Determinants of Tourism Competitiveness in Malang City

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Abstract—**The tourism is one of the strategic and potential sectors in national and regional economic development. Various research results and studies have proven that the development of the tourism sector has been proven to be able to improve the welfare of the community. The purposes of this study are (1) to analyze the competitiveness of the tourism sector in Malang City with the tourism sector around Malang Regency and Batu City, (2) to analyze the factors that determine the competitiveness of the tourism sector in Malang City. Malang City's tourism competitiveness in this study was analyzed by referring to the Competitiveness Monitor which uses 7 tourism indicators according to the *World Travel and Tourism Council (WTTC)*, namely HTI, PCI, ISI, EI, HRI, OI, SDI. Based on the seven indicators of tourism competitiveness used, it is known that only the Social Development Indicator (SDI) has good competitiveness for Malang City against Batu City tourism and Malang Regency. The indicators of the Human Tourism Indicator (HTI), Infrastructure Development Indicator (IDI), and competitiveness while the Environmental Indicator (EI) have moderate competitiveness. Whereas the Price Competitiveness Indicator (PCI), Human Resources Indicator (HRI), and Openness Indicator (OI) has no competitiveness. Then, for the factor that most determines the competitiveness of tourism is the parameter of the average length of stay of tourists.**

Keywords—*competitiveness, development, tourism*

I. INTRODUCTION

The tourism is one of the strategic and potential sectors in national and regional economic development. Various previous research results have shown that the development of the tourism sector has been proven to be able to improve the welfare of the community [1,2]. Therefore, many countries are trying to make the tourism sector as one of the priorities of development, causing the tourism industry is growing rapidly. It has been more than 20 years that the tourism industry continues to grow with the highest growth in the world for example, from 1990 - 2012, the number of visitors coming to Asia has grown from 55.8 million to 233.6 million [3].

The contributions and strategic role of the tourism sector underlying the Indonesian government from the tourism sector as one of the priority sectors of development. As a country that has natural beauty and is rich in cultural diversity (natural and cultural resources), Indonesia has enormous potential in developing the tourism industry. In 2017, the number of foreign tourists who came to Indonesia was 10,406,759 tourists, and contributed a Gross Domestic Product of US $ 28,208.9 Million or 3.3% of GDP and created 3,468,440 jobs or 2.9% of the total employment. However, tourism development in Indonesia has not been optimal and needs to be continuously improved. Based on data released by the United Nations World Tourism Organizations (UNWTO) and the World Travel and Tourism Council (WTTC), Indonesia's tourism competitiveness level is ranked 42 out of 136 countries assessed. At the ASEAN level, Indonesia's position is still below of Singapore (13), Malaysia (26) and Thailand (34).

Malang City has quite diverse Tourism potential that needs to be developed. Tourism development must continue to be carried out and improved so that the tourism sector becomes a reliable economic activity in order to increase Regional Original Revenue, open up employment opportunities and business opportunities especially for the local community.

Although Malang City does not have natural tourism resources such as Malang Regency and Batu City, tourism competition with other regions needs to be considered so that the economy of Malang City is well maintained and does not experience setbacks. This situation will create a tourism competitiveness where there is a level of attraction strength in various aspects of tourism which will further shape the competitiveness of the tourism industry as a whole. This causes regions try to promote their tourism potential, so that they can attract tourists to visit, both domestic and foreign tourists. The development of tourism will also have a significant impact on the related industries. In line with the development of an increasingly competitive tourism industry, the development of tourism must be encouraged to develop more strongly and appropriately directed to increase the appeal advantage and excellence of tourism competitiveness in Malang.

Based on the background that has been explained, the purposes of this study are (1) To Analyze the Tourism Competitiveness in Malang City, and (2) To analyze the factors that determine the tourism competitiveness in Malang City.

II. RELATED WORK

According to Porter [4], competitiveness is identified with productivity problems, which are defined as the value of output produced by a workforce. The increase in productivity is caused by an increase in the amount of physical input of capital and labor, an increase in the quality of the inputs used, and an increase in technology. Meanwhile, the scope of competitiveness at the macro scale includes: (1) the regional economy, (2) openness, (3) financial systems, (4) infrastructure, (5) science and technology, (6) natural resources, (7) institutional, (8) government policies, and (9) management and microeconomics [5].

