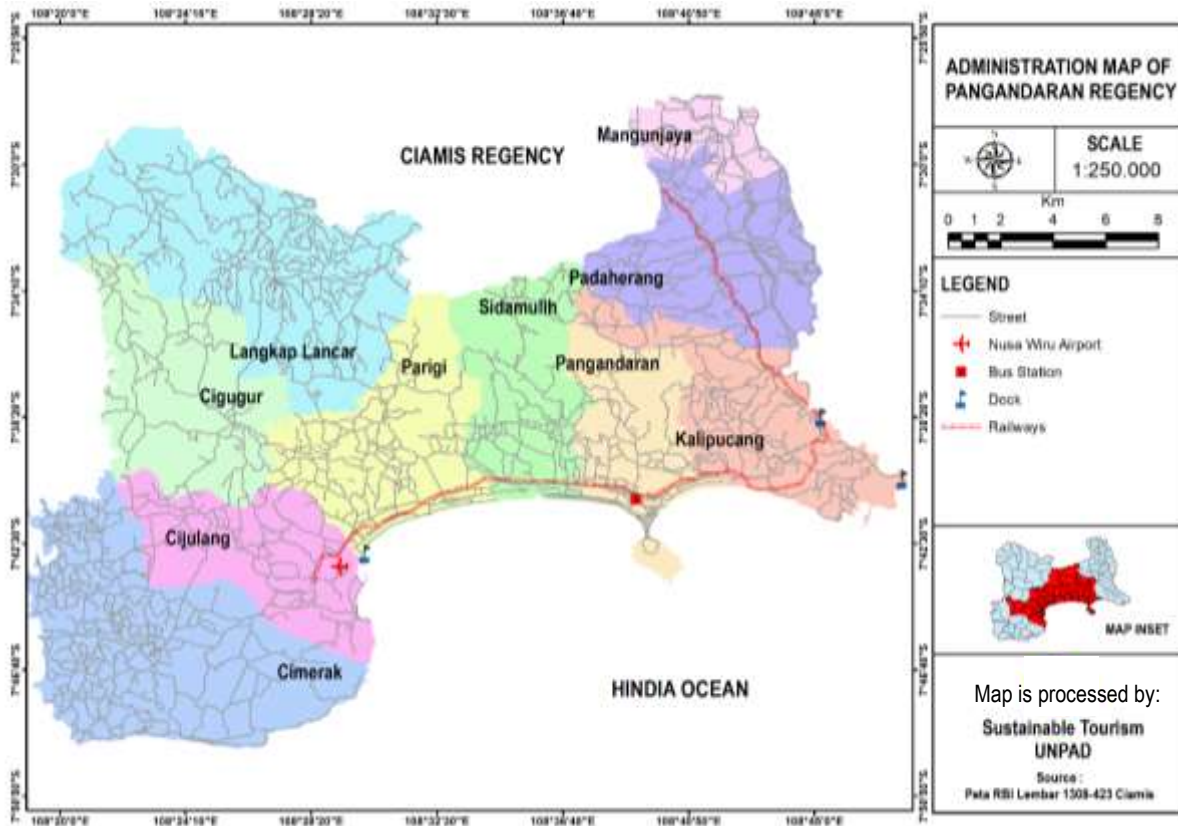


Figure 1. Map of Pangandaran Regency Administration
(Source: Processed by researchers, 2019)

From the perspective of geology, Aspiring Pangandaran Geopark and surrounding areas have 6 (six) rock formations namely jampang formation rock, pamutuan, calcutite members of Pamutuan formation, members of tuff marathon pamutuan formation, kalipucang formation, and alluvial deposits. In terms of disasters, Pangandaran's tsunami potential is at the highest position compared to other tsunami potentials in other coastal areas in West Java. The strong earthquake on July 16, 2006 provided strong evidence of environmental changes from the pre-tsunami lagoon to the mainland after the tsunami sand was deposited showing the magnitude of the earthquake that occurred at that time until a tsunami wave occurred and accompanied by land elevation. Aspiring Pangandaran Geopark itself is a tourism destination that has the main theme of coastal tourism. Seen from the beach line that has a variety of configurations ranging from white sandy beaches, rocky, with calm waters to high waves. There is also a karst area which is a diversity of geological heritage owned by Pangandaran Regency.

Potential of Geodiversity, Biodiversity, and Cultural Diversity of Pangandaran Regency

Based on the results of data verification, most of them were agreed to be inventory into three forms of diversity (geodiversity, biodiversity, and cultural diversity), so below is a mapping of potential in each district in the Pangandaran Regency (Table 1).

Table 1. Three Pillars of Aspiring Pangandaran Geopark

| DISTRICTS | PILLARS | | |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | GEODIVERSITY | BIODIVERSITY | CULTURAL DIVERSITY |
| Cijulang | <ol style="list-style-type: none"> 1. Cijulang River 2. Muarabengang Cave 3. Cisamping Lake 4. Green Canyon 5. Batu Karas Beach 6. Bau Cave 7. Palatar Dermaga 2 Cukang Taneuh | <ol style="list-style-type: none"> 1. Kertayasa Village | <ol style="list-style-type: none"> 1. Sagati Cultural Park 2. Saung Angklung Mang Koko 3. Gurame Cultivation |
| Cimerak | <ol style="list-style-type: none"> 1. Hutan Pagar Bumi Beach 2. Muara Getah Beach 3. Keusik Luhur Beach 4. Cikaracak Beach 5. Legokjawa Beach 6. Bagong Cave 7. Kolor Cave 8. Madasari Beach 9. Karang Seugeuh Beach 10. Sawer Waterfall 11. Jojongor Beach 12. Pacuan Kuda Legok Jawa | - | <ol style="list-style-type: none"> 1. Salt Mine |
| Cigugur | <ol style="list-style-type: none"> 1. Panorama Pasir Bentang 2. Muara Cijalu River 3. Leuwi Kerti River 4. Leuwi Leutak Waterfall 5. Deng-Deng Waterfall 6. Pagar Bumi Forest 7. Ciwayang River 8. Cipatahunan River | - | - |
| Kalipucang | <ol style="list-style-type: none"> 1. Haur Mountain 2. Karang Nini Beach 3. Karapyak Beach 4. Solok Timun Beach 5. Donan Cave 6. Majingklak 7. Tpi Palatar agung 8. Nusa Werek Cave 9. Batu Kasur Beach | - | - |
| Langkaplancar | <ol style="list-style-type: none"> 1. Parang Mountain 2. Langkob Cave 3. Bilik Waterfall 4. Tanjung Waterfall 5. Luhur Waterfall | - | <ol style="list-style-type: none"> 1. KH Abdul Hamid Cultural Reserve |
| Mangunjaya | - | - | <ol style="list-style-type: none"> 1. Majapahit Heritage Site |
| Padaherang | <ol style="list-style-type: none"> 1. Pemandian Air Panas 2. Cileutik Tonjong Waterfall 3. Bunton Waterfall 4. Cipalungpung Cave | | <ol style="list-style-type: none"> 1. Dayang Sumbi Cultural Reserve 2. Syekh Muhtar Cultural Reserve 3. Jagapati Cultural Reserve 4. Gedeng Mataram Cultural Reserve |

| | | | |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | 5. Syekh Abdullah Ciayam Cultural Reserve 6. Lingga Kencana Cultural Reserve 7. Eyang KH Santarudin Cultural Reserve 8. Astana Budha Cultural Reserve |
| Pangandaran | 1. Barat Pangandaran Beach 2. Timur Pangandaran Beach 3. Bojong Waterfall 4. Badak Paeh Cave 5. Bojong Lekor Cave 6. Pingit River 7. Jembe Enum Waterfall | 1. Natural Reserve & Nature Tourism Park Pananjung | - |
| Parigi | 1. Citumang River 2. Santirah River 3. Lanang Cave 4. Sutra Regregan Cave 5. Jogjogan 6. Batu Hiu Beach 7. Batu Lumpang 8. Pepedan Hill | - | - |
| Sidamulih | 1. Pule Waterfall 2. Komplek Sodong Panjang 3. Karang Tirta 4. Kurung Waterfall | - | - |

(Source: processed by researchers, 2019)

1. Geodiversity Potential of Pangandaran Regency

According to Presidential Regulation Number 9 of 2019 Concerning Geopark Development, geological diversity is a description of the uniqueness of geological components such as minerals, rocks, fossils, geological structures, and landscapes that form the intrinsic richness of an area and the existence of a wealth of distribution, and conditions that can represent the geological evolutionary process of the area. Following are a few examples of the diversity of geological resources owned by Pangandaran Regency:

1.1 Green Canyon

Based on the Java-Bali Spatial Planning in Republic of Indonesia Presidential Regulation Number 28 of 2012, there is a geological protection area in Pangandaran based on special interest tourism. One of the objects identified as geodiversity is Cukang Taneuh or Green Canyon (Figure 2). This Cijulang karst area may not be well known by the public at large. However, the name Green Canyon or Cukang Taneuh, has been widely known as a natural tourist attraction located about 28 kilometers west of Pangandaran precisely in the Village of Kertayasa in Cijulang District, Pangandaran Regency. In terms of hydrogeology or the study of groundwater, not many people know that Green Canyon is a karst hydrogeology, the Cijulang Karst. The name Cijulang also comes from the name of the river that divides this karst region.



Figure 2. Green Canyon
(Source: Researcher documentation, 2019)

The groundwater flow system in the karst region is unique. This is due to the fact that water becomes a media to form its own flow area by dissolving rocks that pass under the surface of the soil. If the cavities formed from the dissolution result are interconnected, then a channel will form an underground river. At ground level, a karst area may not show water flow. However, just below it, in the caves, there may be a flow of water, both in the form of channels or rivers. These waterways beneath the surface are all formed by the dissolution process. With a wealth of scientific geological heritage, has a beautiful view and has a supporting function for the environment while contributing to the civilization of the local community, especially for tourism, the Green Canyon is considered to be appointed as Geoheritage Pangandaran Regency.

1.2 Lanang Cave

Lanang Cave is located in the village of Selasari, Parigi District, Pangandaran Regency and can be reached from the Pangandaran Coastal area for approximately 1.5 hours. The nickname of Lanang Cave is because there are sedimentary rocks shaped like male genitalia (in Sundanese, its called 'lanang'). This cave is a complex cave that has 9 (nine) caves, namely Petapan Cave, Adu Stone, Karaton, Tiger, Gugurah, Petir, Bagong, Apu and, Kaharti Kabawa. Lanang Cave is a karst cave complex in which many stalactites are found - stalactites with unique shapes (Figure 3). In terms of geology, related to the unique process of stone formation, it can be a source of interpretation to educate tourists. Because Interpretation is an important component in the development of geotourism (Wulung et al., 2019b).



Figure 3. Lanang Cave
(Source: Researcher documentation, 2019)

1.3 Bojong Waterfall

Bojong waterfall is located on the river Ciputrapinggan at coordinates 108° 40 '43.3" E and 7° 38 "46" S. This waterfall has a height of 5.5 m and is arranged by the Volcanic Breccia unit of the Jampang Formation, with the Monomic Components of Andesite Frozen Rock (Figure 4). In general, geologically the waterfall does not show any layers, the breccias that are exposed have a matrix of fresh gray tuff and weathered grayish black, hard, there is a Vesicular structure, large grains of medium-coarse, medium disaggregated, closed container, and there are Kuarssa, Biotite, and Feldspar Minerals. The Volcanic Breccia Unit is estimated to be in early Oligocene-Miocene age.



Figure 4. Bojong Waterfall
(Source: Researcher documentation, 2019)

2. Biodiversity Potentials of Pangandaran Regency

According to Oktariadi (2015), biodiversity is a term to express the level of biodiversity of natural resources which covers their availability and distribution of ecosystem diversity, species diversity, and genetic diversity. Biodiversity is part of the ecosystem which is very important not only for the sustainability of the ecosystem itself, but also is important for human life now and in the future (Withaningsih, 2017). The following below is an example of the biodiversity owned by Pangandaran Regency:

2.1 Bird Species Diversity in the Pananjung Nature Reserve and Cijulang Karst Areas

Based on the study of literature from the results of research conducted Mulaidi et. al, (2018) related to bird species diversity REEPS (Rare, Endangered, Endemic, Protected Species) in the Pangandaran Geopark Area candidate, West Java, the total number of bird species found in 45 species from 24 families with 14 species of birds found in both locations namely Pananjung Pangandaran Nature Reserve and Kertayasa Village. Then the diversity of bird species and the number of birds with protected status based on Government Regulation (PP) Number 7 of 1999 and CITES Appendix I and II in the Pananjung Nature Reserve and Nature Tourism Areas are higher than those in the Cijulang non-conservation karst area.

In the prospective geopark area there are 45 species of birds from 24 families, 40 of them were found in the Pananjung Pangandaran Nature Reserve, 19 species were found in Kertayasa Village, Cijulang District, and 14 species of birds were found in both locations. Recorded species of birds that dominate in both places are from the family Pycnonotidae with five species observed, namely Cucak Kuning (*Pycnonotus melanicterus*), Cucak Kutilang (*Pycnonotus aurigaster*), Merbah Belukar (*Pycnonotus plumosus*), Merbah Cerukcuk (*Pycnonotus plumosus*), and Merbah Corok-corok (*Pycnonotus simplex*).

2.2 Abiotic environment that supports biotic ecosystems in nature reserves and Pananjung Nature Tourism Parks

The Nature Tourism Park (NTP) and Nature Reserve (NR) Pananjung are located in one Pangandaran peninsula area with coordinates of -7.703608 S - 108.659184 E. Taman Wisata Alam occupies a small portion of the outer portion of the Pangandaran peninsula

(North, West and East) covering an area of 34,321 Ha, while the Nature Reserve covers an area of 454,615 Ha.

In the NTP and NR Panananjung areas there are diverse geological, biological and archaeological sites (Figure 5). Geological diversity that is there are Panggung Cave, Pangandaran Waterfall, and Layar Stone. While biodiversity in NR there are Cikamal Savana, fauna of monkeys, deer and buffalo, as well as flora such as Rafflesia Arnoldi (Bangkai Flower). While, then the existing archaeological site is the Kalde Stone Site and patilasan, one of the prominent figures who spread Islam in Pangandaran.

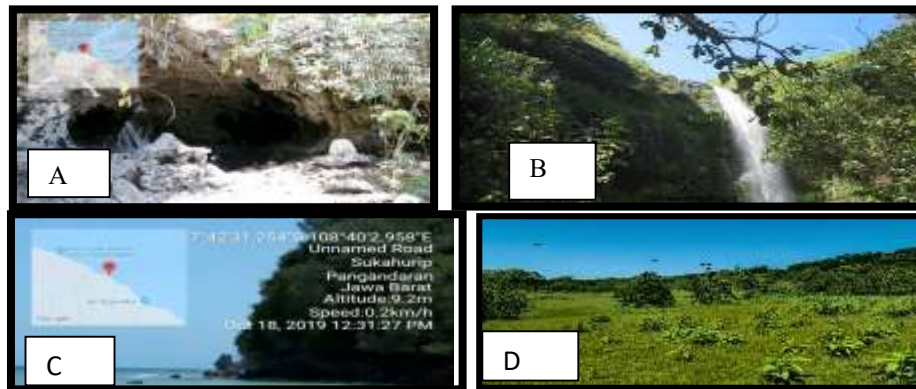


Figure 5. A) Panggung Cave; B) Pangandaran Waterfall;
C) Layar Stone; D) Cikamal Savana
(Source: Researcher documentation, 2019)

3. Potential Cultural Diversity of Pangandaran Regency

Cultural diversity is the work of art and culture of the surrounding community which is the result of human interaction with the natural surroundings. Cultural diversity is related to the understanding of local communities in responding to existing natural conditions (Oktariadai, 2015). According to Bakti et al., (2018), Tourism potential in Pangandaran is not only beach tourism, but also cultural tourism, because in the region there are many sites of 'Sunda Buhun' relics, both in the form of sacred tombs and the appearance of ancient figures, as well as various ritual inheritance of the elders in ancient times. The following below is an example of the cultural diversity of Pangandaran Regency:

3.1 Badud Art

Badud traditional art is an art that was born in Kampung Badud, Margacinta Village, Cijulang District, Pangandaran Regency (Maulana et al., 2019) (Figure 6). Where this art has been around for a long time and the exact number of years is not known. In the beginning, the performance of Badud art became part of the ritual when the harvest arrived, namely at the accompaniment session where the community brought the harvest to the granary in the village. The session had recorded the year number, which was 1928.

According to the narrative of Aki Ardasim and Aki Ijot which are karuhun in Kampung Badud, Badud Art is estimated to have existed since 1880 in Margajaya Hamlet. The role material is then added by wearing animal mask attributes such as langurs, monkeys, coyotes, tigers and boars made with makeshift materials. With dance movements mimicking the movements of animals in accordance with the masks they wear.



Figure 6. Badud Art
(Source: Researcher documentation, 2019)

3.2 Angklung Mang Koko

Angklung Mang Koko is from Margacinta Village, Cijulang District, Pangandaran Regency (Figure 7). In Angklung Mang Koko there are various types of angklung sizes ranging from normal to measuring 2-7 meters, then the shape is different from the angklung that we usually know. This can be seen from the amount of bamboo used consisting of 3 bamboo pieces. Locals used to call him by the name of Roel. The number 3 bamboo means father, mother and child. This Angklung is a development from angklung which is commonly used on Badud musical instruments. Along with the development era Mang Koko also modified the Badud angklung into a modern angklung. Angklung which is usually played is usually moved sideways, but Mang Koko now also creates an angklung that can be moved like we play the piano, which is then called 'Angklung Toel'. But the sound or sound that comes out does not change the original sound of an angklung, it's just that Mang Koko changes the way he plays the angklung. Tourists can enjoy and learn to play angklung instruments and can also shop for souvenirs for sale.



Figure 7. Angklung Mang Koko
(Source: researcher documentation, 2019)

Mapping the potential distribution of Pangandaran Regency as an Aspiring Geopark

The points observed in this study were focused into two zones, namely the western zone (Cijulang District and Parigi District) and the eastern zone (Pangandaran District). Of the ten districts, the two zones have their respective characters (themes) that can be raised in the development of the geosite. The eastern zone is identical to the coastal area (with a length reaching 91 Km), while the western zone is identical to the karst area (15 km to the west of the eastern zone).

Based on the results of interviews with the Tourism Destination Management Sector, the Tourism and Culture Office of Pangandaran confirmed the direction of developing the Aspiring Pangandaran Geopark by taking up the theme:

"For the Aspiring Pangandaran Geopark, we push it not for the coast if we can, but for other unique things, such as our geological potential, we have karst and outcrops of breccias formed in the Jampang formation about 18 million years ago to the west" (Dudung Cahyadi. Interview results, 2020 October 17)

From the potential geodiversity and biodiversity that have been identified in the previous chapter, geological sites whether mountains, jungles, oceans, mountains, or rivers are all in Pangandaran. While cultural diversity will be a supporter or added value for the Aspiring Pangandaran Geopark. The development of special interest destinations such as geopark also requires a management system (Siti 2001; in Suarta et al., 2017) and appropriate market targets or segmentation (Utama et al, 2019).

Adopting these two quotations, product differentiation from each geosite can be a future development program after it has been determined which geological sites will be geosites and which geological sites will be used as primary geotourism attractions. Based on the existing conditions, the differentiation pattern planned by the Head of Tourism and Culture of the Pangandaran Regency refers to the spatial pattern of the base camp (Putra et al., 2020). This pattern makes the Pangandaran Beach Area a gateway complex (main entrance) and staging area (staging areas that keep tourists staying with adequate safety and accessibility), then tourist attractions outside the area can be attractive options to visit afterward. This is in line with what the Head of Tourism and Culture of Pangandaran said:

"... to make tourists feel at ease ... the food is spoiled, the setting is also ... hotels, restaurants, travel agents, guide services of all kinds to the money exchange there (in Pangandaran Beach Area) ... so one day in Pangandaran which is the core ... then it can go to power Another tourist attraction ... " (Undang Sohbarudin. Interview results, 2020 October 17)

This pattern can certainly support the differentiation of geotourism attraction products that are scattered in Pangandaran by grouping them into several geosites. This is consistent with previous research related to geotourism route planning on Natuna Island, which says that the distribution of geodiversity can be a potential for geopark development with thematic geotourism (Wulung et al., 2019).

