

## **THE SELECTION DECISION BEACH AREA TOURISM POTENTIAL OF THE MOST DEVELOPED IN GUNUNG KUDUL REGENCY**

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### **ABSTRACT**

*The choice of theme tourism 2011 "Eco, Culture, and MICE" because Indonesia is very concerned about the tourism that is environmentally safe and friendly environments both in terms personnya and development or the ingredients. Culture and Tourism Minister also called for maintaining and managing the environment to better attract tourists so.*

*Gunung kidul has considerable tourism potential potential and diverse, ranging from the natural wealth of beaches, caves, hills and mountains as well as the potential for cultural and artistic heritage of diverse and scattered in nearly 18 districts. This potential is very meaningful line Gunung kidul existence as part of the Special Region of Yogyakarta which is the second tourist destination in Indonesia after the Bali province. Development and tourism development and supporting facilities should be conducted continuously in an effort to increase the attractiveness for tourists to visit and support in increasing people's income and revenue (PAD).*

*This study was made and will be used to help decision makers in determining the nature Tourism Region coast with the most potential in the district of Gunung Kidul not yet known to the public. Criteria used in making this decision : Kualitas objek wisata, Kondisi Objek Wisata, Aksebitas. Method Using Analytical Network Proses (ANP). Decision Support System will make the right decisions and flexible with aspects that affect these decisions, and generate reports with decision makers to aid decision makers in making decisions.*

**Keyword** : Analytical Network Proses (ANP), Decision Support System (DSS).

### **1. INTRODUCTION**

Decision-making system (Decision Support System) is part of a computational method that continues to experience growth in today. No exception to an agency or organization, decision support systems used to support the decisions of the various alternatives are given in an organization or company, in hopes of making an appropriate decision can help the business process well.

Among them is in helping decision makers in determining the *nature Tourism Region coast most potential to be developed that have not been known to the public*. Therefore, the authors try to do research with the title of Model-Based Decision Making with Multiple Criteria using the analytical network process (ANP), with case studies: selection developed by AMFITIL Coast Tourism Potential in support of the Government

(Kemenbudpar) which has set *Wonderful Indonesia* as Indonesia's tourism branding, 2011 was chosen as the theme of *Eco Tourism, Culture, and MICE*. "Branding New *Wonderful Indonesia*".

### **2. REVIEW REFERENCES**

Methods Analytical Network Process (ANP) is a development of methods Hierarchy Analytical Process (AHP). ANP method was introduced by Professor Thomas Saaty research experts from Pittsburgh University, with a goal as a refinement of the method of AHP. ANP concept derived from the theory of AHP is based on the symbiotic relationship between some components, so that the AHP is a special form of ANP. ANP excess of the other methodologies is its ability to take measurements and synthesis of a number of

factors in the form of hierarchy or network. No other methodology that has facilities such as the synthesis of ANP methodology. The basic principles in ANP there are 3, namely decomposition, comparative judgments (comparative judgment), and komposisi hierarchical or synthesis of priorities (Saaty, 1994). As for the explanation as follows:

- a. The principle of decomposition  
Applied to structure a complex problem into the framework of a hierarchy or network clusters, sub-clusters, sub-sub clusters and so on. In other words, decomposition is to model the problem into the framework of ANP.
- b. The principle of valuation (comparative judgment)  
Applied to build the benchmarking partner (pairwise comparison) of all combinations of elements in the cluster seen from its parent cluster. The

comparison of this pair is used to obtain the local priorities of elements in a cluster seen from its parent cluster.

- c. The principle of hierarchical composition or synthesis of priorities  
Applied to multiply the local priorities of elements in the cluster with the global priorities of the parent element that will generate global priorities throughout the hierarchy and add them to generate a global priority to the lowest level element (usually an alternative).