Tourism is one type of industry that can boost economic growth in terms of providing jobs, increasing income, better living standards, and being able to support other productive sectors [6]. Further, Yoeti [7] mentioned tourism as an industry, where a group of companies that directly provide services to tourists when coming to visit at a tourist spot. Without the contribution of this group of companies, tourists will not get the comfort, safety, and satisfaction in finding the desired pleasure.

Competitiveness Monitor (CM) is a method that can be used to see the competitiveness of the tourism industry. The CM analysis was first introduced by the World Travel and Tourism Council (WTTC) and World Tourism Organization (WTO) in 2001 as a measure of tourism competitiveness. The indicators are:

A. Human Tourism Indicator (HTI)

HTI can be measured by the achievement of regional economic development due to tourist arrivals in the destination area.

B. Price Competitiveness Indicator (PCI)

PCI by evaluating the most commonly consumed prices for products and services (entertainment services, car rental, travel, hotels and restaurants, tour guides, etc.).

C. Infrastructure Development Indicator (IDI)

IDI can be measured by indicators: road index, availability of clean infrastructure, water quality intended for consumption households.

D. Environment Indicator (EI)

EI can be seen from the quality of the environment and the awareness of the population in preserving the environment

E. Technology Advancement Indicator (TAI)

TAI shows the development of modern technology and infrastructure as indicated by the spread of the Internet, mobile telephone and export of high-tech products.

F. Human Resources Indicator (HRI)

Human resource indicators are intended to measure the quality of the workforce at certain tourist destinations.

G. Openness Indicator (OI)

Openness is measured by the total tourist expenditure as a percentage of GDP, while the level of trade openness is measured as the relationship between international trade turnover and GDP. It can be seen from the number of international tourists who come to visit.

H. Social Development Indicator (SDI)

The quality of life evaluated by the social development index has an impact on the attractiveness of tourists' destinations. This provides comfort and safety for tourists to travel in the area. This can be seen from the length of stay of tourists in a tourist area.

III. METHODOLOGY

The type of research is descriptive with qualitative and quantitative approaches (mix method). Qualitative method is a method used in research by describing data in full using simple tables, narratives, pictures, and statistics. The data used for analysis are data with a span of the last 3 years namely 2016, 2017 and 2018. The quantitative method in this study was used to analyze the tourism competitiveness in Malang City against the tourism sector in Malang Regency and Batu City, analyze the factors that determine the tourism competitiveness in Malang City.

Malang City's tourism competitiveness in this study was analyzed by referring to the Competitiveness Monitor which uses 7 tourism indicators according to the *World Travel and Tourism Council (WTTC)*, namely HTI, PCI, ISI, EI, HRI, OI, SDI. After calculating these indicators, then proceed to the stage of analysis in 3 stages, namely as follows.

- Calculating the tourism index from indicators that form the competitiveness,

- Calculating the composite index of the indicators that determine tourism competitiveness,

- Calculating the tourism competitiveness index

The index value of "0" shows no / low competitiveness, while the value of "1" indicates high competitiveness / very good. The competitiveness can be categorized in 5 scales [8]. Can be shown in table 1.

TABLE I.   COMPETITIVENESS SCALE [8]

Category	Scale
No competitiveness	0- 0,20
Medium competitiveness	0,20-0,40
Good Enough competitiveness	0,40-0,60
Good competitiveness	0,60-0,80
Very good competitiveness	0,80-1,00

IV. RESULTS AND DISCUSSION

The determinant analysis of competitiveness is done to give an overview of the position of tourism competitiveness in Malang City and compare it with the surrounding regions. The results of an analysis of tourism competitiveness in Malang can be explained briefly in the following table.

TABLE II.   TOURISM COMPETITIVENESS INDEX OF MALANG CITY, MALANG REGENCY AND BATU CITY FROM 2016 TO 2018

Indicator	Malang City			Malang Regency			Batu City		
	2016	*2017*	*2018*	*2016*	*2017*	*2018*	*2016*	*2017*	*2018*
Human Tourism Indicator (HTI)	0,86	1,68	1,67	0,11	0,19	0,21	9,72	6,56	5,83
Price Competitiveness Indicator (PCI)	31063	57463	57463	840	1812	734	1816	2758	1565
Infrastructure Development Indicator (IDI)	97,92	96,77	42,92	96,58	86,08	86,08	54,91	96,12	66,63
Environmnt Indicator (EI)	7734,85	7781,30	7826,77	854,64	860,14	865,49	1079,76	1016,22	1024,65
Human Resources Indicator (HRI)	1,36	1,36	1,37	1,22	1,13	1,15	1,92	1,10	1,18
Openess Indicator	0,03	0,03	0,03	0,02	0,02	0,01	0,00	0,01	0,00
Social Development Indicator (SDI)	2,61	2,13	2,13	1,42	1,52	1,39	1,95	1,24	1,35