Following below are the results of mapping the potential points and tourist attractions in the two regions (Figure 8). At least in the western region found 11 potential geodiversity-based tourist attractions (5 sites in Cijulang District, 5 sites in Parigi District and 1 site in Sidamulih District). Then in the eastern region or in Pangandaran District, 4 geodiversity-based tourist attractions are found, as well as 1 biodiversity, geodiversity and cultural diversity-based tourist attraction.

Based on the results of the field observations, the region of Pangandaran Regency as a geopark candidate can be delineated based on the abundance of existing geological features. Those are three geosites which have great opportunities to be developed into geopark, namely Pangandaran Coastal Geosite, Parigi Geosite, and Cijulang Karst Geosite (Figure 8).

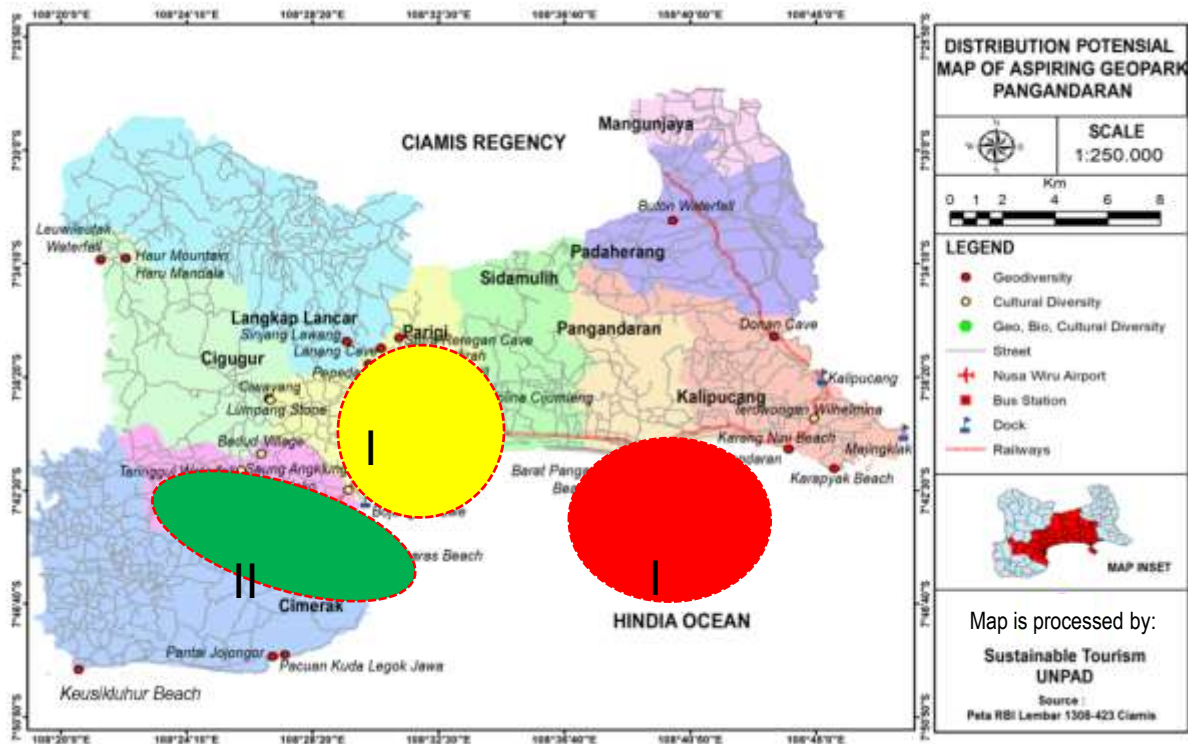


Figure 8. Distribution Potential Map of Aspiring Pangandaran Geopark
(Source: processed by researchers, 2019)

- I. **Pangandaran Coastal Geopark** consists of 3 sites. Geological site-based on geodiversity, namely: Timur Pangandaran Beach and Barat Pangandaran Beach. And then, geological site - based on geo, bio and cultural diversity in the NR and NTP Pananjung;
- II. **Parigi Geopark** consists of 6 sites. Geological site - based on geodiversity, namely: Citumang River, Jojogan Wonder Hill, Batu Hiu Beach, Lanang Cave, Pepedan Hill and Reregan Silk Cave; and
- III. **Cijulang Karst Geopark** consists of 7 sites. Geological site-based on geodiversity, namely: Bau Cave, Green Canyon, Batu Karas Beach, Cisamping Lake. And then, geological site-based on cultural diversity, namely: Sagati Cultural Park, Saung Angklung Mangkoko and Badud Art.

CONCLUSION

In addition to geological sites, there are also many non-geological sites in Aspiring Pangandaran Geopark that can be developed into geotourism attractions and tourist attractions with high cultural diversity and biodiversity values for provision as Aspiring Pangandaran Geopark. There are 18 geological site-based on geodiversity, 2 geological site which has biodiversity in the form of rare bird ecosystems, and also around 14 geological site-based on cultural diversity, identified through literature studies and field verification.

Subdistrict which has three pillars of diversity is Cijulang Subdistrict, where the Subdistrict is a karst area. Referring to the geological and non-geological potential in Pangandaran, the capital of Pangandaran Regency is a geopark area. So that in the future, with information on the potential of the three aspects of diversity pillars, it can be a reference for making development plans to accelerate Pangandaran Regency which aspires to become a national geopark, until being a global geopark or better known as UNESCO Global Geopark (UGG). This geopark concept is expected to make Pangandaran Regency as a sustainable tourism destination.

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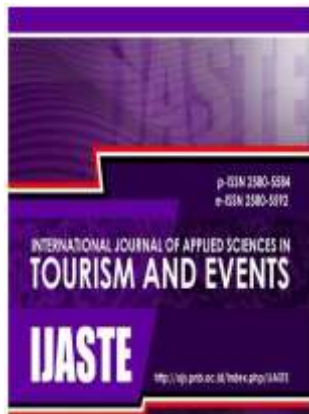
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Sustainable Marine Tourism in Alor: A Study of Coastal Communities' Perception

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Abstract

Purpose: This research aim is to determine the existence of natural or historical resources that can be develop as a tourist attraction based on community's perception and determine the management strategies for Alor Regency.

Research methods: The research method used in this study is the survey method, snowball method for collecting data, and SWOT analysis with the quantitative and qualitative approach to determine the development strategy.

Results and discussions: Alor Regency have many tourist attractions with a good quality, safety, accessibility that give a positive impact for local community, but the local communities are still need the government rules to manage the area. The quantitative analysis result showed that internal and external factors both have a positive score, which means Alor Regency is at the 1 quadrant from SWOT Analysis chart and the qualitative showed various forms of development strategy that can be used according to the area needs.

Conclusion: Many natural and historical resources in Alor that can be develop as a tourist attraction, and the suitable development strategy can be used in Alor Regency is the strength-opportunity strategy, which means the area should maximize the strength to get all the opportunity.

Keywords: *Biodiversity, development, ecotourism, natural attractions, social equities, SWOT analysis*

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INTRODUCTION

Alor is a beautiful region in East Nusa Tenggara which has a lot of cultural heritage, diversity of flora and fauna, beautiful scenery of the coast and mountains, and also wildlife (E. Lau et al., 2019). This richness of history and natural resources in Alor can be developed as a tourism

destination to reach the aim of sustainable tourism. The sustainable tourism is a kind of tourism that consider the current and future of economic, social, and environmental impact, fulfill the visitor, industry, the environment, and the local community needs, and also can be applied to all forms of tourism activities in all types of a tourist destination (Khan et al., 2020).

To achieve the balance in sustainable tourism, the implementation should: (1) Utilizing the natural resource as the main element in tourism development such as help to conserve natural heritage and biodiversity, (2) respect for the socio-cultural of the local community, and contribute intercultural understanding and tolerance, (3) Ensure long-term operations that give a socio-economy benefit for all stakeholders that equitably distributed, including stable employment and local community's opportunity to get an income and social service, also contribute to poverty alleviation (Gunawan & Ortis, 2012). According to the statement of Nurdin (2016) *in* Allo et al., (2018) that the local community has an important role in determining the success of a tourism area development. The involvement of the local community will give an impact and best chance of management that leads to community empowerment in a tourist destination and sharing profits from tourism activities by the stakeholders of tourism.

Community-based tourism is one type of tourism that prioritizes the involvement of the local community in tourism development activity starting from planning, management, monitoring, and evaluation because the community knows the potential and local wisdom in their area. So, the local community is not only followers of the management, but also become a part of management and enjoy the result from the tourism industry (Adikampana, 2017; Khan et al., 2020; Wiwin, 2018). This community-based tourism can be the good solution to reach the sustainable tourism purposes.

Research of the natural resource potentials, sustainable tourism, and community-based tourism has been widely carried by several researchers. Research of Purbani et al., (2014) about beach characteristics of Wakatobi National Park to support marine ecotourism in the case of Wangiwangi island shows that the beach characteristic includes depth, type of substrate and the absence of cliffs is can be used as a tourist attraction. As well as research of Salim & Purbani (2015) about community-based tourism development in Kaledupa, Wakatobi Regency to find out the main variables of tourism development, and the result show there are 3 main variables in tourism development includes information, coordination between agency, and natural resources. Another research by Astuti & Noor (2016) about the natural resource potentials in Morotai as marine tourism and historical tourism destinations, mentioned that historical heritage of the World War II and marine tourism could attract visitors but it needs to fulfill the minimum criteria of the tourism component that international tourist needed. Or the research by Salakory (2016) about the development of community-based ecotourism in Banda Island, Central Moluccas District mentioned that starting the ecotourism need to introduce the concept of ecotourism that consider cultural heritage, participation and welfare of the local community and also natural resource conservation to the local community who will be involved in implementing the ecotourism.

Based on the background and research that has been mentioned above, the potential of natural or historical resources and involvement of the local community have an important role in the success of sustainable tourism development. The strategy that related to the development of sustainable marine ecotourism in Indonesia can be done through empowerment of local communities, infrastructure, marketing, security and human resources development, and should be planed and managed properly (Arismiyanti, 2017). However, the perspective of local community's regarding the existence of natural or historical resource needs to be obtained to determine the most appropriate management strategy to achieve the goals of a sustainable tourism area.

So, these study aims are to determine the existence of natural or historical potential that can be developed as a tourist attraction based on the community's perception and determine the appropriate area.

RESEARCH METHODS

This research was conducted in Alor, East Nusa Tenggara in October 2019. The research method used in this study is the survey method. The survey method is a non-experimental research method that represents all study methods undertaken to collect data directly from the subject (Mustari & Rahman, 2012). This research method was divided into two steps, including data collection data analysis.

Data collection was done by the snowball method. Nurdiani (2014) mentioned that the snowball method is used to identify, collect, and take samples in an ongoing network or chain of relationships. Or simply is where the first respondent will recommend the next respondent and so on until the required number of respondents is obtained. Data analysis was carried out in 2 parts with a descriptive method. The first part is to describe the ability of the area to develop marine tourism, and another part is to determine the development strategy through qualitative and quantitative approaches based on the perceptions of the local community.

The quantitative approach was carried out by a score tabulation, where the total of each factor (internal & external factors) is calculated using these following formula (Nasution et al., 2015):

$$S = N \times B$$

Where:

S = Total Score of each question

N = All local community's scores of each question

B = All local community's quality value of each question

In this quantitative approach, each score of every question was count up to get a total score of each factor. The total score of each factor is used to determine the appropriate development strategy. Total score of internal factors inserted as X value and the score of external factors inserted as Y value (Figure 1)



Figure 1. Chart of SWOT Analysis
(Source: Nasution et al., 2015, p.2)

Meanwhile, in a qualitative approach that used to determine the form of a development strategy is carried out by utilizing strength, taking the opportunity, reducing weakness, and avoiding threats that might occur in the implementation of sustainable tourism.

RESULT AND DISCUSSIONS

The result of this research showed that there were 24 respondents with various ages and genders (Table 1). Respondents were from 3 different villages, namely Munaseli Village, Pante Deree Village, dan Kabola Village.

Table 1. The Age and Gender of the respondents

| Age | Amount |
|-------------------|--------|
| ≤ 25 years old | 2 |
| 26 – 35 years old | 10 |

| | |
|-------------------|---------------|
| 36 – 45 years old | 4 |
| ≥ 45 years old | 8 |
| Gender | Amount |
| Men | 16 |
| Women | 8 |

Marine Tourism Development

Based on Lau (2019), Small Alor in Alor regency have good potential marine tourism such as beautiful scenery of coastal and underwater. Coral reefs condition in the nature preserve area of the Pantar Strait and surrounding seas in medium and very good categories (Wabang, 2018). Good condition of coral reefs also can be one of an attraction for tourist to visit a tourism area.

There are four elements in the development of a tourism destination, namely attraction, amenities, access, and ancillary. This theory can be used to identify and observed a tourism village in tourism development especially to find out the potential possessed so the implementation of development and management can be more directed (Sukmadewi et al., 2019). The Attraction of tourism included the natural amenities, man-made supply, and the way of the community's life. Based on respondent's response, there are several tourist attractions in Alor regency (Table 2).

Table 2. The Existence of Tourist Attraction in Alor Regency

| No | Tourist Attraction | Form of Tourism |
|----|-------------------------------------------------|----------------------------------------------------------------------------------------------|
| 1. | Wai Ulung, Wai Redang, Wai Urita, Wai Bakolang, | Historical tourism and beautiful scenery |
| 2. | Munaseli Kingdol | Historical Tourism |
| 3. | The old village Hiking Baki | Culture and historical tourism |
| 4. | Kenari beach | Beautiful coast and underwater scenery, coral reefs, dugong, mangrove forest, and sea turtle |
| 5. | Sikka island | Beautiful coast and underwater scenery, coral reefs, dugong, mangrove forest, and sea turtle |
| 6. | Putri Laut cave, Tomi Leo cave, Bats cave | Cave scenery |
| 7. | Squid lake | Conservation area |

In tourism development, observing the quality of natural resources as a part of tourist attraction needs to be done as a stage in determining the development strategy. The quality of natural resource comes from the respondent opinion, whether it has a good quality or not (Figure 2).

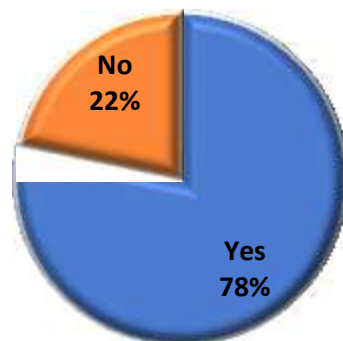


Figure 2. Quality of the natural resource
(Source: Research data, 2019)

Figure 2 showed that approximately 78% of respondents mentioned that the natural resource in their area was in the best quality to attract tourists. Meanwhile, around 22% of respondents mentioned the opposite due to the lack of support from government and insufficient public facilities. Quality of the natural resource is a supporting factor in achieving the success of tourism development (Indayani & Dewi, 2018). According to Samudra et al., (2010), the quality of natural resources can be maintained and preserved by conducting conservation activities carried out by local communities and tourists.

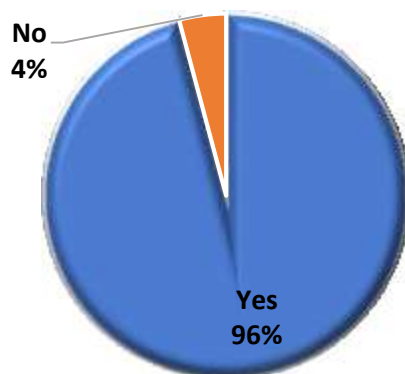


Figure 3. Safety on the Nature Resource
(Source: Research data, 2019)

Safety on the natural resources become an important factor in tourism that might influence the decision to visit the tourism area. Safety and comfortable threats can be influenced or caused by many factors including terrorism, local conflict, natural disaster, community social behavior, or infectious diseases (Khalik, 2014). Based on Figure 3, 96% of respondents stated that the natural resource in their village is safe for tourist visitation, meanwhile another 4% stated the contrary because of the lack of public facilities. According to the research of Listiowati et al. (2020), the community's perception of tourism development in their area will affect the quality of tourist safety and comfort when visiting a tourism attraction.

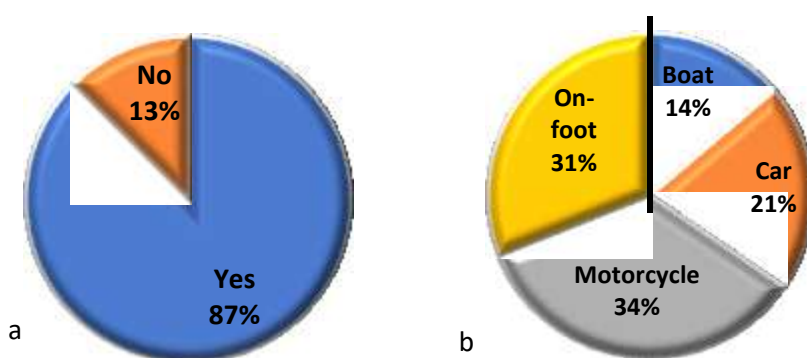


Figure 4. (a) Accessibility, (b) Type of Transportation mode
(Source: Research data, 2019)

Accessibility is an important aspect that can support the tourism development because it involves a cross-sectoral development that needs a transportation network that makes it easy for tourists to reach and find a tourist attraction (Abdulhaji & Yusuf, 2016). Soekardijo (2003) in Abdulhaji & Yusuf (2016) stated the required of accessibility there are: (1) information access which includes complete information about the tourist attraction, (2) road condition that

must be connected to public infrastructure includes main road, or infrastructure that have telecommunication facility, and (3) availability of parking space.

Figure 4(a) showed that approximately 87% of respondents mentioned the easy accessibility to the tourist attraction in their village, and another 13% of respondents stated the contrary because of insufficient of road facilities. The types of transportation mode which can be used to access the tourism attraction perceived by the respondents were 34% by motorcycle, 31% by walks, 21% by cars, and the remaining 14% mentioned that the location can be reached by boat (Figure 4b).

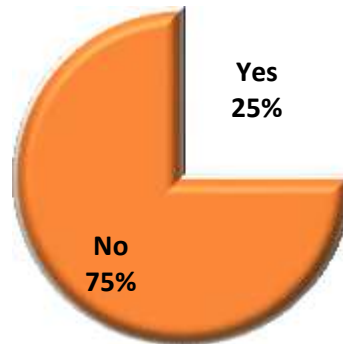


Figure 5. Existence of Local Wisdom
(Source: Research Data, 2019)

The existence of local wisdom is one of the factors that might affect the tourism activities. Shaleh (2016) mentioned that local wisdom is a rule that has been obeyed by local communities where this existence of local wisdom also can be one of a potential tourism asset as cultural tourism. According to Figure 5, around 75% of respondents perceived that there is no local wisdom in their village regarding tourist visitation, and another 25% of respondents perceived in contrary about the existence of local wisdom. The 25% respondents mentioned that local wisdom is applied in their village for tourist visitation such as the tourists should be dressed and speak politely, permission for taking any pictures, no harm the environment and must actively protect the natural resources by taking nothing from the location other than memories and pictures.

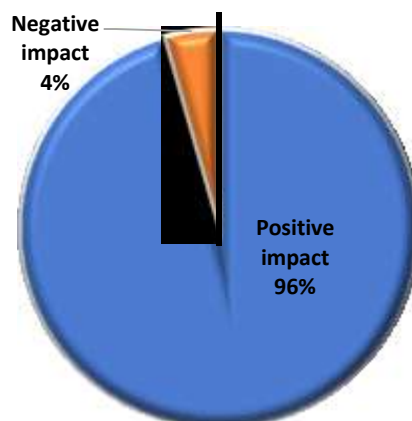


Figure 6. Existence of Tourism Impact
(Source: Research Data, 2019)

Every tourism activity involving the local community will definitely have an impact on the local community and the environment. Based on the research results, approximately 96% of respondents agree that tourism activities have a positive impact, such as improving the community's economy, increasing the availability of employment, increasing the community

awareness to maintain the environmental cleanliness, improving community welfare, providing opportunities for the local community to be involved in resource and tourism management. Another 4% respondent indicated that there will be a negative impact, such as beach damaged and large amounts of plastic waste caused by tourists (Figure 6)

The same thing is mentioned in the research of Dritasto & Anggraeni (2013) and Fyka et al., (2018) regarding the impact of tourism on the economy where the community's economy increases due to the existence of community business units such as crossing service, mat rental, and food sellers. Fyka et al. (2018) mentioned that tourism has an impact on changing the lifestyle of the local community through the way they dress and communicate. And there is also an impact to the environment due to tourism activity such as in Khirsnamurti et al. (2016) in Tidung Island which shows that the tourism activity has an impact on the visual changes of Tidung Island because of the large number of homestays and accumulation of waste caused by an imbalance in waste management with the amount of waste generated by tourists.