Calculating the Consistency Index (CI):

$$CI = \frac{\lambda_{max} - n}{n - 1} \dots\dots\dots (1)$$

Consistency count ratio (CR)

$$CR = \frac{CI}{RI} \dots\dots\dots (2)$$

Table 1. Assessment of the Pairwise Comparison Scale

The intensity of Interest	Information
1	The second element is equally important
3	Elements that one a little more important than any other element
5	One element is more important than others
7	One element is absolutely clearly more important than other elements
9	One element is absolutely important than other elements
2,4,6,8	Values between two values adjacent considerations

**3. RESEARCH METHOD**

This research uses descriptive analysis method that aims to get a more profound and complete of the object to be studied by direct observation and interviews in the field.

In this study for the selection of the most potential areas are developed, used the assessment of some parties that will be processed by the method of ANP and software Superdecision. Through software and this method will produce a priority area beaches, which will support the decision of the selection of the beach resort of the most potential to be developed in the district of

Gunung Kidul in Yogyakarta. Alternative measure of the quality criteria of attractions, tourist attraction and accessibility conditions.

**4. RESEARCH RESULT**

In accordance with the steps approach the research with ANP (Analytical Network Proses) discussed about the actual input data, process calculations and the expected output for the selection of case studies coastal attractions. Enter the beginning was to determine the value of the criteria is exemplified as Table 2.

Table 2. Input Calculation Criteria

	Kualitas Objek Wisata	Kondisi Objek Wisata	Akseibilitas
Kualitas Objek Wisata	1	0,548480655	0,548480655
Kondisi Objek Wsata	1,817120593	1	1,817120593
Akseibilitas	1,817120593	0,548480655	1

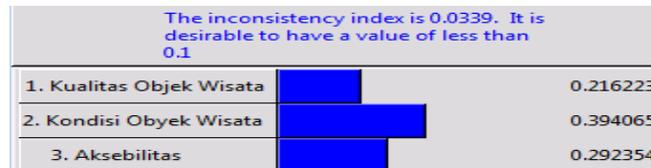


Figure 1. Priority Value Criteria

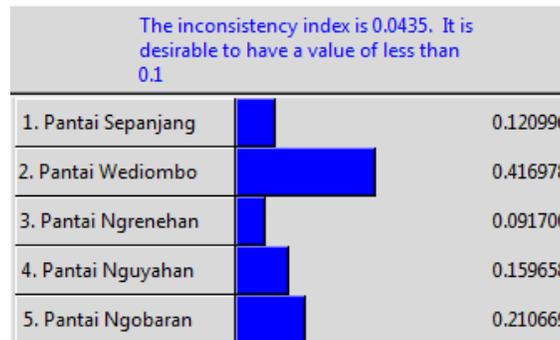


Figure 2. Alternative priorities based on the value of beauty

Having generated the priority criteria, the next step to calculate the priority alternatives by including scores on each sub-alternatives for

each criterion. Put it produces an alternative priority criteria under sub.

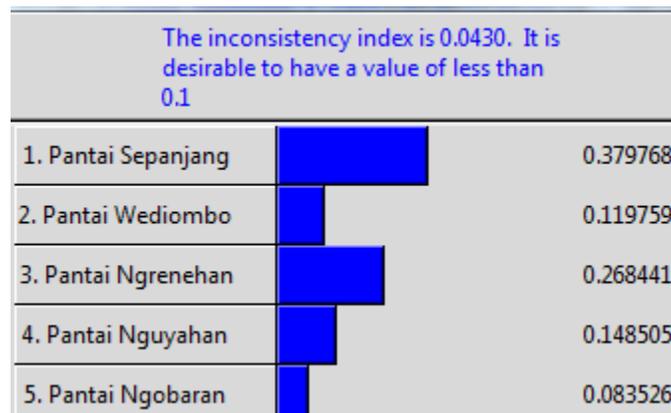


Figure 3. Alternative priorities based on net value

Having generated the priority criteria, the next step to calculate the priority alternative.