Source: Secondary data processed, 2019

Based on the table 2 above, it can be seen that several indicators within 3 years have different conditions in each region. There is a value that fell for 3 years, increasing or stable. In Malang City, there are several indicators that have increased every year, namely the Price Competitiveness Indicator, Environmental Indicator, and Human Resources Indicator. As for those experiencing stable conditions are openness indicator indicators, while the human tourism indicator, Infrastructure Development Indicator, and Social Development Indicator have decreased.

After calculating the values of each indicator, then proceed with calculating the value of the tourism index. Tourism Index calculation is needed in analyzing the determination of the potential possessed in each region, where there are several indicators that have decreased or increased over a span of 3 years (2016-2018).

TABLE III.   TOURISM INDEX OF MALANG CITY, MALANG REGENCY AND BATU CITY FROM 2016 TO 2018

Indicator	Malang City			Malang Regency			Batu City		
	2016	*2017*	*2018*	*2016*	*2017*	*2018*	*2016*	*2017*	*2018*
Human Tourism Indicator (HTI)	0,00	1,00	0,99	0,00	0,76	1,00	1,00	0,19	0,00
Price Competitiveness Indicator (PCI)	0	1	1	0	1	0	0	1	0
Infrastructure Development Indicator (IDI)	1,00	0,98	0,00	1,00	0,00	0,00	0,00	1,00	0,28
Environment Indicator (EI)	0,00	0,51	1,00	0,00	0,51	1,00	1,00	0,00	0,13
Human Resources Indicator (HRI)	0,00	2,29	3,29	1,00	0,00	0,26	1,00	0,00	0,10
Openess Indicator (OI)	0,00	0,00	0,00	1,00	1,36	0,00	0,00	1,00	0,43
Social Development Indicator (SDI)	1,00	0,00	0,00	0,23	1,00	0,00	1,00	0,00	0,15

Source: Secondary data processed, 2019

Based on the table 3 above, it can be seen that the index values in Malang City have a variety of values. For indicators with the lowest index values are the Openness Indicator and Social Development. These two indicators when compared with Malang Regency and Batu City, Malang City still has a lower index value. In addition, there were Infrastructure Development Indicators that experienced a decline, although for Malang Regency and Kota Batu, they also experienced a decline in the same indicator. This shows the government needs to pay attention to the three indicators in order to improve the competitiveness of Malang City tourism.

The indicator with the highest increase that occurred in Malang was the Human Resources Indicator. Seen in 3 years this indicator has increased very significantly, where Malang Regency and Malang City have decreased and the increase is not significant. This shows that the government of Malang City within 3 years has improved and developed the potential for these indicators.

The Human Tourism Indicator and Price Competitiveness Indicator have increased and are included in a stable rate within 3 years. As for the Environment Indicator, Malang City has increased in the last 3 years. The rising EI index shows that Malang City experienced a decrease in environmental quality caused by population density.

The composite competitiveness index of Malang City, Malang Regency and Batu City are as follows:

TABLE IV.   COMPOSITE INDEX OF MALANG CITY, MALANG REGENCY AND BATU CITY

Indicator	Malang City	Malang Regency	Batu City
Human Tourism Indicator (HTI)	0,25	0,28	0,42
Price Competitiveness Indicator (PCI)	0,17	0,30	0,28
Infrastructure Development Indicator (IDI)	0,25	0,50	0,39
Environment Indicator (EI)	0,33	0,33	0,44
Human Resources Indicator (HRI)	0,09	0,40	0,46
Openess Indicator (OI)	0,00	0,21	0,35
Social Development Indicator (SDI)	0,50	0,41	0,43

Source: Secondary data processed, 2019

Of all the indicators of tourism competitiveness of the three regions, from 2016 to 2018, it can be seen the level of competitiveness between Malang City, Malang Regency and Batu City in the following table 4.