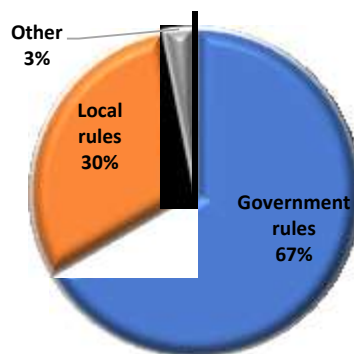


Figure 7. The Need for Local Community rules
(Source: Research Data, 2019)

In the development of tourism activities, there are rules governing tourist visitation and business activities, which need to be considered in the development of tourism. All the respondents mentioned that they need the rules to manage the natural resources in their area. According to Figure 7, there were 67% of respondents answered that they need a government rule to create an operating standard procedure and schedule for manage tourist visitation, manage the cleanliness of the tourist attractions, and a safety guarantee for tourist visitations. The other 30% of respondents perceived that they require rules made by local communities to manage the tourism area. The remaining 3% of respondents answered that they need other rules for governing collaboration between stakeholders.

Community Perception

Community Perception is important in determining tourism development strategies because the local community is the main element in implementing sustainable tourism. The determination of the development strategy is carried out through the quantitative approach using the Matrix SWOT and qualitative approach using the SWOT analysis.

The Quantitative Approach to Matrix SWOT

Quantitative approach was obtained based on the results of community assessments of the questions each SWOT.

Table 3. Quantitative evaluation for Internal Factor

| No | Questions (Strength) | Score | Quality | Total |
|----|------------------------------------------|-------|---------|--------|
| 1. | Natural resources as tourism attractions | 181 | 116 | 20.996 |
| 2. | Natural resources quality | 191 | 110 | 21.010 |

| | | | | |
|-------------------------------------|-------------------------------------------------------------|--------------|----------------|-----------------|
| 3. | Location accessibility | 185 | 106 | 19.610 |
| 4. | Safety during visitation | 186 | 113 | 21.018 |
| 5. | Variations of transportation mode to reach the location | 174 | 103 | 17.992 |
| 6. | Friendliness of local community | 197 | 112 | 22.064 |
| 7. | Easy access for food | 150 | 105 | 15.750 |
| 8. | Affordable price for transportation, accommodation and food | 162 | 108 | 17.496 |
| 9. | Low pollution level | 161 | 101 | 16.261 |
| 10. | “Local wisdom” strongly followed by the local community | 159 | 107 | 17.031 |
| Total Strength | | | | 189.140 |
| No | Weaknesses (W) | Score | Quality | Total |
| 1. | Low in environmental awareness | 152 | -106 | -16.112 |
| 2. | Environmental destructive daily activities | 123 | -101 | -12.423 |
| 3. | Tourism infrastructure availability | 107 | -106 | -11.342 |
| 4. | Community acceptability against travelers or tourists | 159 | -106 | -16.854 |
| 5. | Common public welfare level within the villagers | 133 | -103 | -13.699 |
| 6. | Common education level within the villagers | 142 | -106 | -15.052 |
| 7. | Public awareness to maintain the cleanliness | 153 | -104 | -15.912 |
| Total Weakness | | | | -101.394 |
| Total Internal Factors (S+W) | | | | 87.746 |

Table 4. Quantitative Evaluation for External Factor

| | | | | |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------|--------------|----------------|----------------|
| No | Opportunities (O) | Score | Quality | Total |
| 1. | The opportunities for natural resources within the village can be developed as a tourist destination | 165 | 110 | 18.150 |
| 2. | The opportunities for natural resources within the village can be developed as a research site | 176 | 100 | 17.600 |
| 3. | Environmental protection opportunities through responsible tourism | 180 | 109 | 19.620 |
| 4. | Employment opportunities through responsible tourism for the local community | 176 | 109 | 19.184 |
| 5. | Economic benefits through sustainable tourism for the local community | 176 | 109 | 19.184 |
| 6. | Community involvement in natural resources management through sustainable tourism program | 172 | 110 | 18.920 |
| 7. | Opportunities for collaboration with various institutions in sustainable tourism development for the local community | 174 | 109 | 18.966 |
| Total Opportunity | | | | 131.624 |
| No | Threats (T) | Score | Quality | Total |
| 1. | Natural resources damage due to natural disaster | 153 | -103 | -15.756 |
| 2. | Natural resource damage due to human activity | 147 | -98 | -14.406 |
| 3. | Un-predictable weather condition | 153 | -93 | -14.229 |
| 4. | The low number of tourist visits | 120 | -104 | -12.480 |
| 5. | Safe and security guarantee for tourists | 163 | -107 | -17.441 |
| 6. | Traditional unilateral site closure by community | 146 | -92 | -13.870 |
| Total Threats | | | | -88.870 |
| Total External Factors (O+T) | | | | 43.439 |

Total value for internal factors evaluation was 87.746 and 43.439 scores for external factors. The positive value for both factors indicates that the best strategy for tourism development in Alor regency is on quadrant 1 (Figure 8).

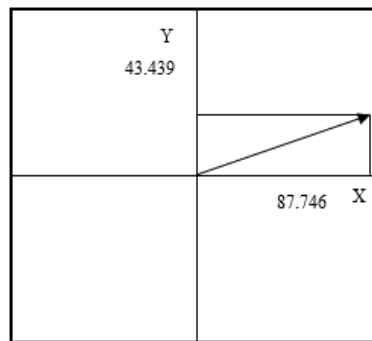


Figure 8. Alor Regency position in SWOT Analysis Chart
(Source: Research Data, 2019)

The total value of each factor showed that the strengths possessed to develop natural resources as a tourist attraction were greater than the weaknesses and furthermore it can enhance the opportunities as well as reducing future threats. Based on Situmorang & Dilham (2007), the quadrant-1 of the SWOT analysis chart can be categorized as an advantageous position because it has the strength to take full advantage of opportunities.

The Qualitative Approach

The qualitative approach is carried out by determining the development strategy of tourism based on the elements in every factor and suggestion from respondents.

a. S-O strategy

1. Development of tourism with conservation-based activities to be fully managed by the local community with support from local governments and NGOs.
2. Promotes safe tourist sites with friendly community hospitalities, no-pollution activities to develop sustainable tourism.
3. Provides sustainable tourism development field-laboratory for students and academia to examine the flora and fauna biodiversity as a reference to environmental protection.
4. Enhance the community involvement as local tour services providers: tour guides, foodservice and homestay to increase local employment opportunities and economy.

b. S-T strategy

1. Increase environmental protection awareness through the installation of signboards and extension services to protect natural resources degradation.
2. Visitation scheduling by local communities based on local agreements.

c. W-O strategy

1. Environmental awareness improvement by providing local experience and knowledge shares for both communities and tourists.
2. Improve local small-scale infrastructures such as toilets, changing rooms, and clean water for tourists.
3. Local capacity improvement through training and comparative studies.
4. Conservation and natural protection activities involving both local communities and visitors.

d. W-T strategy

1. Increase promotion activities to increase the number of tourist visitation.
2. Natural resources management by local communities with collaboration from both local and national government institutions.

CONCLUSION

The conclusion of this study showed that there are many natural resources that can be developed as a tourism attraction in Alor, East Nusa Tenggara such as Wai Ulung, Wai Redang, Wai Urita, Wai Bakolang, Munaseli Kingdom, the old village Hiking Baki, Kenari Beach, Sikka Island, Putri Laut Cave, Tomi Leo Cave, Bat Cave, and Squid Lake. According to the result of quantitative approach, the suitable development strategy of tourism in Alor is the S-O strategy which maximizing the strength to take the opportunities, there are (1) Development of tourism with conservation-based activities to be fully managed by local community with support from local governments and NGOs, (2) Promotes the safe tourist sites with friendly communities' hospitalities, no-pollution activities to develop a sustainable tourism, (3) Provides sustainable tourism development field-laboratory for students and academia examine the flora and fauna biodiversity as a reference to environmental protections, and (4) Enhance the community involvement as local tour services providers: tour guides, food service and homestay to increase local employment opportunities and economy.

This research can be developed for further research, especially in ecotourism activities by observing how much natural resources potential in each ecosystem and observing the impact of tourism activities directly to provide advice to the community and related institutions.

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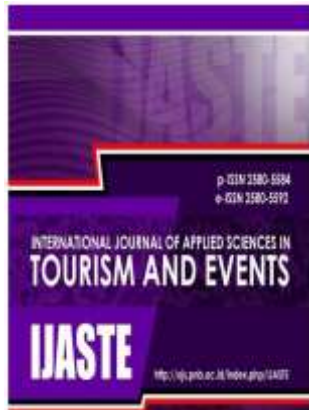
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Green Supplier Selection Practices and its Implications of Green Purchasing: Case Study at 5 Stars Hotel in Bali

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Abstract

Purpose: This study is to examine the practice of selecting green suppliers conducted by companies to be environmentally friendly and how these practices have implications for purchasing green products in 5-star hotels in Bali.

Research methods: The study is guided by the green supply chain management model and the green selection model. A descriptive research design is used. Data were collected using a questionnaire. The population consists of 63 employees from companies that supply room supplies, food & beverage, chemical, and Spa. Data were analyzed using SPSS and presented using tables, graphs, frequencies, and percentages.

Results and discussions: The selection of environmentally friendly suppliers had a positive and significant effect on the implementation of environmentally friendly purchases. The implications of selecting green suppliers create new market opportunities. Hotel cooperation with suppliers is getting closer and mutually committed to operational purchasing activities.

Conclusion: Green supplier selection is a major factor that influences the implementation of green purchasing at 5 stars hotel in Bali.

Keywords: *Green supply chain management, Green supplier selection, Green purchasing*

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INTRODUCTION

Pollution issues have become more and more local, national, and global concerns, especially in developing countries where many of the non-regulatory factors that reputedly motivate firms to improve environmental performance are relatively weak. Fewer regulations and enforcement are less effective (Blackman, 2010; Ling, C. H.; Khor, 2002; Najam, 2005). Furthermore, competing in the global market increasingly requires products that are not only innovative but also environmentally friendly (Coyle J.J., Thomchick E.A., 2015; Smith, N., Halton, A. and Strachan, 2014). This obligation has led to a focus on creating green supply chains where companies adopt practices that minimize environmental damage (Aneyrao, T., & Ahemad, 2014; Zhang, X., Ma, X., & Wang, 2012). Green supply chains require integrating environmental thinking into supply chain management, including product design, procurement,

and selection of materials, manufacturing processes, delivery of final products to consumers, and management of products whose economic and technical periods have ended (Srivastava, 2008).

Many levels of management will be involved during the implementation and ongoing operations phase relating to the selection of green suppliers that end in the decision to green purchasing by the user. The top-level will examine more strategic issues from the relationship, while middle and line managers will manage day-to-day operations. Communication often occurs either person-to-person or electronically to track the movement of goods and the effectiveness of interfaces between companies in the supply chain. Flexibility or assuming short-term difficulties may be needed for the benefit of the supply chain. However, this is expected to balance the length of the relationship (Gardner, J., & Cooper, 1988).

Purchasing and logistics managers must utilize their unique position and knowledge to play a leadership role in the design and implementation of integrated supply chains. Both purchasing and logistics have contract negotiation experience and deal with external suppliers in general that can be used in forming supply chain relationships. Information about the external environment is collected by these two functions and passed on to the company. The traditional role of purchasing and logistics personnel as inventory managers, information gatherers, and information dissemination, and negotiators must serve the company well in the new atmosphere of supply chain management.

The process of managing product supply chains is then often referred to as supply chain management. Supply chain management is a network of companies that jointly work to produce and deliver products to end customers (Pujawan, I Nyoman and Mahendrawathi, 2017). Supply chain systems that are used in the hospitality industry now tend to implement long term relationships with suppliers and trust fully in these suppliers. A Supplier is a party that provides input, in the form of goods needed in production activities (Pujawan, I Nyoman and Mahendrawathi, 2017). Meanwhile, green suppliers are to help companies achieve a balance between economic and environmental performance, reduce the impact of products and services on the environment, and foster an environmental image. This aims to reduce the negative impact on the environment (Sarkis, 2001).

Green supply chain management practices involve organizations assessing the environmental performance of their suppliers, requiring suppliers to undertake measures that ensure the environmental quality of their products, and evaluating the cost of waste in their operation systems (Handfield, Walton, Sroufe, & Melnyk, 2002). Green supply chain management and its implication toward green purchasing is an interesting topic because the "green" icon will be able to create high-quality, fast products and ecofriendly. Therefore, many studies conduct research related to this topic.

The green supply chain management process in hospitality business practices especially in the hospitality industry in Indonesia is also an interesting topic to discuss. This is because the hotel industry has long been developing to contribute to the country's foreign exchange. Likewise, the development of the hospitality industry in Bali. Each 5-star hotel has a target market and uniqueness as a competitive advantage. To ensure the hospitality industry gets raw materials from environmentally friendly suppliers, one of the phenomena that are carried out is through the green supply chain selection approach, so that later the goods and services provided to guests have followed the environmentally friendly process.

Green purchasing activities in the public and private sectors usually take four main approaches: purchasing of products or services labeled as environmentally friendly, in-house product/service evaluation, third party product/service evaluation, and supply chain initiatives. These approaches often begin in the administrative, procurement, environmental, or operational departments of private companies. Green procurement activities often depend on product standards, labels, and certifications that declare environmental attributes or product performance. Driven by bottom-line performance, the hospitality chain industry sees green purchasing as a logical part of effective purchasing and supply chain management practices. Private companies often use internal and third-party evaluations to make green information procurement decisions. However, private businesses are reluctant to carry out green

procurement activities unless there are business benefits that are demonstrated for themselves and/or their customers (Sarkis, 2012).

The purchasing department is responsible for obtaining information about the goods, determining suppliers for procurement of goods, and issuing purchase orders to selected suppliers. The purchasing system is a transaction activity carried out by the company to meet the needs of products or raw materials from suppliers (Galloway, L., Rowbotham, F., & Azhashemi, 2012). The results of previous studies (Astawa, Astawa, & Susyarini, 2017) showed that the level of efficiency for the purchase of food and beverages in star-rated hotels in Bali was calculated using the detailed Economic Order Quantity (EOQ) method starting from the cost of ordering, storage costs, and other costs using the number of goods ordered in each order and frequency of goods ordered during procurement.

Previous research results related to green purchasing capabilities, such as manufacturing, finance, intra-organizational capabilities, and integration, were found to have a significant positive effect on green purchasing practices. However, the ability of innovation does not significantly affect green purchasing practices. Regulation, customer, and competitor pressure positively moderate the relationship between capabilities and green manufacturing practices (Foo, Meow Yee., Kanapathy, Kanagi., Zailani, Suhaiza., and Shaharudin, 2019). Furthermore, the implications of the findings related to the moderating effect can be used to help policymakers, especially in setting the right policies and strategies to improve green purchases.

Other research result shows that green purchasing is associated with various positive benefits for individuals and organizations; this includes eliminating waste costs and/or hazardous material management, positive community relations, improving employee health, reducing solid waste, conserving water and protecting natural resources (Maris G. Martinsons, Andy K.Y. Leung, 1996).

Previous findings from research on business in the hotel industry found that hotel management build a network with hotels, bars, and restaurants that implement green business practices and integrate residents, government, and private sector and traditional villages. This shows that environmentally friendly business practices are used as a tool to enhance hotel competitiveness by collaborating with fellow hotels that carry green (Astawa, I. K., Budarma, I. K., Widhari, C. I. S., & Suardani, 2019).

The Previous study suggests that before a green purchasing program can be implemented, current purchasing practices and policies must be reviewed and assessed (Lozano & Vallés, 2007). A life cycle assessment of the environmental impact of a product or service is required and a set of environmental criteria on which to base purchase and contract decisions must be developed. The result is a periodic green purchasing policy that is integrated into plans, programs, and other organizational policies. Green purchasing policies include priorities, duties, responsibilities and accountability, communication plans, and promotions.

Based on this explanation, it is expected that the development of environmentally friendly hotel industry businesses in Indonesia in general and in Bali, particular will increase. This development provides a good opportunity for business suppliers who supply the needs of the hospitality industry. This article will try to look at opportunities for the integration of environmentally friendly supplier selection by fulfilling green raw materials for the needs of the hospitality industry. The purpose of this study is to examine the practices of selecting green suppliers conducted by companies to be environmentally friendly and how these practices have implications for purchasing green products in 5-star hotels in Bali. Thus, it can be seen how hotel management can utilize the integration of green supply chain management and green hotels as a tool of competitive advantage in running and maintaining their business going forward.

Based on the description and support of the previous research results presented above, some problems are described as follows: (1) How is the implementation of green supplier selection practices in 5-star hotels in Bali? (2) How is green supplier selection related to green purchasing implementation in 5-star hotels in Bali? (3) What is the implication of green supplier selection practices on green purchasing on 5-star hotels in Bali?

RESEARCH METHODS

Supplier selection is the process by which firms identify, evaluate, and contract with suppliers. To avoid results that are not in line with the expectations of the supplier, the buyer usually takes proactive steps to verify the supplier's qualifications before giving them a contract (Ishak, Dziauddin, & Abdullah, 2015). Buyers can contact previous customers and ask about supplier delivery performance, compliance with contract terms, what problems (if any) arise, and how the problem is resolved. Buyers, in this case, the management of 5-star hotels in Bali, may require that suppliers have Tri Hita Karana (THK) or ISO (or similar) certification, which shows that suppliers have policies, procedures, documentation, and training to ensure continued compliance with quality standards. Purchases must focus on selecting quality suppliers and thus, the assessment of successful green suppliers must value suppliers rather than products (Buck, 2014). From the description above, the conceptual framework of this study is as shown in Figure 1.

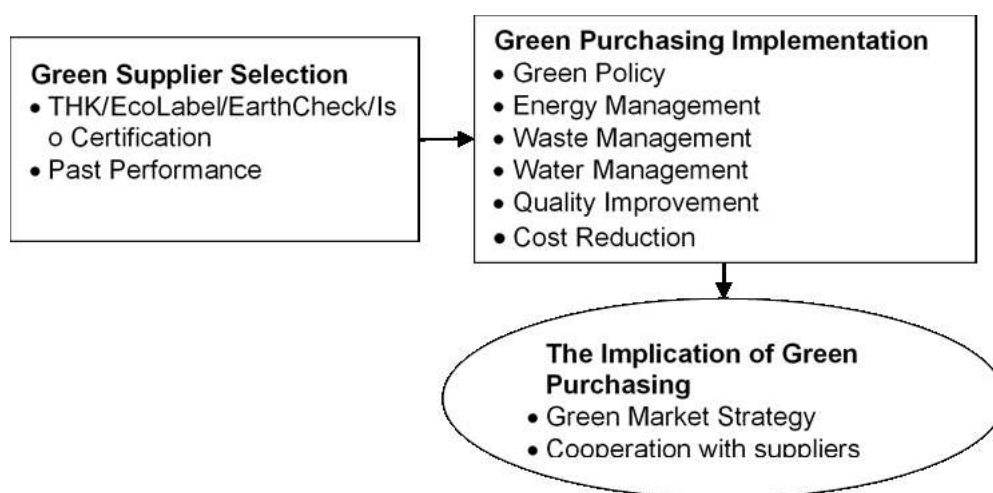


Figure 1. Conceptual Framework

This research is a descriptive study using two stages, namely qualitative and quantitative approach. Descriptive surveys are carried out starting from the collection, measurement, and analysis of data, then plans arranged to get answers to research questions (Creswell, J. W., & Creswell, 2017). Descriptive research answers questions about the subject, location, time and method of a particular event. The purpose of using this method is to describe the nature of a situation, as it existed at the time of the study, and to explore the causes of certain phenomena. This study uses qualitative research methods because we need some information from the field from the bottom. The informants in this research are the management and operational staff of the purchasing, receiving, inventory of F&B, room supplies, chemical, and Spa from the suppliers. Informants were determined using a purposive sampling technique (Miles, M. B., & Huberman, 1994). The process of qualitative data analysis can be shown in Figure 2.