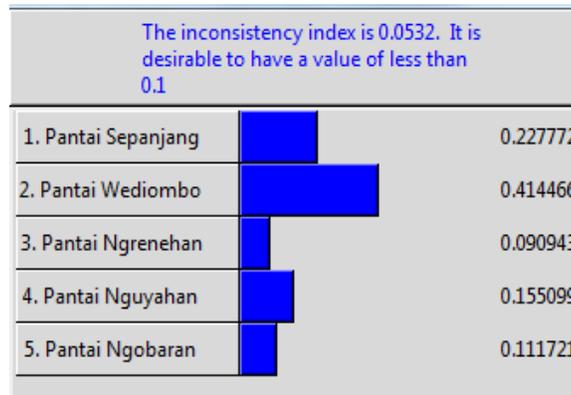


Figure 4. alternatives priorities based on the value of security

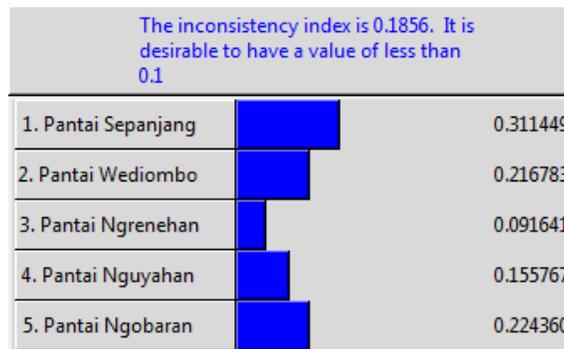


Figure 5. value priorities based Natural alternative

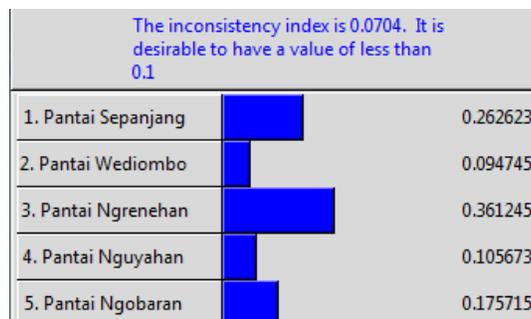


Figure 6. Value of Priorities based on available public transport

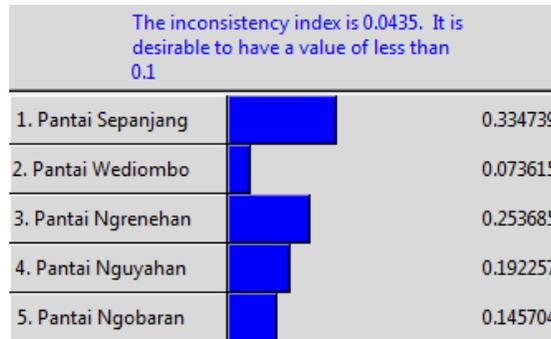


Figure 8. Value priorities based on the condition easy passable alternative

Finally calculate the global priority

### Report for toplevel

This is a report for how alternatives fed up through the system to give us our synthesized

#### Alternative Rankings

Graphic	Alternatives	Total	Normal	Ideal	Ranking
	1. Pantai Sepanjang	0.1557	0.3114	1.0000	1
	2. Pantai Wediombo	0.1084	0.2168	0.6960	3
	3. Pantai Ngrenehan	0.0458	0.0916	0.2942	5
	4. Pantai Nguyahan	0.0779	0.1558	0.5001	4
	5. Pantai Ngobaran	0.1122	0.2244	0.7204	2

Figure 9. Global priorities in the value of alternatives

So alternatives election attraction by far the most potential to be developed has an order of priority: (1) Sepanjang Beach, (2) Ngobaran

### 5. Conclusions

In the ANP all the criteria to be considered should be regulated and made a priority in the control hierarchy or network model derived from performing the comparison and synthesis.

Beach, (3) Wediombo beach, (4) Nguyahan beach, (5) Ngobaran beach.

Decision-making in the selection of a potential tourist attraction areas developed alternative is then followed Along the Coast, Ngobaran Beach, Wediombo Beach, Nguyahan Beach, Ngobaran beach.

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