TABLE V.   INDEX OF TOURISM COMPETITIVENESS IN MALANG CITY, MALANG REGENCY AND BATU CITY

Indicator	Malang City	Malang Regency	Batu City
Human Tourism Indicator (HTI)	0,24	0,27	0,40
Price Competitiveness Indicator (PCI)	0,12	0,23	0,21
Infrastructure Development Indicator (IDI)	0,29	0,57	0,44
Environment Indicator (EI)	0,37	0,37	0,49
Human Resources Indicator (HRI)	0,08	0,37	0,43
Openess Indicator (OI)	0,00	0,12	0,20
Social Development Indicator (SDI)	0,67	0,54	0,58

Source: Secondary data processed, 2019

TABLE VI.   SCALE OF THE TOURISM COMPETITIVENESS INDEX IN MALANG CITY, MALANG REGENCY AND BATU CITY

Indicator	Malang City	Malang Regency	Batu City
Human Tourism Indicator (HTI)	Medium competitiveness	Medium competitiveness	Medium competitiveness
Price Competitiveness Indicator (PCI)	No competitiveness	Medium competitiveness	Medium competitiveness
Infrastructure Development Indicator (IDI)	Medium competitiveness	Medium competitiveness	Good Enough competitiveness
Daya saing sedang Environment Indicator (EI)	Medium competitiveness	Medium competitiveness	Good Enough competitiveness
Human Resources Indicator (HRI)	No competitiveness	Medium competitiveness	Good Enough competitiveness
Openess Indicator (OI)	No competitiveness	No competitiveness	Medium competitiveness
Social Development Indicator (SDI)	Good competitiveness	Good Enough competitiveness	Good Enough competitiveness

After analyzing the tourism competitiveness between Malang City and the surrounding cities (Batu City and Malang Regency), it can be seen that the tourism competitiveness of Malang City is influenced by several factors. It can be shown in table 7.

TABLE VII.   INDICATORS, PARAMETERS AND RESULTS OF MALANG CITY TOURISM COMPETITIVENESS INDEX

Indicator	Parameter	TCI of Malang City	Scale
HTI	Number of tourists	0,24	Medium competitiveness
	Total population		
PCI	Number of foreign tourists	0,12	No competitiveness
	Average hotel rates		
	Average tourist stay		
IDI	Number of Good Quality of Road	0,29	Medium competitiveness
	Number of Paved Roads		
EI	Total population	0,37	Medium competitiveness
	Total area		
HRI	Literate population	0,08	No competitiveness
	Educated population Elementary School, High School, Diploma, Bachelor		
OI	Number of foreign tourists	0,00	No competitiveness
	Number of guests staying		
SDI	Average length of stay for tourists	0,67	Good competitiveness

Based on the table 5 above, it can be concluded, for the tourism competitiveness index of Malang City is relatively low. The highest indicator approaching 1 is the Social Development Indicator (SDI), while the lowest indicator is the Openness Indicator (OI).

According to Craigwell [8], the competitiveness can be categorized in 5 scales, so that if it refers to the results of the value analysis of tourism competitiveness index that has been carried out, the following table is produced.

Overall, if seen from the value of Malang City's tourism competitiveness index, the most outperforming indicator is the SDI (Social Development Indicator). SDI value in Malang is also higher compared to the surrounding area. If seen from the parameters, it can be said that the highest determinant of Malang tourism competitiveness is the average length of stay of tourists. The length of stay of tourists is closely related to market demand for accommodation and hotels.

V.   CONCLUSION AND FUTURE SCOPE

Tourism competitiveness in Malang in this study was analyzed by the Competitiveness Monitor method using 7 tourism indicators according to WTTC, namely HTI, PCI, ISI, EI, HRI, OI, SDI. All data used to see tourism competitiveness of these three regions uses data from 2016 to 2018. Based on the seven indicators of tourism competitiveness used, only the Social Development Indicator (SDI) indicator has good competitiveness for Malang City. Batu City tourism and Malang district. The indicators of the Human Tourism Indicator (HTI), Infrastructure Development Indicator (IDI), and competitiveness while the Environmental Indicator (EI) have moderate competitiveness. Price Competitiveness Indicator (PCI), Human Resources Indicator (HRI), and Openness Indicator (OI) in the category of no competitiveness.

The results of this study are expected to be used by all relevant stakeholders and other parties including the community. It is expected that in the formulation of policies and other regulations, the results of this study can be a

reference and consideration in the formulation of other policies in the future.

In addition, further and deeper studies are needed, to explore efforts to maximize and create tourism potentials in Malang, so that the tourism sector in Malang City is not left behind from the surrounding area and can compete and become one of the main sectors in contributing income in Malang city.

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