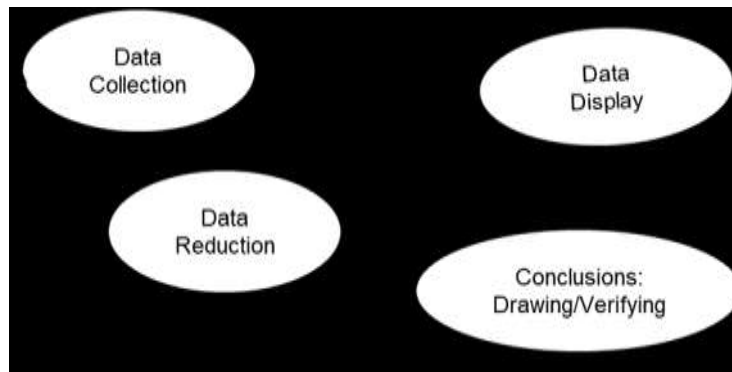


Figure 2. Qualitative Data Analysis Process (Source: Miles and Huberman, 1992)

The target sample consists of 75 employees from a 5-star hotel and supplier. Of the 75 respondents targeted by this study, 63 answered representing the 84 percent respondent rate. Data collection is done by observation, interviews, and questionnaires. The collected data were analyzed using excel 2016 and a statistical package for social science (SPSS version 23) to generate descriptive data presented using tables, graphs, frequencies, and percentages. In the first step, data is analyzed by linear regression in green supplier selection on green purchasing implementation, then the second step, examine the implication of green purchasing with descriptive qualitative.

RESULT AND DISCUSSIONS

The discussions on the practice of selecting green suppliers and their implications for green purchases begin with an explanation of the educational level of the respondent. Then, the implementation of green supplier selection practices, followed by a discussion on green supplier selection related to the implementation of green purchases, and finally the discussion on the Implications of green supplier selection practices on green purchases.

The education Level of Respondents

This study tried to show the level of education of respondents as presented in Figure 3. There are 24 percent of respondents had high school / vocational high school certificates, 30 percent had diploma qualifications, and 46 percent had bachelor's degree qualifications. This shows that respondents have sufficient knowledge and skills needed to assess criteria in selecting green suppliers and understand their implications for implementing environmentally friendly purchases at 5-star hotels in Bali.

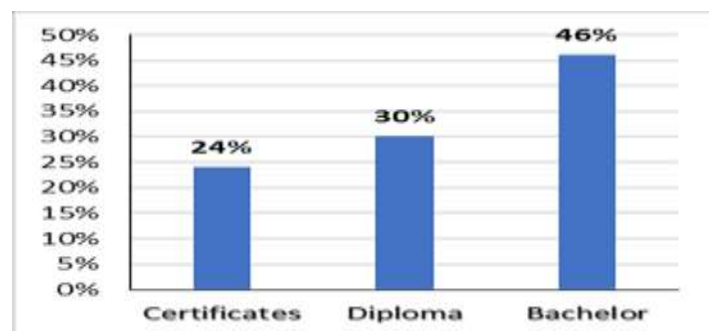


Figure 3. Education Level of Respondents

The implementation of green supplier selection practices

Green supplier selection practices based on data collected and grouped, there are seven practices as shown in Table 1, on a Likert scale with categories 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree and 5 = strongly agree.

Table 1. Descriptive Analysis of Green Supplier Selection Practices

| No | Green supplier selection practices | N | Mean | Std. Error | Std. Dev |
|----|-----------------------------------------------------|----|--------|------------|----------|
| 1 | A long-term relationship will bring cost advantages | 63 | 4.2540 | .07828 | .62135 |
| 2 | The supplier is committed to the hotel | 63 | 4.4444 | .07766 | .61638 |
| 3 | Choosing suppliers by environmental criteria | 63 | 4.2063 | .08208 | .65152 |
| 4 | Supplier understands hotel needs | 63 | 4.4762 | .07792 | .61846 |
| 5 | Payment flexibility is the right payment method | 63 | 4.1429 | .08722 | .69229 |
| 6 | Promote the team with green commitments | 63 | 4.1111 | .07543 | .59868 |
| 7 | Order flexibility is the right ordering method | 63 | 4.1111 | .09083 | .72091 |

Source: Primary data, processed (2020)

Table 1 shows that all average scores above 4.0000 mean that hotel management agrees that all categories are factors to be considered in the selection of green suppliers. The category of suppliers understanding hotel needs is highly rated with an average score of 4.4762 and a standard deviation of 0.61846. This shows that suppliers are committed to the hotel, and with the category of selecting suppliers based on environmentally friendly criteria, it is possible to build long-term cooperation that will later be expected to bring benefits primarily related to costs.

Green supplier selection related to green purchasing implementation

The steps in the analysis of the influence of green supplier selection on green purchasing implementation were carried out through tests of the validity, reliability, and normality of research instruments. The test results fitted the criteria and regression models. Furthermore, a series of linear regression output results are presented in Table 2, Table 3, and Table 4.

Table 2. Determination Coefficient Test Results

| Model Summary | | | | |
|-----------------------------------------------------|-------------------|----------|-------------------|----------------------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .657 ^a | .431 | .422 | 1.367 |
| a. Predictors: (Constant), Green Supplier Selection | | | | |

Table 2 shows that the correlation value (R) was 0.657. From the SPSS output obtained a coefficient of determination (R Square) of 0.431 shows that 43.1 percent of the green purchasing implementation variable is explained by a green supplier selection variable.

Table 3. Test Results F

| ANOVA ^a | | | | | | |
|--------------------------------------------------------|------------|----------------|----|-------------|--------|-------------------|
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 86.377 | 1 | 86.377 | 46.204 | .000 ^b |
| | Residual | 114.036 | 61 | 1.869 | | |
| | Total | 200.413 | 62 | | | |
| a. Dependent Variable: Green Purchasing Implementation | | | | | | |
| b. Predictors: (Constant), Green Supplier Selection | | | | | | |

From these outputs, the calculated F value of 46.204 with a significance level of $0.000 < 0.05$, then the regression model can be used to predict the participation variable. That means, there is an influence of the green supplier selection variable on the green purchasing implementation variable.

Table 4. Regression Analysis Output

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|--------------------------|-----------------------------|------------|---------------------------|-------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 6.459 | 1.537 | | 4.203 | .000 |
| | Green Supplier Selection | .793 | .117 | .657 | 6.797 | .000 |

a. Dependent Variable: Green Purchasing Implementation

Based on the calculation results in Table 4, the value of constant is 6.459 at p-value 0.000 which less than 0.05, and the value of the regression coefficient is 0.793 at p-value 0.000 which less than 0.05. The equation of the linear regression model becomes; $Y = 6,459 + 0.793X$. The analysis indicates a positive and significant relationship between green supplier selection on the green purchasing implementation at the 5 stars Hotel in Bali. It also means that an increase of one unit of green supplier selection consideration increases green purchasing implementation by 0.793. The indication was that green supplier selection is a major factor that influences the implementation of green purchasing at 5 stars hotel in Bali.

The Implications of green supplier selection practices to green purchasing

Choosing the right supplier has a significant effect in realizing the company's environmental goals. However, choosing the right supplier is not enough to improve environmentally-friendly performance. After the right supplier is chosen, the supply process must be managed in an integrated manner with the supplier. In addition to supplier selection and management, it is also important to assess whether suppliers meet environmentally friendly criteria.

The process of procurement of goods is very attentive to the accuracy starting from the stage of preparing the purchase request which is based on the sale and stock of goods in storage. Required goods submitted through the system have followed the green corridor. The market list is compiled by checking existing stock in storage until the stage of receiving goods needed in operational activities will be checked before use.

Green commitment is shown by receiving staff in ensuring that goods that arrive based on purchase orders are of good quality and quantity. Receiving staff can reject incoming items if there are differences with articles in the system. Hotels samples are very concerned about the management of green material sources and the choice of green materials as anticipatory measures to minimize the impact of damage to the natural environment. Implications related to the reuse of the value of goods that have been used, the hotel sample did upcycle pillowcases that are not feasible, reused as trash bags to reduce linen waste, minimize wasteful use of clean water and turn salt water into freshwater using the Sea Water Reverse Osmosis system (SWRO). Awareness of the existence of quality products at good prices and environmentally friendly is more driving the performance of green supply chains. After the goods are received, there is a need for control especially food and beverage products to guarantee and ensure the quality and quantity as well as the feasibility of the incoming goods. So that the production process can produce optimal output. This action has implications in reducing plastic waste when guests check out.

Melia Bali responds to green by digitizing the check-in process in line with technological developments, to reduce the use of paper. Administrative work can be done with high technology to achieve performance that is: faster, paperless, accuracy, security, and safety. The sample hotel explores product innovation by utilizing local products and local expertise.

Going green is important to attract the new segment of conscious consumers and to stay competitively relevant to the targeted market, but is also financially beneficial for the related tourism industry. The implications of selecting green suppliers create new market opportunities. The sample hotel market is experiences travellers with a dominant demand in the cleanliness, safety, and environmental comfort categories.

In response to the consumer's change of preference towards green products and services, the hotel industry is adopting sustainable practices and advertised towards potential customers (Martínez, Leaniz, Crespo, & Gómez, 2017). An environmentally friendly hotel can be categorized as the one that offers sustainable services and focuses on minimizing its negative impacts on the environment through reusing, reducing, and recycling. It is used by an eco-friendly use of water and energy (Dalton, Lockington, & Baldock, 2008). According to Saharye and Marendi (2017), Green procurement has impacted not only the performance of organizations but also on brand reputation. It has become increasingly significant for organizations facing competitive, regulatory, and community pressures to balance economic and environmental performance (Sarhaye & Marendi, 2017).

Hotel cooperation with suppliers is getting closer and mutually committed to operational purchasing activities. Cooperation commitment is presented in Table 5.

Table 5. Cooperation between hotel management and suppliers

| No | Cooperation between hotel management and suppliers | Strongly disagree (%) | Disagree (%) | Neutral (%) | Agree (%) | Strongly agree (%) |
|----|------------------------------------------------------------------------------------------|-----------------------|--------------|-------------|-----------|--------------------|
| 1 | Conduct regular meetings between hotel management and environmentally friendly suppliers | 0 | 0 | 20.6 | 60.3 | 19.0 |
| 2 | The supplier is committed to the hotel | 0 | 0 | 6.3 | 42.9 | 50.8 |
| 3 | Supplier understands hotel needs | 0 | 0 | 6.3 | 39.7 | 54.0 |
| 4 | Deliveries from suppliers always arrive on time | 0 | 0 | 15.9 | 36.5 | 47.6 |
| 5 | Delivery from suppliers is always the right amount | 0 | 0 | 11.1 | 41.3 | 47.6 |
| 6 | The condition of goods ordered is always good | 0 | 0 | 12.7 | 38.1 | 49.2 |
| 7 | The company's profits achievement has increased | 0 | 0 | 6.3 | 57.1 | 36.5 |

Table 5 shows that more than 79% of respondents stated conduct regular meetings between hotel management and environmentally friendly suppliers. The meeting activities further implicated the commitment in the form of suppliers understands hotel needs. The real action is that more than 93% of respondents said deliveries from suppliers always arrive on time. Enhancing cooperation between hotel management and suppliers is an action to maintain a brand reputation in environmentally friendly business practices and the company's profits achievement.

CONCLUSION

The study revealed that the selection of environmentally friendly suppliers had a positive and significant effect on the implementation of environmentally friendly purchases. The indication was that green supplier selection is a major factor that influences the implementation of green purchasing at 5 stars hotel in Bali. Besides, management must utilize financial support to implement green purchasing practices. It was also noted that the suppliers are committed to the hotel, and with the category of selecting suppliers based on environmentally friendly criteria, it is possible to build long-term cooperation that will later be expected to bring benefits primarily related to costs. Hotel cooperation with suppliers is getting closer and mutually committed in operational purchasing activities for the company's profits achievement. Future researchers must focus on the challenges of implementing green purchases by companies incorporated into the hotel, bar, and restaurant business.

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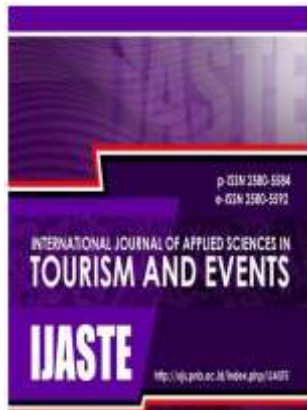
The Impact of Promotion on Room Occupancy Rate in Mesra Business and Resort Hotel Samarinda

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Abstract

Purpose: The purpose of this research is to test and analyze the effect of the development of room occupancy rates at the Mesra Business and Resort Hotel in Samarinda.

Research methods: The population in this study is the number of guests staying during the unknown study period. The sampling technique was taken based on accidental sampling. Primary data obtained by conducting interviews with 70 respondents using a secondary questionnaire data collected by conducting field observation. Data were analyzed using a simple linear regression method with the help of SPSS statistical software.

Results and discussions: The result showed that the promotion variables consisting of advertising, direct sales, sales promotion, publicity, and word of the mouth simultaneously had a significant effect on room occupancy rates.

Conclusion: The promotional mix variable has a positive and significant effect on the room occupancy rate variable or the consumer's decision to choose a place to stay at the Mesra Business and Resort Hotel.

Keywords: *Promotional Mix, occupancy rate, business and resort hotel*

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INTRODUCTION

In the business world, especially those engaged in services, services are an essential and decisive element in maintaining or growing a company. Service quality is one of the main factors determining the guests, satisfied guests will continue to use services (brand loyalty). Service in the hospitality world is an activity that puts forward standards regarding hospitality attitudes that make guests who come to stay comfortable and happy and return when guests get a good and satisfying impression of the services provided by the hotel. Moreover, usually,

it is not easy to invite guests to come and enjoy the menu at the restaurant. Typically, guests prefer tasty and cheaper food.

The hospitality industry, both national and international, is experiencing intense competition between them. This situation encourages the company to always be observant and responsive in observing various changes, both internal and external, in order to maintain the company's survival. Hotel management must continue to carry out active marketing and promotion because the service industry sector is expected to increase the resilience of the national economy, expand employment and business opportunities, as well as encourage the development of economic activities in various other development sectors. Here every company is faced with challenges in facing competition from similar hotel business units in order to increase sales. With such market conditions, companies must be innovative in adjusting themselves in order to survive in the competition. One of the elements of activities that determine the success of a company is promotional activities. Promotional activities are not only used by companies to pursue profits but also to introduce more of the company's products and services to consumers.

In a company, profit achievement needed to support the survival of the company. Mesra Business and Resort Hotel located at Jalan Pahlawan Number 1 Samarinda-East Kalimantan, which is adjacent to Temindung Airport, a shopping center (Plaza Mulia), a sports center (Gor Segiri) and an office center (Samarinda City Hall) also close to a gas station located on a hill with beautiful, green natural scenery.

From year-to-year Mesra Hotel continues to improve its facilities and number of rooms, wherein 2008 there were 144 deluxe rooms and 12 suite rooms, bringing the total rooms to 307 offices located on the 2nd to 7th floor. Plus, an extensive size swimming pool facility, namely Sangkulirang swimming pool, Sangkulirang Restaurant, Miang Island Pavilion, seven meeting rooms located on the basement floor, VIP room, 2 VIP restaurants (Rinding Island and Senumpak Island), business center, mini market. Plus, a particular front office 2 for places and a magnificent facility is the Mesra Ballroom's pride, with a capacity of 500 to 1,200 people. In 2012 added a new facility, namely mini golf. Furthermore, in 2013 added new facilities, namely hot tubs, the progress of Mesra International Hotels has made it the only hotel in Samarinda, which has the most rooms with the complete facilities. Its characteristics, which located in a green and natural hilly area, are pride for Mesra International Hotel.

With a wide range of facilities and an extensive area, the Mesra Hotel International is now not just bearing as hotel accommodation. Still, the Mesra International Hotel is currently the only Hotel and Resort in Samarinda. In conducting the Mesra Hotel activities, it also carries out policies such as holding approaches to government and private institutions by providing information about the products and services they have. Mesra Hotel also takes a promotion policy by utilizing existing media, both print and electronic media. From the systems and strategies that have been carried out by Mesra Hotel, it turns out that the room occupancy rate has increased every year, as has been determined. The room occupancy rate can be seen with the room occupancy table every year to assess the development of room sales volume each year at the Mesra Hotel can be seen in the table below:

Table 1. Room Occupancy Rate in the Mesra Hotel in 2016-2018

| NO | Month | YEAR | | |
|----|-------|-------|-------|-------|
| | | 2016 | 2017 | 2018 |
| 1 | Jan | 3,324 | 4,116 | 4,216 |
| 2 | Feb | 2,707 | 3,080 | 4,080 |

| NO | Month | YEAR | | |
|----|-------|-------|-------|-------|
| | | 2016 | 2017 | 2018 |
| 3 | Mar | 2,962 | 3,362 | 4,362 |
| 4 | Apr | 3,463 | 7,175 | 8,175 |
| 5 | Mei | 3,082 | 7,089 | 8,089 |
| 6 | Jun | 2,277 | 6,332 | 7,332 |
| 7 | Jul | 1,893 | 6,175 | 7,175 |
| 8 | Aug | 1,773 | 5,977 | 6,977 |
| 9 | Sep | 2,825 | 3,671 | 4,671 |
| 10 | Oct | 2,548 | 3,394 | 3,894 |
| 11 | Nov | 2,215 | 3,924 | 4,924 |
| 12 | Des | 2,889 | 4,530 | 4,930 |

Source: Mesra Business and Resort Hotel, 2019

Based on the Room Occupancy Data at Mesra Hotel in 2016-2018, we can see that the sale of rooms at the Mesra Hotel has experienced a significant increase in the room occupancy rate each year. This escalation happened because the Mesra Hotel did a Promotional Mix to increase the number of rooms in the Mesra Hotel. Mesra Business and Resort Hotel provide excellence in terms of quality; that is, the hotel's atmosphere and the nuances of the house-maintained cleanliness and service. Affordable prices also stimulate promotional actions undertaken by Mesra Business and Resort Hotels.

Customers play an essential role in measuring satisfaction with products and services provided by the company. In determining the level of joy, a customer often sees the value of the product and the service performance received from a purchase process for the product/service compared to other companies. The significant value added by a service product to the customer is an answer to the question that arises about why a customer makes his choice. Customers look for the most excellent value a service product provides. Based on the background description above, the purpose of this study was to determine the effect of promotion on room occupancy rates at the Mesra Business and Resort Hotel in Samarinda.

RESEARCH METHODS

This type of research in this research is quantitative descriptive research. That is research that aims to explain the state of a variable independently to provide a general picture. The research approach is through the survey; survey research is investigative research conducted to obtain facts from the symptoms that exist and look for information factually to get the truth. The population used in this study were visitors who stayed at the Mesra Business and Resort Hotels in Samarinda during the study period. Primary data obtained by conducting interviews with 70 respondents using a secondary questionnaire data collected by conducting field observation. Data were analyzed using a simple linear regression method with the help of SPSS statistical software.

The population in this study is the number of guests staying during the unknown study period. The sampling technique was taken based on convenience considerations, namely, accidental sampling, where one or more individuals were taken as samples because the respondents were in the study period. In this case, the study sample was guests who stayed at the Mesra Business and Resort Hotels during the study period. The measurement scale of the variable used in this study is a Likert scale (Umar, 2008:98), where respondents state answers to various statements on the proposed behaviour, matter, or knowledge.

RESULT AND DISCUSSIONS

According to Sistaningrum (2002:98), promotion is an effort in influencing actual consumers so that they want to make a purchase of a product offered, now or in the future. Based on the results of the t-test showed that the promotional mix has a positive and significant effect on consumers' decisions to stay at the Mesra Hotel. This can be seen from the considerable value $(0,000) < 0.05$ and count value of $13.468 > t\text{-table } 1.994$. The importance of the contents of the promotional mix in promotional activities to provide excellent performance and operations for the company. This is following the respondents' answers, which stated the promotion provided sufficient information and influenced the decision to stay at the Mesra Hotel. So, it can be said that the promotion variable has the power to win the market, especially the hotel business in Samarinda, namely advertising, personal selling, public relations, sales promotion, direct marketing, and word of mouth.

This happened because of the advertisements carried out by Mesra Business & Resort Hotels, where statements about promotions easily obtained and about promotions delivered by Mesra Hotel that were attractive to respondents, and the messages conveyed were easily understood. Personal Selling or Direct communication (face to face) there is an influence on the decision of the respondent's stay where in this case, regarding the services provided by hotel staff is relatively reasonable and hotel managers are friendly in providing information and willing to take the free time to provide information. Public Relations conducted by Mesra Business & Resort Hotels are reasonably good. This seen from his statements regarding hotel guests invited to specific events and related news about helping provide information. The site also includes sufficient information for hotel guests or potential visitors. Sales Promotion conducted by the Mesra Hotel shows that the level of promotion in terms of Sales Promotion, where his statement about the discount given by the Mesra Hotel affects the decision of the stay and his statement regarding the promos conducted by the Mesra Hotel change hotel guests to stay. Direct Marketing influences the respondents' decision to stay overnight so that the occupancy rate of the Mesra Hotel has increased.

This happens because the Direct Marketing conducted by Mesra Business and Resort Hotels regarding promotions via telemarketing affects the decision of hotel guests in choosing Mesra hotel and is active in offering the latest hotel promos. Word of Mouth or Word of mouth communication is very influential on the decision of the respondent's stay so that the occupancy rate of the Mesra Business & Resort Hotel has increased. This happens because Word of Mouth occurs where statements about recommendations from other consumers and explanations about other people's opinions about hotel amenities or promos are a reference for prospective hotel guests or make hotel guests interested or interested in staying at Mesra Hotel.

1. Advertising

Advertising is one of the four essential items used by Mesra Business and Resort Hotels to launch persuasive communication with targeted buyers and communities. The results showed that the promotion rate was 47%, where almost half of the room occupancy rates of the Mesra Business and Resort Hotels had increased. This happened because of the advertisements carried out by Mesra Business and Resort Hotels, where statements about promotions were easily obtained and about promotions delivered by Mesra Hotel that were attractive to respondents. The messages conveyed were easily understood.

Mesra Business and Resort Hotels in packaging the form of presentation of their advertisements as attractive as possible with the right price so that the purpose of advertising which primarily is to sell or increase sales carried out, this is related to advertising (advertising) with promotion theory which is a method of communicating information aimed at the target market about excellent goods or services available at the right place at the right price. This supported by a previous study by Rahadian and Pratomo (2013), where the results obtained prove the positive influence of the promotional mix on increasing sales of rooms at the Benua Hotel in Bandung.

2. Personal Selling

Direct communication (face-to-face) was conducted by Mesra Business and Resort Hotels to prospective customers to introduce a customer candidate product and form a customer understanding of the product to try to buy it. Based on the results of research conducted in this case, the promotion rate of 46% in which nearly half in this case regarding the services provided by hotel staff is relatively good, and hotel managers are friendly in providing information and willing to take the free time to provide information.

In personal selling of Mesra Business and Resort Hotel employees, direct interaction occurs, face to face with prospective customers, communication by both parties is individual and two-way, and so employees can immediately get a response as feedback about the wishes and preferences of potential customers. Submission of news or conversation that they do is very flexible because it can adjust to the situation. This relates to Hardy's studies (2010: 3), which states that promotion is a method of communicating information aimed at the target market about excellent goods or services available at the right place at the right price. This supported by a previous study by Dani Rahadian and Adithya Pratomo in 2013, where the results obtained prove the positive influence of the promotional mix on increasing sales of rooms at the Benua Hotel in Bandung.

3. Public Relations

Public Relations Publicity is part of a broader function, namely public relations, and includes efforts to create and maintain beneficial relationships between the organization and potential visitors. Based on the results of research shows that public relations conducted by Mesra Business and Resort Hotels are relatively good, this seen from his statement about hotel guests invited to specific events and regarding related news to help provide information, and the site also includes sufficient information for hotel guests or prospective visitors. The relationship between public relations and promotion theory is where public relations perform a method of communicating information aimed at the target market about excellent goods or services available at the right place at the right price. This supported by a previous study by Rahadian and Pratomo (2013), where the results obtained prove the positive influence of the promotional mix on increasing sales of rooms at the Benua Hotel in Bandung.

4. Sales Promotion

All activities intended to convey or communicate a promotion to the target market to take immediate action. Based on the results of the research conducted shows that the level of development in terms of Sales Promotion where his statement regarding price discounts given by the Mesra Hotel affects the decision to stay overnight and his statement regarding promos conducted by the Mesra Hotel change hotel guests to stay. This relates to promotion theory, which is a method of communicating information aimed at the target market about excellent goods or services available in the right place at the right price. Hardy (2010:3). This study not comparable with previous studies conducted by Zulkarnain (2015) regarding Room Prices on Occupancy Rates at the Hotel in Tenggara. Where the results obtained to state that the price of rooms with occupancy rates do not affect each other or do not indicate a relationship, While the results of the authors were careful that there is a link or connection between the price of a room with the decision to stay a prospective customer.

5. Direct Marketing

Mesra Business and Resort Hotel marketing system communicates directly with prospective hotel guests to generate responses or transactions. The reactions caused can be inquiries, purchases, or even support. The results showed that the promotion rate was 50%, where half the occupancy rate of the Mesra Business and Resort Hotel had increased. This happens because the Direct Marketing conducted by Mesra Business and Resort Hotels regarding promotions via telemarketing affects the decision of hotel guests in choosing Mesra hotel and is active in offering the latest hotel promos. This relates to Hardy's (2010:3) theory, which states that promotion is a method of communicating information aimed at target markets about excellent goods or services available in the right place at the right price. This supported

by a previous study by Rahadian and Pratomo (2013), where the results obtained prove the positive influence of the promotional mix on increasing sales of rooms at the Benua Hotel in Bandung.

6. Word of Mouth

Word of mouth communication is a communication process that gives recommendations both individually and in groups to a product or service that aims to provide personal information. The results showed that the promotion rate was 46%, where almost half the occupancy rate of the Mesra Business and Resort Hotel has increased. This happens because Word of Mouth occurs where statements about recommendations from other consumers and explanations about other people's opinions about hotel amenities or promos are a reference for prospective hotel guests or make hotel guests interested or interested in staying at Mesra Hotel. According to Swasta and Irawan (2003:353), this relates to the theory of promotion objectives, including modification of behaviour in which people who communicate provide information, express ideas or opinions, inform, persuade, and remind. In this case, the promotional mix, Word of Mouth, can influence a prospective customer's overnight decision. This supported by a previous study by Rahadian and Pratomo (2013), where the results obtained prove the positive influence of the promotional mix on increasing sales of rooms at the Benua Hotel in Bandung.

Satisfaction with Service

The satisfaction of hotel guests in service that is felt very satisfied is evident from the results of research where the statement of hotel guests about Mesra Hotel fulfils the needs of the excellent stay and becomes a consideration for staying overnight when visiting the city of Samarinda. The service provided by Mesra Business & Resort Hotel employees is one that attracts customers to return to stay at the hotel, so this can be related to Yoeti's theory (2004: 1) that what is meant by service is a product. Intangible results from reciprocal activities between the service provider (producer) and the service recipient (customer) through one or more activities to meet customer needs. Besides, this is supported by previous research by Rahadian & Pratomo in 2013 entitled The Effect of Promotion Mix on Increasing Room Sales at Hotel Benua Bandung, where the results obtained prove that there is a positive effect of the promotional mix on increasing room sales at Hotel Benua Bandung. Recommend to others

The satisfaction felt by hotel guests so that they feel obliged to recommend to their family and friends, so that prospective hotel guests feel that the decision to stay at Mesra Hotel is the right one and where hotel guests also want to stay back at Mesra Hotel. This is related to the theory of promotional objectives according to Swastha & Irawan (2003:353), including behaviour modification where people who communicate provide information, present ideas or opinions, inform, persuade, and remind. In this case, the promotion mix, namely the Word of Mouth, can influence the decision to stay overnight. This is supported by previous research by Rahadian & Pratomo in 2013 entitled The Effect of Promotion Mix on Increased Room Sales at Hotel Benua Bandung, where the results obtained prove that the promotion mix has a positive effect on increasing room sales at Hotel Benua Bandung.

Based on the results of the research and the discussion started, the conclusions of this study are: Promotion mix variable has a positive and significant effect on room occupancy rate variables or consumer decisions in choosing a place to stay at Mesra Business & Resort Hotel. The importance of the content of the promotional mix in promotional activities to provide good performance and operations for the company. So it can be said that the promotion variable has the power to win the market, especially the hotel business in Samarinda, namely advertising, personal selling, public relations, sales promotion, direct marketing and word of mouth. Advertising or advertising affects the respondents' decision to stay so that the room occupancy rate of Mesra Business & Resort Hotel has increased. This happens because the advertising carried out by Mesra Business & Resort Hotel, where statements about promotions that are easy to get and about promotions delivered by Mesra Hotel is attractive to respondents and the messages conveyed are easy to understand.

Personal selling or direct communication (face-to-face) influences the respondent's decision to stay where in this case the service provided by hotel staff is reasonably good, and hotel managers are friendly in providing information and willing to take spare time to provide information. Public Relations or public relations carried out by Mesra Business & Resort Hotel is already reasonably good, this can be seen from his statement about hotel guests being invited to specific events and regarding related news helping provide information and the site also provides sufficient information for hotel guests or potential visitors. Sales Promotion carried out by Mesra Hotel shows that the level of promotion in terms of Sales Promotion where his statement regarding the price discount given by Mesra Hotel affects the decision to stay and his statement regarding the promos carried out by Mesra Hotel affects hotel guests to stay.

Direct Marketing affects respondents' decision to stay so that the occupancy rate of Mesra Hotel has increased. This happens because the Direct Marketing carried out by Mesra Business & Resort Hotel regarding promotions via telemarketing affects hotel guests' decisions in choosing Mesra Hotel and is active in offering the latest hotel promos. Word of Mouth or word of mouth communication greatly influences the respondent's decision to stay so that the occupancy rate of Mesra Business & Resort Hotel has increased. This happens because the Word of Mouth that occurs in which statements regarding recommendations from other consumers and statements regarding other people's opinions regarding hotel facilities or promos become a reference for potential hotel guests or make hotel guests interested or interested in staying at Mesra Hotel.

CONCLUSION

Based on the results of the research and discussion presented, the study's conclusions are: The promotional mix variable has a positive and significant effect on the room occupancy rate variable or the consumer's decision to choose a place to stay at the Mesra Business & Resort Hotel. The importance of the contents of the promotional mix in promotional activities to provide excellent performance and operations for the company. So, it can be said that the promotion variable has the power to win the market, especially the hotel business in Samarinda, namely advertising, personal selling, public relations, sales promotion, direct marketing, and word of mouth. Advertising or advertising affects the decision of the respondent's stay so that the room occupancy rate of the Mesra Business & Resort Hotel has increased.

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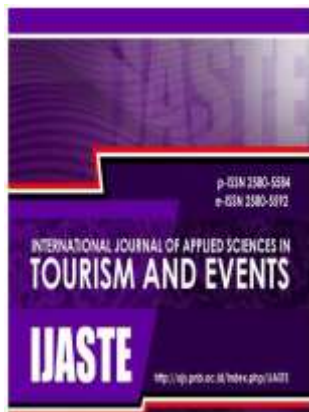
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Utilization of Remote Sensing Technology and Geographic Information Systems for Tourism Development

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Abstract

Purpose: This article is to analyze one of the most effective and efficient ways in utilizing remote sensing technology and geographic information systems (GIS) for tourism development.

Research methods: This article was created to archive and review some of the findings of the use of remote sensing technology and GIS for tourism management and development, using the literature review method.

Results and discussions: The use of remote sensing technology and GIS for tourism development and management has been widely used by various academics and researchers in various countries in the world including in Indonesia. This is acceptable because it is considered effective and efficient, the suitability of tourism development studies, for the study of tourism multimedia development, identification of the most desirable tourist areas, and for the evaluation of ecotourism areas.

Conclusion: Following up on the findings and explanations above, further research can take advantage of remote sensing technology and geographic information systems in tourism development and management.

Keywords: *Remote sensing, geographic information systems, tourism development*

Article History

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INTRODUCTION

Tourism in its development has become the largest industry in generating foreign exchange in various countries (Ridwana et al., 2018). In Indonesia based on Law Number 10 of 2009 tourism is an integral part of national development that is carried out systematically, planned, integrated, sustainable, and responsibly while providing protection for religious values, culture that lives in the community, sustainability and quality the environment, and national interests (Sulaiman et al., 2017). The success of tourism in any country depends on the country's ability to develop, manage and market the tourism facilities and activities of its (Bualhamam, 2009).

Tourism development and management can be done in various ways. One of the most effective and efficient ways is to utilize remote sensing technology and geographic information systems. The development of this technology can provide convenience for the acquisition of data that is actual, with fast and efficient than with terrestrial surveys. That is because the development of remote sensing technology allows the collection of geographical data through images (Hamuna et al., 2018). Current image data can be obtained freely through various unpaid providers such as on the NASA website (Boori & Komal Choudhary, 2015). Various image processing techniques are applied to obtain better results (Ridwana dkk., 2019). The difference in approach to obtaining information from remote sensing images is termed hybrid interpretation, a combination of visual interpretation techniques (based on spatial characteristics of objects) and digital processing according to the spectral characteristics of objects (Himayah dkk., 2020). By definition remote sensing is the science, technology, arts to obtain information about the object, the region, and the symptoms that exist on the surface of the Earth by analyzing the image obtained by the sensor and a electromagnetics wave without direct contact with object being studied (Yanti et al., 2020). More details can be seen in Figure 1 below.

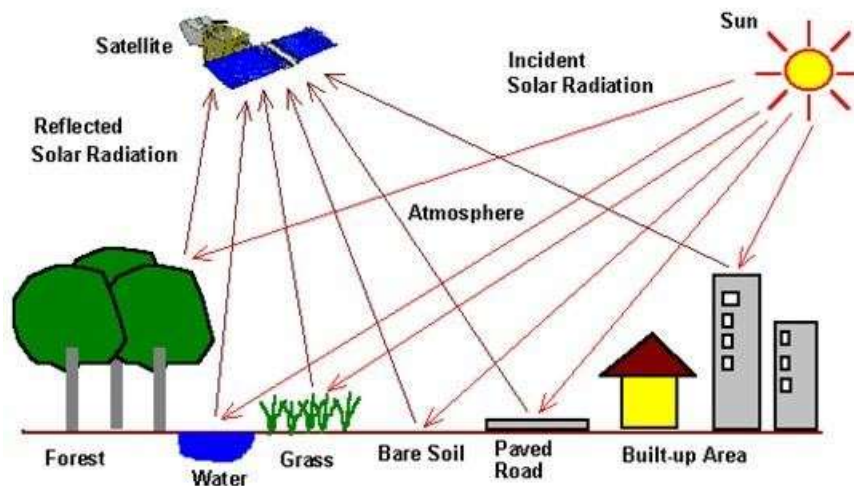


Figure 1. Remote Sensing System
(Source: Sutanto, 1994)

Geographic information system in the present has been widely recognized as a *tool* that is very useful for managing, analyzing, and displaying large amounts of diverse data related to a lot of the planning and management of both scale workshops I and regionally. Its use in environmental management is greatly increasing. Tourism itself is an activity that is highly dependent on environmental resources. So that if the tourism activity ignores planning and management it will likely erode its environmental base. Therefore, the strength of the planning of tourism can be enhanced with the application of geographic information system for the achievement of the development of sustainable tourism (Pareta, 2013).

The presence of remote sensing technology and geographic information systems provides enlightenment for the ease of planning and managing tourism. Information about objects located at a location on the surface of the earth is taken using satellite or aerospace sensors. Then according to the targeted objectives, information on the object is processed, interpreted, dian a lysis, and presented in the form of spatial information and thematic maps related to tourism using geographic information system (Shalihati, 2014).

Various countries in the world, including in Indonesia, the use of remote sensing technology and geographic information systems for tourism management has been done by many university academics and researchers working in the field of geospatial information and tourism development. Based on that, it is very necessary to archive the findings of the studies that have been carried out, with expectations so that later it is easy to apply them. This

scientific article was created to archive and review some of the findings of the use of remote sensing technology and geographic information systems for tourism management.

RESEARCH METHODS

This scientific paper was made using the method of tuning literature. Literature review is a translation in the form of descriptions in the form of critical studies in the discussion of themes that have been written by experts in certain fields (Shalihati, 2014). The theme of the study chosen in this scientific article is the study of remote sensing technology and geographic information systems that have been effectively utilized for tourism management. The data was obtained from various scientific journals, proceedings, and literature books.

RESULT AND DISCUSSIONS

Remote Sensing and Geographic Information Systems for Suitability of Tourism Development

The criteria for determining the location most suitable for tourism development derived from pengharkatan and estab weight of an every parameter consisting of topography, soils, geology, hydrology, environment, land use, land cover, and infrastructure. Suitability of tourism development is analyzed through the *model builder* developed in ArcGIS application that can be seen in figure 2.

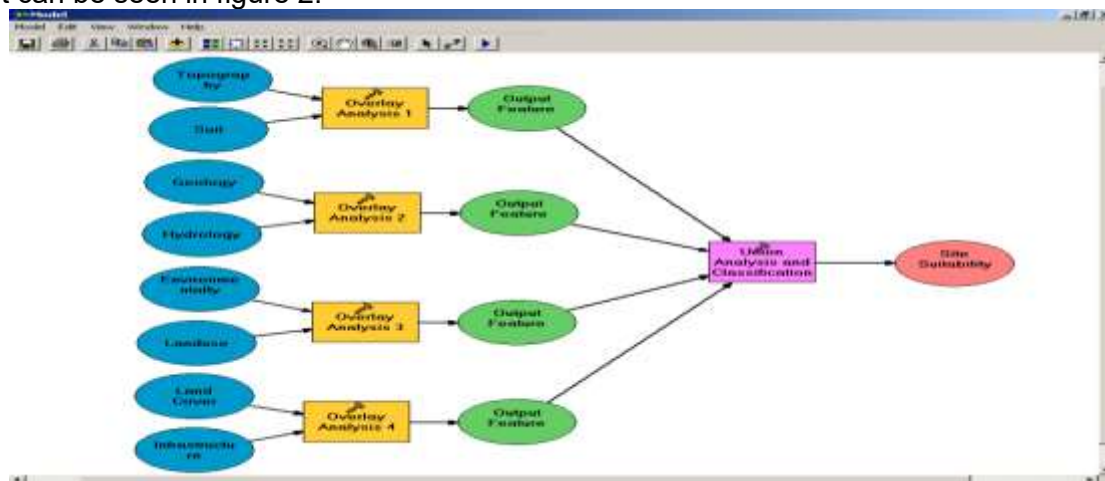


Figure 2. *Model Builder* Conformity Tourism Development Area
(Source: Pareta, 2013)

Each parameter produces a thematic map which is then overlapped and analyzed produces a map of land suitability for tourism. The final suitability map can be seen in Figure 3, where the map is displayed in gradations of red to green. Areas indicated by green symbols represent the most suitable locations for tourism development. Whereas the area designated with the red symbol is the location with the lowest suitability level. The most suitable area is an area that has an aggregate score close to 10. In addition to seeing the area of the area suitable for tourism development can be seen in Table 1.

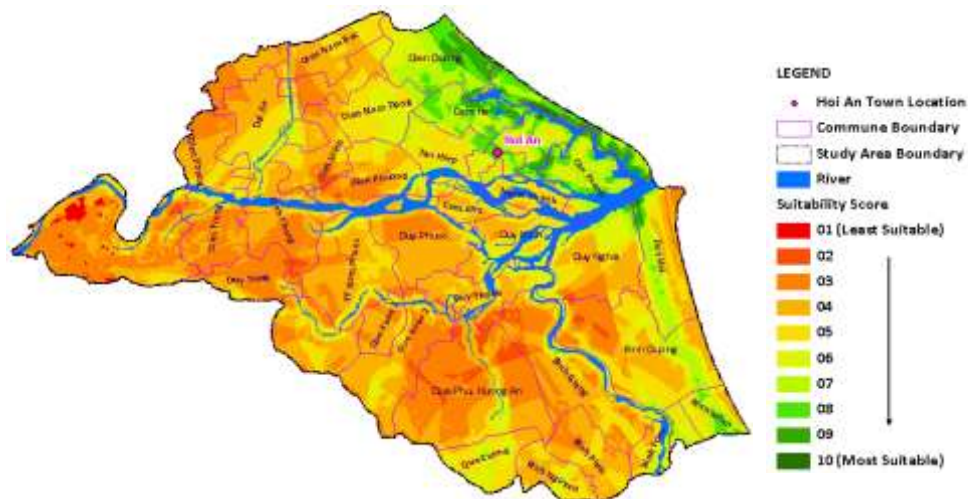
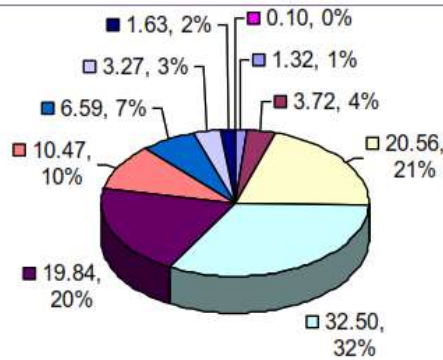


Figure 3. Land Suitability Map for Tourism Development in Hoi An, Vietnam (Source: Pareta, 2013)

Table 1. Table of Area of Conformity of Tourism Development Land

| S. No. | Suitability Classes | Area | |
|--------|---------------------|-------------|--------|
| | | (In Sq Kms) | (In %) |
| 1. | Class - 1 | 04.83 | 01.32 |
| 2. | Class - 2 | 13.56 | 03.72 |
| 3. | Class - 3 | 74.95 | 20.56 |
| 4. | Class - 4 | 118.50 | 32.50 |
| 5. | Class - 5 | 72.33 | 19.84 |
| 6. | Class - 6 | 38.18 | 10.47 |
| 7. | Class - 7 | 24.01 | 06.59 |
| 8. | Class - 8 | 11.93 | 03.27 |
| 9. | Class - 9 | 05.95 | 01.63 |
| 10. | Class - 10 | 00.36 | 00.10 |
| TOTAL | | 364.59 | 100.00 |



The same thing has also been studied in Central Java to determine the potential location of astronomical tourism in the Province of Central Java, Indonesia. The distribution of potential locations for the development of astronomical tourism is shown in Figure 4. The yellow area indicates the potential area and is recommended for the development of astronomical tourism. The red area is a potential area for astronomical tourism but is not included in the recommendations. This is because the accessibility to the location is not within < 3 km of the collector or artery road. Both potential and potential areas and recommended are widely available and clustered in the southeast and northeastern areas of the study area. In the northeastern part, most areas are covered in Blora, Grobogan, Rembang, and Pati districts. In the southeast, many of these potential areas are on the southern coast of Gunungkidul district and part of the Karanganyar Wonogiri district. Some other potential areas have a narrower size and have a non-grouped distribution pattern.

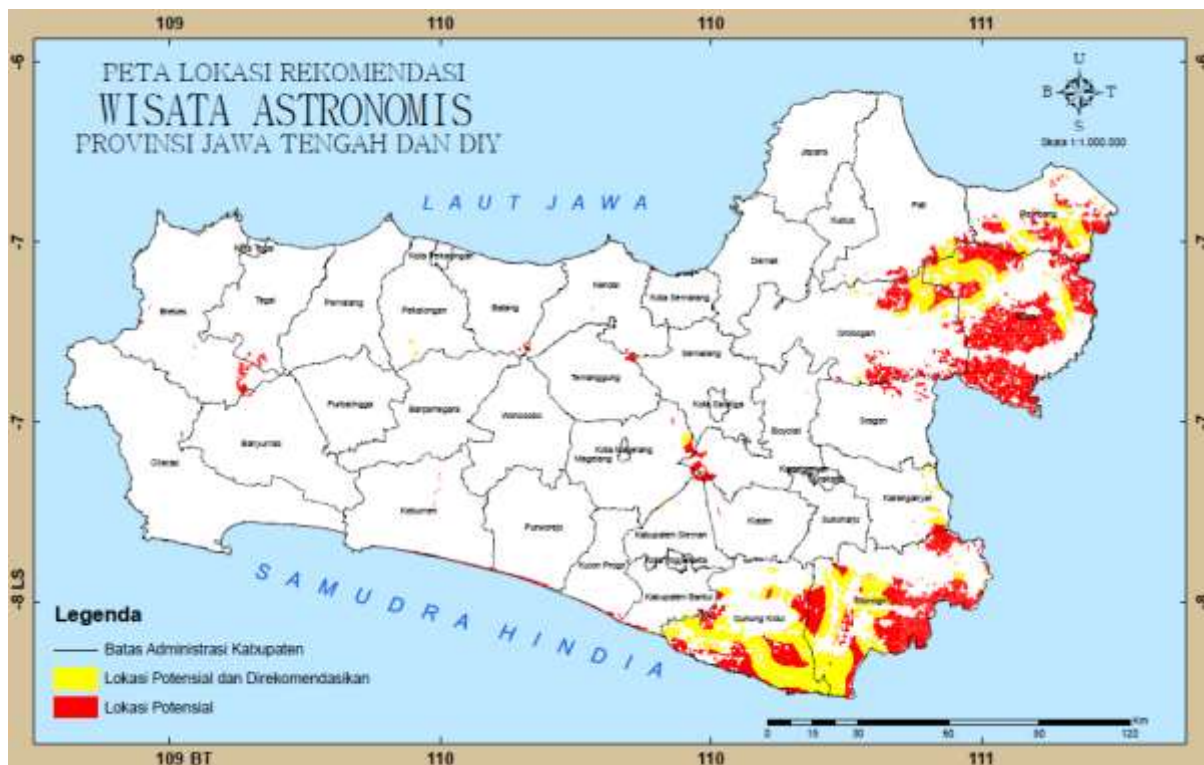


Figure 4. Distribution of Astronomical Tourism Maps
(Source: Afrizal dkk., 2016)

There is a significant difference between potential locations and non-potential locations. The difference is seen from the appearance of the night sky where the potential location of astronomical objects is easy to observe. Dark environmental conditions so that light pollution is very minimal. The condition of the night sky at the site has no potential for environmental conditions with high artificial lighting/electricity so that the night sky does not look dark which results in unclear astronomical appearance (Afrizal dkk., 2016).

Remote Sensing and Geographic Information Systems for Tourism Multimedia Development

Existing competition in the tourism industry requires new and innovative strategies to present the tourism area. To reach the intended tourist target group, it is very important to prepare information in the geo-multimedia information system and to display it in different digital media. The implementation of geo-multimedia information systems in the tourism area requires close cooperation with various parties within the framework of the concept of work created over the years.

The basic elements to complete the system in the development of this project can be seen in Figure 4 below. The development of related thematic and geographical data is integrated in a database of interactive multimedia information systems and can be obtained through online and offline with a variety of tourism information in digital media. The system will be integrated with satellite imagery, GPS (Global Positioning System) data, geographic information systems, terrestrial data, and also integrated with tourism information offered through multimedia, 2-dimensional data, 3-dimensional visualization technology, and interactive navigation. Tourism information that is developed based on location and provides tourism area information that can be accessed via the internet, on CD-ROMs, and also mobile devices, can increase tourist interest.

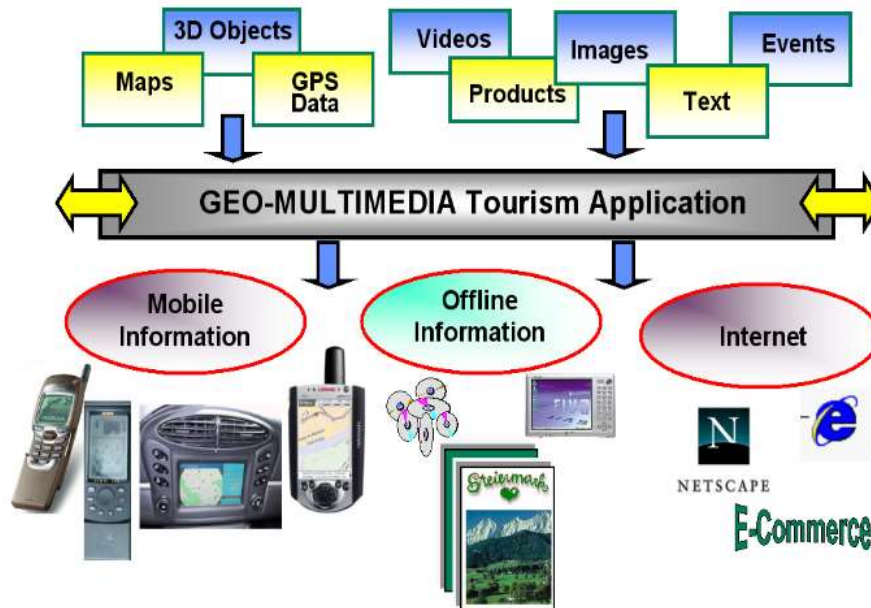


Figure 4. Tourism Geo-Multimedia Application
(Source: Almer & Stelzl, 2002)

In general, the display of results from geographic data processing and thematic tourism data can be seen in Figure 5 below. Display that can be obtained through the internet and CD-ROM is a multimedia tourist guide in the Dachstein Tauern region. To display 3-dimensional visualization, virtual panoramas, and digital photographs use remote sensing satellite imagery. The digital travel guide contains the latest information on infrastructure, geographical position, sports and events, as well as complete information related to accommodation that is equipped with photos of the building.

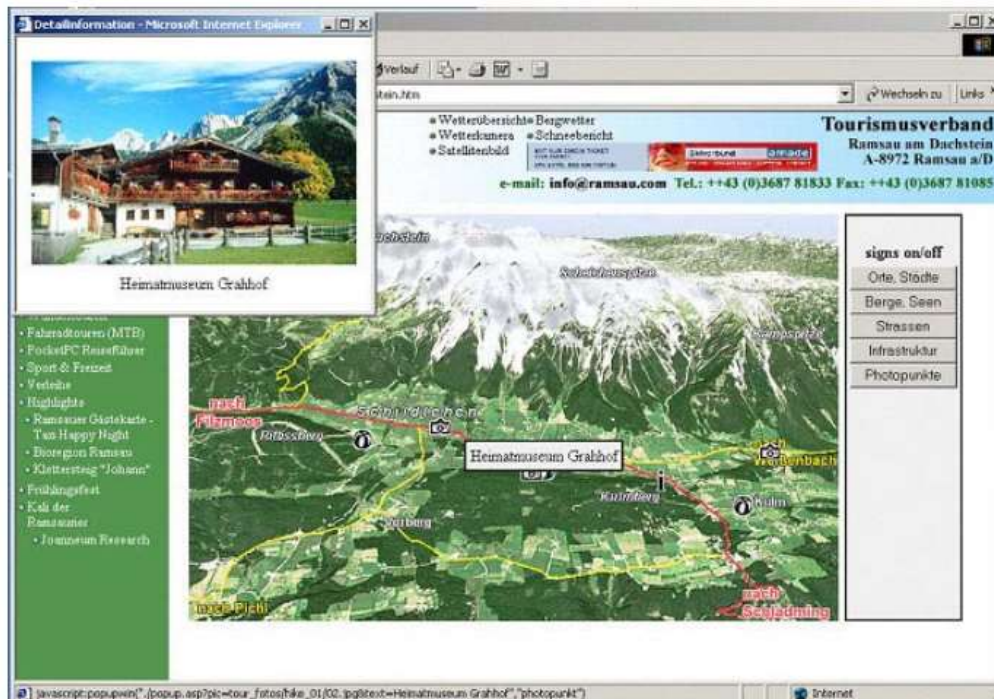


Figure 5. Display 3 Dimensions of Tourism Infrastructure
(Source: Almer & Stelzl, 2002)

Multimedia visualization for travel information, images, sound, text, and video elements have been integrated in PDAs that have been recorded through mobile devices. Furthermore, cartographic illustrations regarding tourist locations and surroundings are also available, can be seen in Figure 6 below. Users can move on the map to see different areas. The location point that is clicked on the map demonstrates the available multimedia information, including descriptions in the form of text, audio and a short video.



Figure 6. Travel information in the iPAQ application
(Source: Almer & Stelzl, 2002)

Remote Sensing and Geographic Information Systems for the Identification of Tourist Areas of Interest

Twitter provides voluntary geographical information that can be accessed geographically and can be accessed freely. This study shows that tweets have great potential to map tourist areas even in remote areas and areas that lack data. OSM (Open Street Map) data is freely available and night light data from remote sensing helps in enriching the process of finding TAOI (tourism areas of interest). In this study, geo-tagged tweets are collected and cleaned, and then apply grouping to get the spatial distribution of social media clusters. Furthermore, tourism-related clusters are distinguished from normal clusters by exploring different Twitter metadata along with OSM and NTL (nighttime light) data. The final list of selected TAOI is not only popular among travelers, but also ensures the availability of important related tourism infrastructure in the vicinity. The proposed framework was examined in two different district districts in Nepal with satisfactory results. This framework not only identifies popular TAOI but also helps in finding key tourist locations in the neighborhood. Figure 7 shows Lakeside, part of the city of Pokhara, which is the most popular tourist area in the Kaski district.

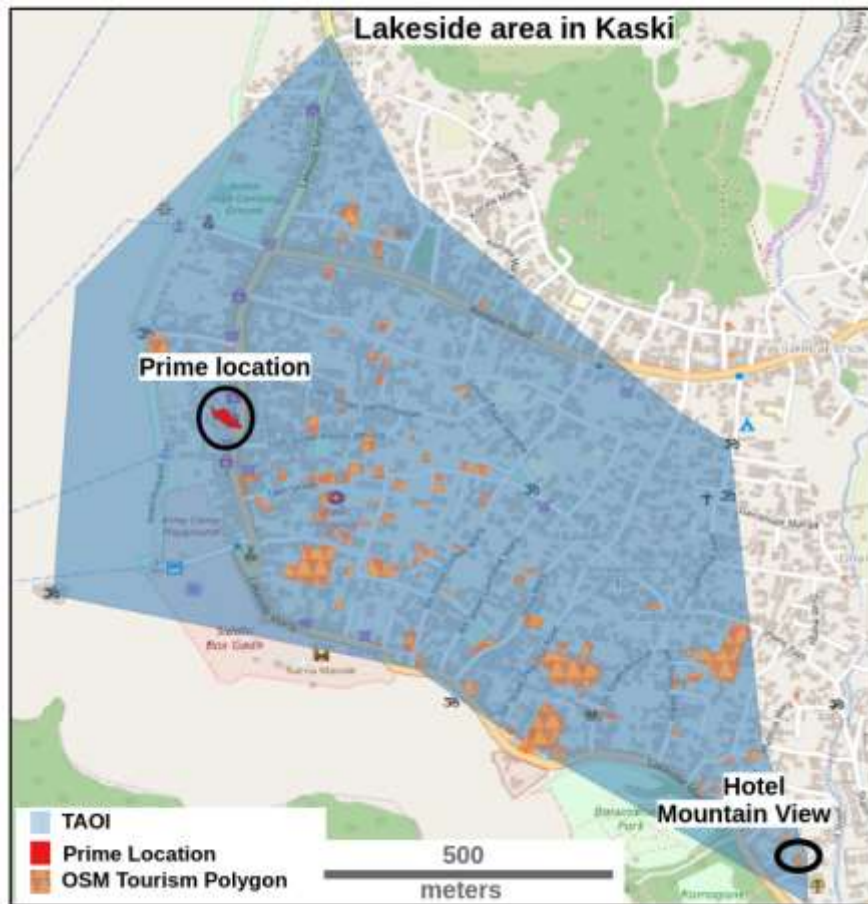


Figure 7. Lakeside Areas as Important TAOI in Kaski with Main Locations
 (Source: Devkota et al., 2019)

The proposed analytical framework will enhance current tourism studies in several directions. First, by finding interesting tourist areas in remote areas that lack data by conducting fusion of free social media data and other free data sources such as OSM and NTL. Second, by devising a method for estimating the value of clustering parameters that can be applied in a variety of scarce data areas. Third, by ensuring the availability of minimum essential facilities recommended by tourist sites. In addition, useful guidelines are determined to identify unclear alternatives from the main tourist sites. Most importantly, the approach outlined in this paper presents a methodological novel that was not previously used in tourist studies.

For example, figure 8 shows the newly emerging tourist relations in the Kaski district. The spots that lie along the shores of Lake Phewa, were once non-tourist. The proposed framework was successful in finding newly formed tourist sites, although most of the data used was relatively long. Therefore, an in-depth investigation of the positive results generated by this system can provide more insight. For example, the presence of foreign tweets in non-tourist areas might signify tourist attractions that appear.

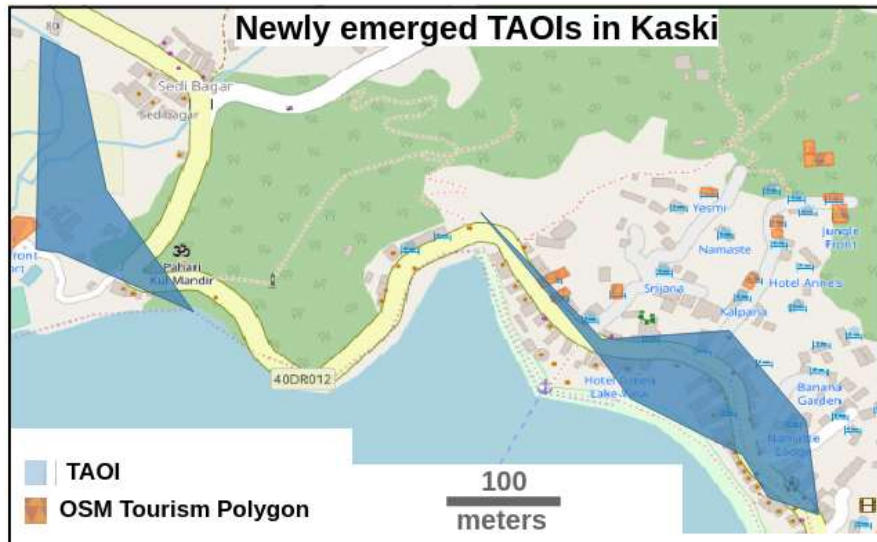


Figure 8. New TAOI that Appears in Kaski
(Source: Devkota et al., 2019)

The proposed approach examines TAOI findings from social media groups that are located mainly in areas that are built (or well-lit areas). Some TAOI with little media attention or located in areas that are not built (or not lit) can be discarded. A simple way to include these areas in the final selection is to decrease the threshold value.

Remote Sensing and Geographic Information Systems for Ecotourism Evaluation

Ecotourism is currently the fastest growing segment in the world in terms of tourism. People want to enjoy the world but they must try to do it in a way that does not negatively affect the environment. As such, many conservative programs are followed by countries that mainly receive tourism benefits. Let's say Turkey, the Ministry of Culture and Tourism determine that the Black Sea is an area that will be developed primarily on biodiversity and ecotourism targeted in 2023.

This article aims to determine the most suitable ES in the Black Sea region of Turkey. Thus, a four-step scientific solution approach was developed to determine ES. First, 14 indicators are determined for site selection (figure 9), then these indicators are entered into GIS. Then the criteria are prioritized by AHP and finally, potential sites are ranked using PROMETHEE. When we look at the site selection indicators, it appears that the factor that has the highest priority is "vegetation diversity" and the lowest priority is "temperature". This means that tourists can visit ecotourism sites regardless of temperature and weather, but they are very interested in the diversity of vegetation which means that they wish to see various types of plants. On the other hand, while "land use" has the highest importance, the lowest level is the "climate" dimension.

One limitation of research; the level of importance is determined by local tourism experts and they are determined primarily for this field. But any research can be done with the same technique. As a result of this study, west of Sinop, east of Artvin was determined as a very suitable location for ecotourism among 27 alternatives (figure 10).

On the other hand, the central regions of Trabzon and Rize are determined as inappropriate locations. Both Sinop and Artvin are small cities that have waterfalls, natural parks, wildlife ecology, and rural tourism. Although this area has more than enough resources for ecotourism, there are factors that hinder its progress, namely ineffective publication or lack of investment. Another important issue is the carrying capacity of the economy or ecology for tourism locations.

Thus, monitoring tourist behavior, marketing strategies and management objectives seems to be a suitable area for planning to become an eco tourism city. The results of this paper can be useful for ecotourism planning because the government invests heavily in tourism even though they have scarce resources. Further research can be conducted to

determine the optimal location for various types of tourism such as "religious tourism, hunting tourism, golf tourism, and others".

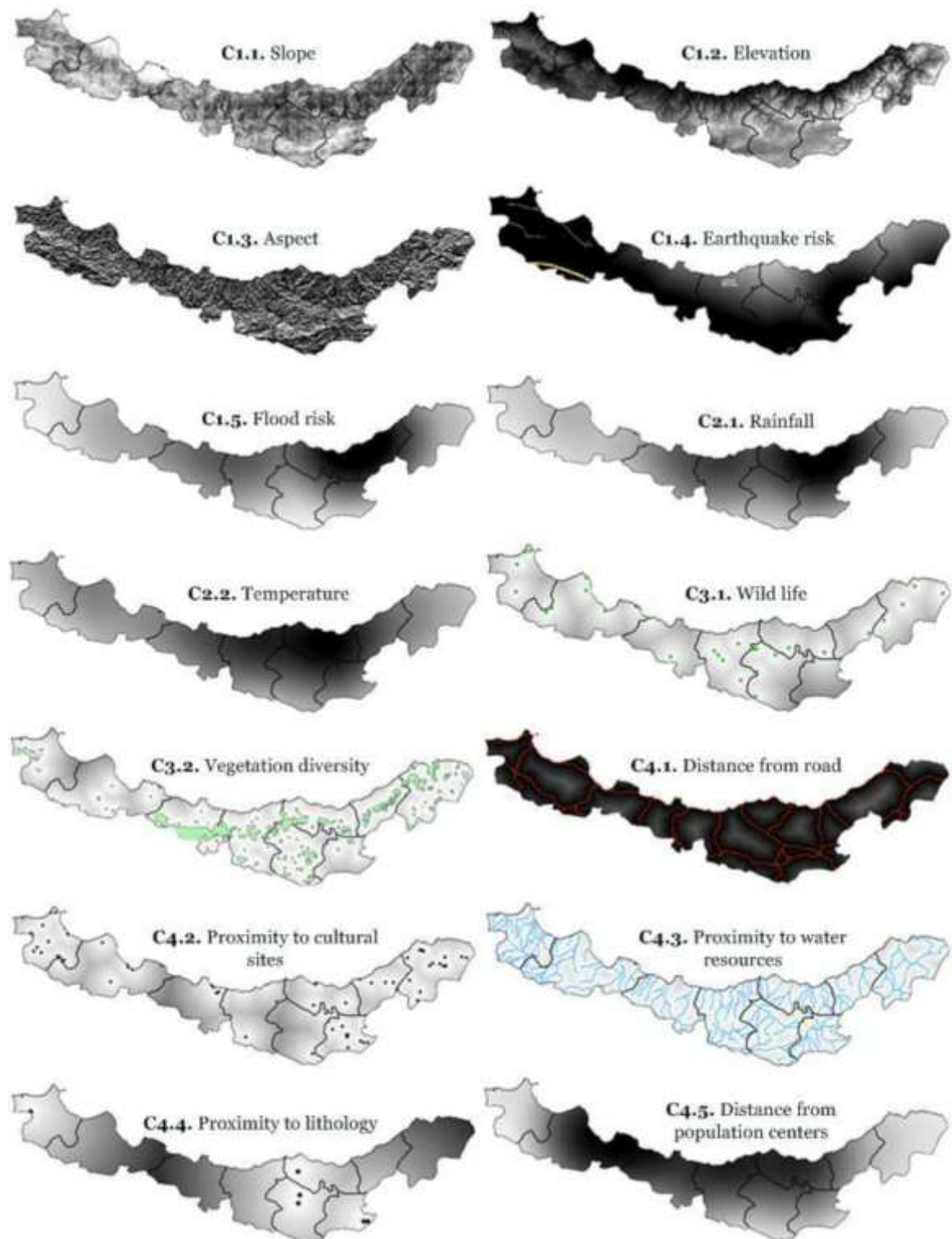


Figure 9. Evaluation of Ecotourism Sites
(Source: Çetinkaya et al., 2018)

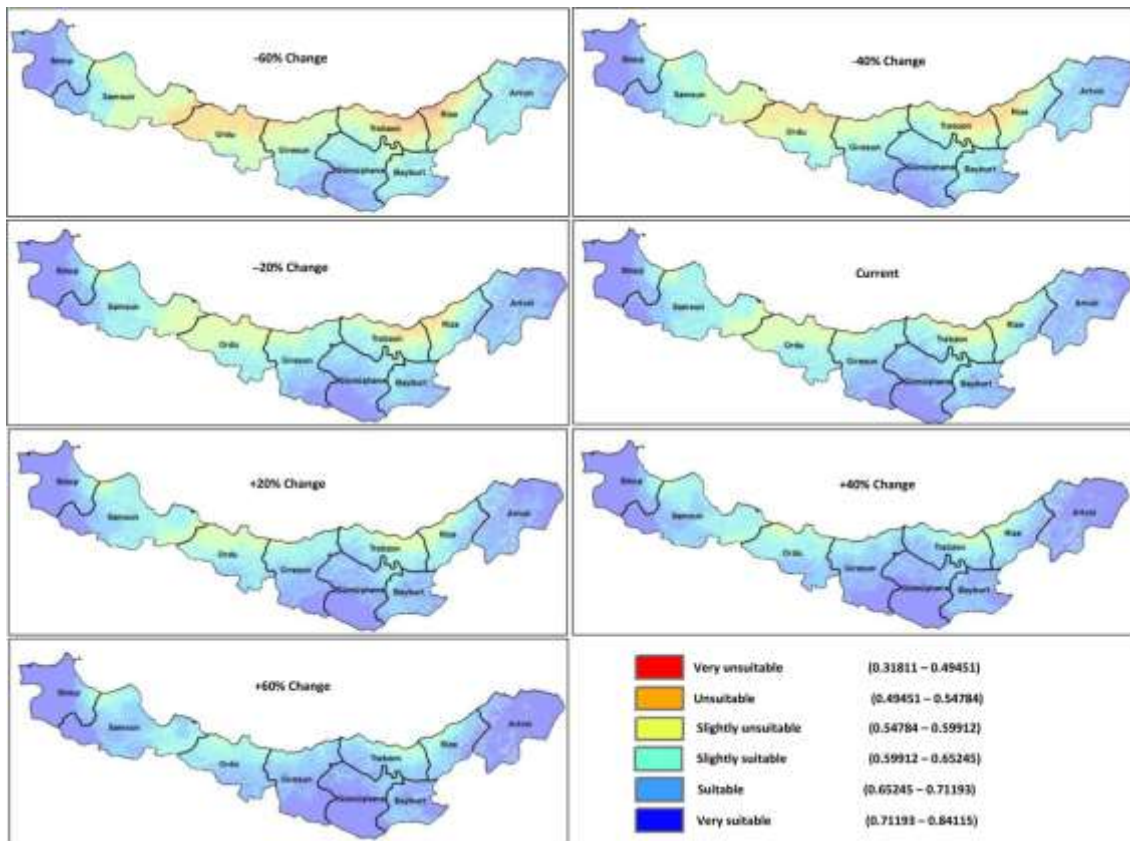


Figure 10. Conformity Map of Ecotourism Areas
(Source: Çetinkaya et al., 2018)

CONCLUSION

The use of remote sensing technology and geographic information systems for tourism development and management has been widely used by various academics and researchers in various countries in the world including in Indonesia. This is acceptable because it is considered effective and efficient. As is the case for the suitability of tourism development studies, for the study of tourism multimedia development, for identification of the most desirable tourist areas, and for the evaluation of ecotourism areas.

Following up on the findings and explanations above, further research can take advantage of remote sensing technology and geographic information systems in tourism development and management. Starting from obtaining tourism data, processing, and analyzing data to produce geospatial information.

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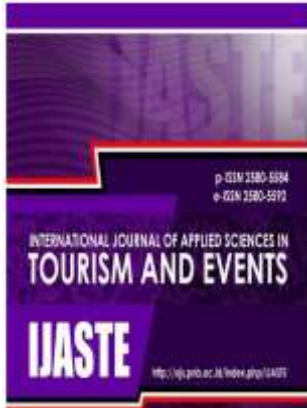
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The Application of Technology in Museums

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Abstract

Purpose: This research set an objective to answer how could technology is applied in museum to encourage interest of tourist to visit museum as destination.

Research methods: Research has been done through Focus Group Discussion (FGD) and depth observation conducted on January 2020, in Jakarta. Nine informants/participants involved during FGD, including 5 museums (public and private), 2 technology providers, and 1 museum users community.

Results and discussions: Strong cooperation between museums and technology providers have been elaborated, in several museums in Jakarta. Both parties will try to add more platforms through video mapping application, projection mapping, virtual tour, and internet of things (IoT) operations. Process of increasing experience and immersion encounters obstacles, to provide additional experience to visitors, so that all five senses that exist in visitors, can enjoy all museum collection.

Conclusion: Technology could embrace interaction and immersion to add more experience value on visitors. Thus, tourism industry would be more attractive with the presences of museums.

Keywords: *immersion, interaction, experience, museum, technology*

INTRODUCTION

In relation to cultural tourism, the existence of museums is believed to be a core for cultural development process and human civilization, at the same time. With collections in form of historical objects, as well as objects related to human culture, museums have taken an important role in providing education, especially for tourists who visiting a destination. In its function in terms of cultural education, museum also holds an important function to inherit values from past life. Through the museum, there is a bridge of inheriting culture from previous generation to the next generation. Museum also made people and tourists aware about how importance is of preserving a value from the past to the modern era. As mentioned by Absalyamova (2015) that museum preserves and maintains the diversity of cultural heritage as a resource for sustainable tourism development.

Thus, the importance of a tangible high-value collection from the previous era to the current era, Ministry of Tourism was aggressively carrying out museum-based tourism development. State government also sees the existing museums abroad, where museums often become more than just tourist destinations, but also historical studies of human anthropology, such as Louvre Museum in France, Terracotta Museum in China, Rijksmuseum in Netherlands, British Museum in United Kingdom, and the Pergamon Museum in Germany. This is what the Ministry of Tourism looks at as one of opportunities and strategies by implementing culture-based sustainable tourism. Then, finally number of museum collections is growing. The establishment of museum was also carried out by involving private sector, in

every province in Indonesia. Every activity for the sake of the activity is designed by using museum as event venue.

Among many areas that are considered as leading tourism destinations in Indonesia, Jakarta stands as one of the most popular tourist destinations particularly for education purposes. A report from the Ministry of Education and Culture (2019) reveals that there is a total of 453 museums in Indonesia. Forty-two of them are general museums, while the rest is specialized or themed museums. Mostly the museums are concentrated in Java region, with DKI Jakarta (64 museums) and Central Java (54 museums) as the leading cities. Based on the ownership, museums can be classified into three types: (1) national government & provincial government museum; (2) regional government museum; and (3) private museum.

Government regulation stated that museums must be standardized. However, according to the last report, there are only 102 museums that have been standardized, while the other 351 museums are not yet evaluated. The result shows that 27 museums in the A grade, 29 museums are in the B grade, and 46 museums are in the C grade, which means that they still need a lot of improvement to achieve the intended quality.

Museum conditions who have lacks innovation, has implications for the declining number in interest of tourists to come and dig deeper into the collections in the museum. Innovations in museums have begun in several developed countries. In Louvre museum, the use of technology has been done by using audiovisual media in several types of collections. One form of technology use in an art performance with exhibition-based is also done in a mall in Jakarta, called Galeri Indonesia Kaya. The form of innovation carried out in this art exhibition uses the artificial intelligence method. Artificial intelligence assists to emphasize the creation of intelligent machines that work and react like humans. As Zhao (2012) mentioned that technology could enhance interactive environment established at virtual museum.

The two forms of innovation that have been carried out by the art exhibition performance form should also be replicated by other museums in Indonesia, especially those that do have a fairly high cultural collection. It cannot be denied the dependence of tourism in Indonesia on culture itself. But it cannot be ignored that cultural preservation in Indonesia will be very difficult to do without the help of technology. Artificial Intelligence technology will certainly provide the innovation and novelty of the museum as a destination in Indonesia. As Pallud (2017) described that museum should be placed as a cultural learning center. The interaction with technology as being intuitive and interactive, will make visitors experience higher levels of cognitive engagement, cultural engagement, and thereby ensuring positive learning experiences.

The origin of the museum can be traced back to the establishment of *kunstkammer* or cabinet of curiosities in the 16th Century (Richman-Abdou, 2018). Owned by the noble and the elite, the purpose of *kunstkammer* was to collect natural objects, manuscripts, and artefacts from different areas or continents as a private collection of the owner. There was no special interest and classification of the collection since it was mainly used as a storage room for the wealthiest to enhance their social status.

The transition between private collections to public collection begun in the 18th century. At this period, many famous museums were built, such as the British museum that made more than 71,000 objects collected by Sir Hans Sloane accessible to the public (British Museum, 2019). From then on, the collection keeps expanding. Afterwards, the formerly random collections started to be more systematic and the purpose for social status changed into a means of acquiring knowledge. It possessed a greater purpose rather than just satisfying an individual.

When museums first transformed into a public institution, the main purpose is for education and communicate the object to visitors. According to Anderson, Ed. (2012) the functions of museums are to collect, preserve, and interpret objects with additional benefits for leisure, socialization, and relaxation. Meanwhile, Pekarik et al. (1999) and Silverman (2002) add other functions namely introspective and therapeutic respectively. Considering this, there is a shift from an internal focus to an external focus on the visitors' experience. In contrast with the previous approach which brought the collection to the public, nowadays,

visitors' demands, and interests can influence the development process of a museum in terms of theme, collection, and other related strategies.

In 2015, the Ministry of Education and Culture succeeded in persuading the government to release a Government Regulation (Peraturan Pemerintah) No. 66 related to museums to enhance the development of the museum sector. According to this regulation, there is a tangible and intangible heritage. Under the tangible heritage, there are cultural heritage object and museum. In Indonesia, the three main purposes of museums are for research, education, and entertainment.

Besides the certification, UNESCO and the late Ministry of Culture and Tourism (2011) have collaborated to make 'Practical Guide for Museum Revitalization in Indonesia' strategic planning report to aid the improvement of local museums. There are also several initiatives to promote traditional culture and museums in Indonesia, for example, Komunitas Historia Indonesia (Indonesian Historical Community), Asosiasi Museum Indonesia (Indonesian Museum Association), and Indonesian Heritage Society. One of the most unique programs by Komunitas Historia Indonesia is "Menginap di Museum" where participants spend the night in a museum while learning about the museum and building network with fellow museum enthusiast.

Thomas and Brown (2001) believe that in the 21st century, learning will move beyond the classroom. In the digital age, information and knowledge are cheap and easy to access without social or locational barrier. In other words, people do not have to visit a brick and mortar building, be it a classroom or a museum, to satisfy their curiosities. With a swap of fingers, all the information needed is already available. Other methods of learning such Massive Open Online Courses (MOOC), using creative commons, and digital library enable people to learn faster. Moreover, in terms of entertainment, besides competing with other tourist attractions like cinema and theme park, museums also compete with in-house leisure activities such as watching Netflix or playing games.

This situation raises a challenge, what can museums offer in the 21st century, both in terms of education and entertainment? How can we incorporate technology in the museums? How can we use it to help museums to overcome this challenge instead of making people stray away from the museum?

Additionally, visiting a museum often comes with many boundaries such as to not touch the object, to not take a picture, and there is a notable distance between the objects and the visitors. Mostly the experience relies on one sense only, namely seeing, whether it is seeing the object or reading the explanation text. However, considering the previous challenges, it is important for museums to design the exhibition with laboratory mindset (Armstrong, Howes, and Woon, 2015) so that the visitors may utilize several methods of learning: listening, sharing, making, comparing, critiquing, and meaning-making.

Visitors should be able to actively participate in the exhibition and engage with objects kinaesthetically or cognitively, thus creating an experiential museum (Hein, 2006). If visitors can get a one-of-a-kind experience by visiting the museums, it will be a unique selling point for the museums to compete. Besides the interaction between the visitor and the display, Mouw (2015) explains that interaction between the visitor and other visitors is much needed to form a lively sense of community.

Virtual Reality (VR) technology aims to provide an immersive environment that can enhance the storytelling process. Although the term is getting popular these days, there are still difficulties to classify the types. It led Carozzino and Bergamasco (2010) to create a taxonomy of VR devices based on the interaction axis (non-interaction, device-based interaction, natural interaction) and immersion axis (non-immersive, low immersion, high immersion). Immersion can be evaluated from visual, acoustic, haptics, and motion.

Another similar study proposed by Beck, Rainoldi, and Egger (2017) classified virtual reality systems in tourism into three categories based on immersion and presence: non-immersive (within a screen), semi-immersive (projected into a huge screen or a wall), and fully immersive (with a headset such as Google Cardboard or Oculus Rift). Considering this, many display systems and installations can be classified as virtual reality technology although the degree of interaction and immersion may vary. Even Augmented Reality (AR) can be

considered as a non-immersive VR with device-based interaction, but with emphasizes on the combination of the actual and virtual world.

These are four examples of museums that utilize virtual reality technology to leverage visitors' interaction and experience. The most basic display system that can be used to improve interaction in the museum is a multi-touch table or screen. Hornecker (2008) did a research of visitors' participation in using 'Tree of Life' table at the Berlin Museum of National History, otherwise known as Museum für Naturkunde Berlin. The table provides interactive information and mini-quiz so that visitors can learn while playing. Even though the research found out that not all users improve their understandings about the exhibit, the visitors, especially the younger demographic, still find the experience fun. However, most of the senior users felt that installation is overwhelming.

VR technology to help immersive storytelling can be seen in This Must Be Hell installation at Minnesota Historical Center (Mouw, 2015, p.102). The installation illustrated the horror of World War II D-Day by using a prototype of a paratrooper plane. Visitors can step inside the plane to watch a video of the war on the cabin walls and take a look at the digital scenery from the window. The ambience was created to help visitors to imagine themselves inside the war, empathize with the victims, and evoke an emotional response to provide an engaging experience.

It is important to preserve heritage for future generations. According to that, some heritage sites have limited access or prohibit access from the public because of the fragility of the objects, including Cave 220 at Dunhuang, China. The Pure Land AR installation provides a solution for that (Kenderdine and Shaw, 2015, p.206). The developer took panoramic pictures of the cave then integrate it with the augmented reality system. When visitors using an application on their mobile device to scan the room, they can see the wall paintings of the cave. It requires active participation from the visitors to track the whole paintings in the cave. Besides that, a visitor in any part of the world can take a tour to the Cave 220 even without visiting China.

In Taiwan, Din, Bailey, and Lin (2015, p.141) used technology to raise awareness for heritage preservation in Yuan Min Yuan site with Qing Emperors' Splendid Gardens exhibition. One of the installations was built based on the Qianlong Emperor's Southern Inspection Tour scroll that was enlarged and then projected on the wall. Furthermore, the 'interactive displays use a sensory device to trigger descriptions of different sceneries, locations, shops, activities, and imitate daily conversations among people from the scroll.'

In Indonesia, there are several national and private museums that utilize digital technology in their displays or installations, namely: Museum Nasional Indonesia (Jakarta), Galeri Indonesia Kaya (Jakarta), Museum Gedung Sate (Bandung), Trupark Museum (Cirebon), History of Java Museum (Bantul), Museum BPK RI (Magelang), Indonesian Heritage Museum (Batu). All museums are located in DKI Jakarta and Java.

According to the observation, most of the technologically advanced museums are private museums with paid or free entrance. For example, Museum BPK RI and Monster AR—as the developer—have created a set of augmented reality/non-immersive virtual reality installations where visitors can interact with the touch screen, play games, and see 3D figures of important buildings. Besides that, Monster AR has a museum digitalization program. They will provide a free consultation, free concept design, and free budget estimation for Indonesian museums (Monster AR, 2019).

Based on those backgrounds, this research set an objective to answer how could technology applied in museum. The researcher argues that this research is important and urgent to be conducted by considering that this can be a pilot project in order to explore the side of innovation and creativity in the museums in Indonesia. At the same time, this research certainly can be a guide for using technology application, in the form of museum collections based on other kind of exhibitions. Thus, through this research, there will be a higher interest in getting to know how culture and history of the Indonesian people are, increasing interests in visiting a museum, and improving level of tourism growth in an area.

RESEARCH METHODS

This research is conducted by using a qualitative research approach. This research will analyse how do some museums in Jakarta provide technology influences towards cultural arts at the museum. Meanwhile, this research find some challenges and solutions on the technology application. The approach will be taken by looking at phenomena as a whole and deep through focus group discussion (FGD) activities and observations as a form of additional data collection. Pre-research has been taken in Galeri Indonesia Kaya, at Grand Indonesia, Jakarta as one of a corporation who promotes integration between artificial intelligence technology and cultural tourism. Pre-research has found that an artificial intelligence technology could upscale visitor's experience during their visit at a cultural arts destination.

Data was collected through a focus group discussion (FGD) by inviting several relevant participants. FGD defined as a way of collecting qualitative data, which involves engaging small number of people, focused around a particular topic, or set of issues, where facilitator or moderator, could stimulate between participants, to produce an interactive encounter (Wilkinson, 2004). During the FGD, researchers stand as moderators, to create group interactions, to have widens range of responses, to answer a broad research objective.

FGD process has begun by deciding target informants or participants, to contact, arrange schedule, and delivering some terms of references. All questions during FGD have been categorized by type of participants. Most of the questions are related with possible ways to construct and apply technology at the museum.

All participants are divided into three main categories. First category is the museum, who have used, either completely or in partial way, technology application at their museum. Second category is the technology developer, in particular the virtual and augmented reality, and have done several projects at the museum. Third category is the museum users. From museums, there are five museums who present during the FGD, namely Museum Macan, Museum Bank Indonesia, Museum Nasional, Galeri Nasional, and Museum 3D Magic Art. From the second category, there are 9 Matahari and Monster AR who attended the FGD. And from third category, represented by Komunitas Historia Indonesia. All questions discussed during this FGD, have been formulated, and terms of references has been sent to all participants, several days prior to the event.

Data analysis will be conducted descriptively qualitatively by also applying some relevant theories, especially regarding the theory of application for artificial intelligence at the museum. Secondary data in the form of statistics and numbers will be elaborated and analyzed more deeply, so as to find a correlation and its relationship with the formulation of the problem. After all data has been collected, it will then be analyzed using qualitative descriptive. The process begins with data verification, data reduction, data presentation, and then drawing conclusions. In addition, analysis in the form of comments or suggestions will also be concluded to be a recommendation in reviewing the application of technology in museum.

RESULT AND DISCUSSIONS

Based on the results of this research through a focus group discussion, several FGD participants conveyed several conditions related to technology applications that had been created and implemented. In first participant category, FGD participants came from museums, represented by the Head of Museum or another representative. There are five museums joint the discussion, including Museum Macan, Museum Bank Indonesia, Museum 3D Magic Art, Galeri Nasional, and Museum Nasional. From Museum Macan, it was conveyed that this museum currently has 800 collections of art works, mainly paintings. Technology applications have been run at this museum, is focusing on the Art Plus application program. This application is being used, in addition to the value of visitor immersive experience. Another technology which is also used are the security functions. This security functions are conducted through CCTV cameras and RF.ID applications. From the experience of the Museum Macan, technology is seen to have a very positive impact on their collection's safety.

The next participant is Museum Bank Indonesia. This museum has lots of collections are in the form of money and pennies, which is still related to banking activities. Current

technology applications have begun to be used for the process of recording collections owned by Bank Indonesia. In activating the technology application, Museum Bank Indonesia has worked together with Monster AR and 9 Matahari, in particular during technological developing process. Other technology applications which have been used are interactive media, which is implemented through sensory models, by using special applications. In the meantime, Museum Bank Indonesia plans to continue its video mapping project, to increase the visitor's immersive and interaction experience at this museum.

The third museum that participated during FGD and shared its experience is Museum 3 D Magic Art. This museum has some collection of paintings by six painters, from South Korea and four street painters, around the typical tourist destination of Jakarta, Kota Tua. The technology applications currently being used by this museum, is in brightness and lighting technology system, in various collections of paintings. This museum believes that through this technology, they could add device-based interaction, and increase high immersion of their collections.

The fourth participant from the museum is Galeri Nasional. At the moment, Galeri Nasional has 1,800 collections which are dominated by art forms. Their first technology application which currently being used is a database system, which has been carried out via integration through security and conservation. Another technology application is Google 360, which could add more visual immersions to their potential visitors. This application provides visitors with a virtual tour experience. They have been working in collaboration with Google Indonesia. This gallery also builds up third technology application by using their security technology, which uses CCTV cameras. It is currently used for collection's security.

The last museum is Museum Nasional, which stands as a museum that being regulated and managed by central government. This museum has some very diverse collections, ranging from historical relics of Indonesia since prehistoric times to modern times. Museum Nasional considered as museum with the most complete collections in Indonesia. Some technology has been applied by Museum Nasional. First technology is collection database, to keep the management updated with current collection. For second technology application, carried out during process of data collection objects, which will facilitate the searching process and controlling objects during data collection. This process is carried out through a data mutation process. The third technology application, is the implementation of Google Street View, as a collaboration with Google Art Institute. The fourth technology application, is a pilot project, by developing story-based narrative technology in each of the existing collections. This technology will encounter haptics and real objects, increase visual immersions, and create device-based interaction.

The second category of informants who took part during FGD process, to map technology applications in the museum, is technology developer companies. The first informant from this category is 9 Matahari. This company has developed many types of technology, including at Museum Bank Indonesia, and more specifically in the field of Virtual Reality and Augmented Reality. However, for now, 9 Matahari is focusing on developing various types of new technology, projection mapping, in particular. Projection mapping, which is a type of projection technique which is usually used to turn objects, and often by irregularly shaped, into a display surface for video projection. These objects may be complex industrial landscapes, such as buildings, small indoor objects or theatrical stages. Since then, the 9 Matahari has always been consistently in working with museums, such as Museum Fatahillah and Museum Bank Indonesia, in supporting the visitor's experience. Current mission of 9 Matahari is to develop several museums as a strong vehicle for tourism, especially in Jakarta. 9 Matahari realizes that the museum's biggest challenge in applying technology is the budget, which is released by its shareholders.

Another technology application developer invited on discussion is Monster AR. The technology that has been developed by Monster AR is using Augmented Reality and Virtual Reality in increasing user experience, not only in museums, but also in public spaces. The Mixed Reality is a new form of technology that will be developed in the next phase. Monster AR believes that content is a major challenge in technology development, nowadays. This challenge requires collaboration between users and developers. In its prediction, Monster AR

estimates that the Internet of Things (IoT) would be the next trend in technology applications. In order to help the museum, Monster AR is being committed to the campaign, called Gerakan Digitalisasi Museum. This campaign will include free consultations, free concepts, and free cost estimates, for museums who eager to apply technology.

The third category participating in this FGD is the museum-loving community, represented by the Komunitas Historia Indonesia. Komunitas Historia Indonesia has desire on technology applications to be developed immediately at the museum, to invite the public as well as tourists to travel to the museum. This community exemplifies several museums abroad, which succeeded in adding more applicable technology to the experience of the visitors, through virtual reality. Collaboration between the museum and technology providers should be facilitated by the government, in this occasion, is Ministry of Tourism. One pillar that could be prepared is to construct The Law of Museum.

To realize the application of technology in the museum, all stakeholders will face several challenges. The first challenge obtained during discussion is an external challenge, which is there is still no integration between the museums and other stakeholders, in this case the integration between directorate of culture and tourism. In the discussion, solution which could be used to overcome this external challenge by establishing a Museum Organization, under the Ministry of Education and Culture (Kementerian Pendidikan dan Kebudayaan). This organization will be part of directorate of the ministries, with the tasks including: making the Law of Museum (Undang-Undang Museum). This organization will assist any licensing process of the museum's establishment, as well as conducting standardization and quality control, and also could stand as a bridge to collaborate with other outside parties. This organization could connect all museums in Indonesia, especially museums which are located in similar area (for example in Jakarta or in Bandung), so that visitors can buy tickets through one merchant. The third solution is to connect the museum in an area, with other non-museum tourist destinations. These three solutions are supported by an opportunity as tourism will be Indonesia's biggest foreign exchange contribution, in the near future. Moreover, there are many programs related to historical activities and cultural activities carried out by the government, in the framework of 75 years of Indonesia's independence in 2020.

The second challenge is human resources quality. Museum management board has delivered several complain about the quality of curators who play a significant role during managing the museum. Curator is currently seen to be not familiar with development of technology and its benefits for museum's collection. Solution raised during discussion is by providing education (both from historian community and universities) related to technology that can be implemented. Technology applications should be applied in museums to increase visitor experience, human interaction, and visitor's immersion. This education process can be accompanied by providing examples of technology applications in museums abroad. These museums can collaborate and consult with universities, or the historian community in making proposals, for technology applications. In addition, these museums can take advantage of free consultation programs offered, such as 'Digitalisasi Museum' which is initiated by Monster AR.

The third challenge occurred is archiving and database collection security. Digitizing archives process can be the moment of first technology application strategy, which could be implemented. The museum can consistently scan the objects with a 3D scanner, so that all data collections will be stored not only in the form of photos or dual dimensions. These data do not need to be recorded manually, and data collection process is not only recorded in series, but object per object. One application that can be used to facilitate database recording and provenance is Artplus Application. And an application that can be used for tracking process is RFID Tracking. RFID Tracking can be object tracking, especially if these objects are often moved or lent outside the museum. Data and object security in the museum will be more assured with both applications. However, the use of CCTV cameras is still highly recommended, to be accompanied by regulations governing the safety of collection items.

The fourth challenge most often experienced by museums is limited of funds. Museums also face financial stability and difficulties. The process of implementing technology in a museum certainly requires commitment from all museum stakeholders and requires funding sponsors. The search for sponsors could be done in parallel with an increase of level

of tourist who visits the museum. Financial management is extremely important to keep the stability of museum's financial condition. Regular events can also increase museum revenue. Most museums in Indonesia have very cheap entry tickets. Currently, the cheapest museum ticket is Museum Aceh, which is only fifteen hundred rupiah. The most expensive museum ticket price is Museum Hari Darsono, which reaches two hundred and fifty thousand rupiahs.

The fifth challenge found in this study is access difficulty to the museum, or museum position in a less strategic location. As solution, the ticket purchase process, which is still conventional, can actually be integrated with the payment application model that is commonly done by the public, such as Ovo or GoPay. The museum can work with online ticket sites which are widely used by travelers when they are traveling. Purchasing museum tickets can actually be integrated with the purchase of travel tickets, event tickets, or tour packages. In the current era of social media, museums are also required to have attractive and regular tour packages, which can be communicated on social media.

The sixth challenge raise by the museum users or visitor's point of view. Survey results from museums indeed indicate that visitors are less interested in visiting museum. Visitors feel bored because they do not feel entertained while in the museum. On the other hand, visitors still do not understand the information/messages to be conveyed, and do not feel educated after visiting the museum. Museums need to rethink to combine both the entertainment and education dimensions, through technological interventions by making interactive installations. One game application has been done at Museum Bank Indonesia, where visitors can use their kinetic and psychomotor senses in a game. Technology actually performs as a tool, so indeed it is more important to inaugurate content in museum objects properly. Another solution is to create visual dynamic, based on technology through virtual reality so that even if visitors are static (examples stand in one location), they can feel dynamic experience (examples of application can be seen in 'Journey to the Center of the Earth' where the screen seems to bring visitors from the deepest layers of the Earth to outermost surface). Another possible technological application are the operation of touch screens, video mapping, and augmented reality, to take advantage of social media momentum, where documentation will become a free promotional tool. Creation of immersive experiences can be realized with an attractive ambience design. Thus, it can touch emotional side of visitors, through dramatic experiences. One implementation could be possible on 'War Collections', where visitors should feel panic and fear, experienced by the people at that time, from visual, kinetic, and smell.

Manually, visual dynamic can also be built by preparing temporary exhibitions which always change within a certain time period (outside of permanent exhibitions). This will make museum always able to offer new things. In the era of Artificial Intelligence technology, museums have been able to implement the Internet of Things (IoT), which means every installation or object can be related to other objects. All sensors in an object can be controlled from one place. IoT can also be operated through collaboration with telephone providers. Visitors can get notifications on their smartphones before and after visiting the museum. Although a tour guide is mandatory on visitor's experience, by IoT, museum can add more experience and interaction by preparing audio in the form of podcasts or applications. Audio content not only describe archaeological data, with a conservative way of description, but through storytelling with a casual description, for example 'Silent Walking Tour' application. Visitors can later use headsets whose voices are captured through radio waves.

Boredom of visitors can be overcome by improving the hospitality services of museum stakeholders. Hospitality can be commenced from the warmth of employees, greetings, smiles, and comfortable facilities such as clean toilets, fragrant lounges, and the attractiveness of public facilities. Technology application process through hospitality, can be carried out with the use of Augmented Reality technology as well, which is enabling to welcome visitors or through interactive map applications.

The seventh challenge is lack of evaluation process carried out by the museum to increase visitor satisfaction. Unlike hotels, restaurants, or tourist destinations, museum currently has not implemented an objective survey yet. Visitor evaluation process can be actually done through an application of artificial intelligence or chip processing. Through big data analytic system, visitor data will be processed, both from online ticket purchases, visitor

satisfaction surveys, engagement with display tools, and other data retrieval processes. Results will certainly be useful for experience design process, to formulate the upcoming product, and beneficial to provide a different side of engagement, according to the visitor's habits and interests. This will encourage the experience of visiting a museum which is not only general point of view, but personal.

The last challenge found was process of increasing experience and immersion. Technology developer also often encounters obstacles to provide additional experience to visitors, so that all five senses that exist in visitors, can enjoy all museum collection. For solution, museum should hold an event for the activation function, for example 'Night at the Museum' or 'Meet Me at the Museum' which has been initiated by Komunitas Historia Indonesia. Museums can also build café facilities, working space, study space, or rent out locations for other educational activities, so that museum's atmosphere will be more attractive. To invite visitors to learn about museum before making visitation, data access in virtual, or virtual visit, can be developed by museum. Museum can also apply technology, in building virtual museums or online exhibitions such as what has been generated by Museum Nasional, in collaboration with Google Art Institute. Websites, virtual data, and virtual museums can be utilized as method of promotion so that potential visitors can find big pictures related to museum collections. This will attract more visitors to travel to museum. On the other hand, museums can assist academics in carrying out research.

CONCLUSION

Strong cooperation between museums and technology providers has been elaborated, in particular in several museums in Jakarta. Augmented Reality and Virtual Reality are two most applications, adopted during these implementations. Meanwhile, museums have established several platforms for security and data collection purposes. Both parties will try to add more platforms through video mapping application, projection mapping, virtual tour, and internet of things (IoT) operations. Furthermore, technology providers have begun some persuasive actions, particularly through free digitalization campaign.

The collaboration should achieve requirements which have been set by stakeholders, including users or visitors themselves. Both museums and technology providers have to be ready with challenges. External challenges indicated by lack of integrated management, could be resolve through establishing new law of museum. Most of challenges are taking place in inside the museums. Three main obstacles faced are human resources quality, database security, and financial difficulties. Capacity building and synergy could be the solutions, involving historian community and academicians.

Most of other obstacles are felt by users or visitors. Survey results from museums indeed indicate that visitors are less interested in visiting museum. Visitors feel bored because they do not feel entertained while in the museum. Museum also located in lack of strategic area. Evaluation process has never been carried out by the museum to increase visitor satisfaction. Moreover, process of increasing experience and immersion encounters obstacles, to provide additional experience to visitors, so that all five senses that exist in visitors, can enjoy all museum collection. Technology could embrace interaction and immersion to add more experience value on visitors. Thus, tourism industry would be more attractive with the presences of museums.

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FIGURE AND TABLES

Table 1. List of Participants of Focus Group Discussion

Day, Date : Thursday, January 30th 2020
 Time : 11.30 – 16.00
 Location : Happy Room, Harris FX Sudirman – Jakarta
 Topic : Technology Application in Museum

| No | Name | Position | Type of Informant |
|----|-------------------|---------------------------------|----------------------|
| 1 | Way Dwi Arifianto | Director (9 Matahari) | Technology Developer |
| 2 | Rizal Pamungkas | Director (Monster AR) | Technology Developer |
| 3 | Ernida Rere | Manager (Museum 3D Magic Art) | Museum Manager |
| 4 | Dandy Indarto | Manager (Museum Bank Indonesia) | Museum Manager |
| 5 | Bambang H. | IT Manager (Museum Macan) | Museum Manager |
| 6 | Ujang Mulyadi | Manager (Museum Nasional) | Museum Manager |
| 7 | Jarot Mahendra | Manager (Galeri Nasional) | Museum Manager |
| 8 | Furqon Abdurrazar | Staff (Monster AR) | Technology Developer |
| 9 | Asep Kambali | Komunitas Historia Indonesia | Museum User |
| 10 | Peni Zulandari S. | Universitas Prasetiya Mulya | Moderator |
| 11 | Made Handijaya D. | Universitas Prasetiya Mulya | Moderator |
| 12 | Aulia Ardista W. | Universitas Prasetiya Mulya | Moderator |
| 13 | Ida Bagus Agastya | Universitas Prasetiya Mulya | Assistant Researcher |

Figure 1. Ideas from FGD Participants

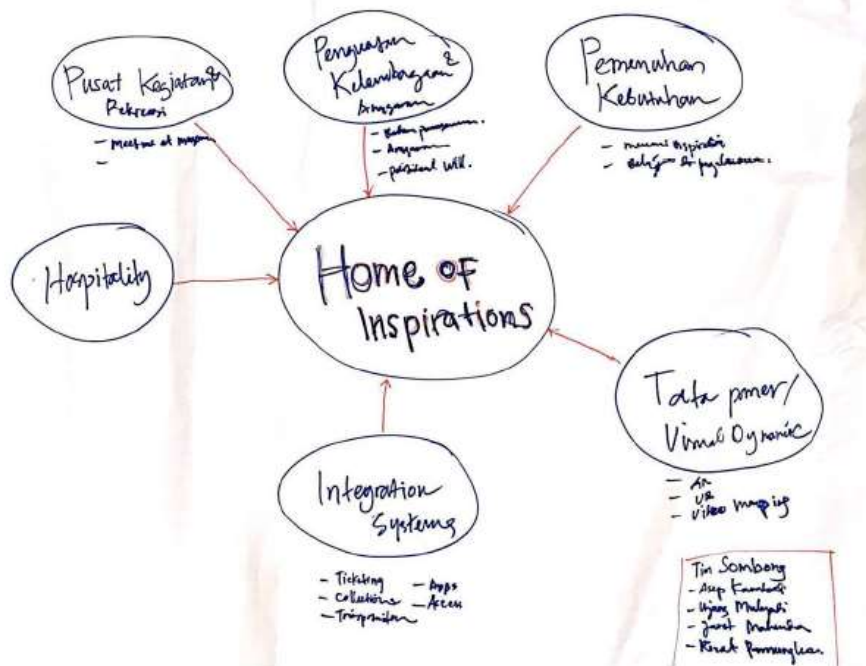


Figure 2. Types of Technology Application (FGD Summary)



Figure 3. Taxonomy of Virtual Reality in Museums (Carozzino and Bergamasco, 2010)

Interaction

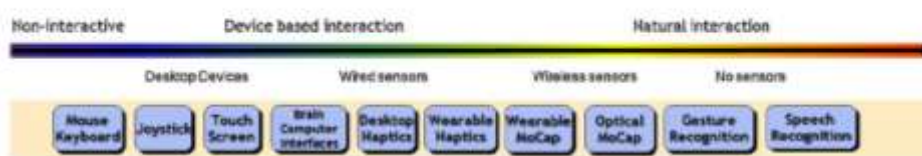
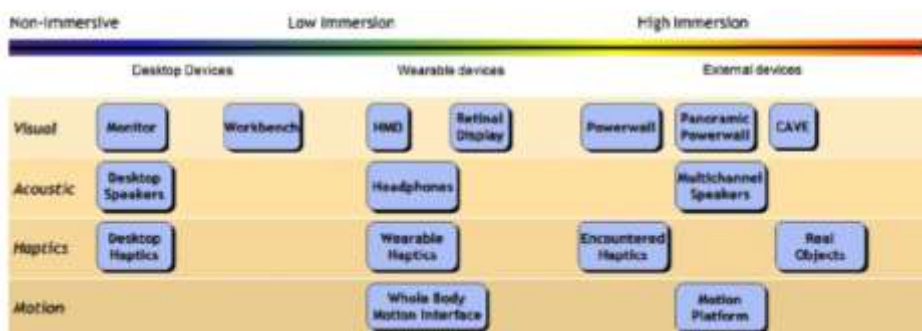


Fig. 1. Classification of VR devices on the interaction axis.

Immersion



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