

## **THE INFRASTRUCTURE COMPETITIVENESS OF NEW DEVELOPMENT TEN TOURIST DESTINATION IN INDONESIA**

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### **Abstract**

In this research investigates the infrastructure competitiveness of new development ten tourist destinations' performance in Indonesia. It deeply analyzes Infrastructure board organized into three pillars factors of competitiveness. First pillar is Air transport infrastructure, second pillar is Ground and port infrastructure and third pillar is Tourist service infrastructure. Research was made by descriptive and research was focused by using secondary data.

According to the result, the rank of new development tourist destinations will be number ten is North Maluku, number nine is Southeast Sulawesi, number eight is Bangka Belitung, number seven is East Nusa Tenggara, number six is West Nusa Tenggara, number five is North Sumatra, number four is Jakarta, number three is Central Java, number two is East Java and number one is Banten.

**Keywords** : Infrastructure, Travel & Tourism, Tourism Destination, Travel & Tourism Competitive Index, Descriptive, Indonesia

## **INTRODUCTION**

### **Indonesia is potential for tourism development**

Indonesia is the largest country archipelago and has the second longest coastline in the world. The land and the sea of Indonesia are a rich and diverse natural environment, and this gives it strong potential for tourism development (United Nation, 2001, p. 43)

### **Ten new tourist destination**

The government of Indonesia has decided to emphasize the development and boosting of ten new tourist destinations, which is expected to increase the number of foreign tourist arrivals in the country. This being a consideration, the government, through the Ministry of Tourism under its "Wonderful Indonesia" program, is developing and promoting Lake Toba in North Sumatra, Tanjung Kelayang beach in Belitung island, Tanjung Lesung beach in Banten, Thousand Islands in Jakarta, Borobudur Temple in Central Java, Mounts Bromo and Semeru in East Java, Mandalika beach in West Nusa Tenggara, Wakatobi in Southeast Sulawesi, Labuan Bajo in East Nusa Tenggara, and Morotai Island in North Maluku (Antara News, 2016)

## **LITERATURE REVIEW**

### **Travel & Tourism Competitiveness Index**

The Travel & Tourism Competitiveness Index (TTCI) measures "the set of factors and policies that enable the sustainable development of the Travel & Tourism sector, which, in turn, contributes to the development and competitiveness of a country". The T&T Competitiveness Index measures four broad

factors of competitiveness. These factors are organized into subindexes, which are further divided into 14 pillars: A) The Enabling Environment subindex, which captures the general settings necessary for operating in a country: 1. Business Environment, 2. Safety and Security, 3. Health and Hygiene, 4. Human Resources and Labour Market, 5. ICT Readiness. B) The T&T Policy and Enabling Conditions subindex, which captures specific policies or strategic aspects that impact the T&T industry more directly, 6. Prioritization of Travel and Tourism, 7. International Openness, 8. Price Competitiveness, 9. Environmental Sustainability. C) The Infrastructure subindex, which captures the availability and quality of physical infrastructure of each economy: 10. Air Transport Infrastructure, 11. Ground and Port Infrastructure, 12. Tourist Service Infrastructure. D) The Natural and Cultural Resources subindex, which captures the principal "reasons to travel": 13. Natural Resources, 14. Cultural Resources and Business Travel. (WEF,2017)

### **Infrastructure**

Based on American Public Works Association (Stone, 1974 in Kodoatie, R., 2005), infrastructure is physical facilities developed for functions governance in the provision of water, electricity, waste disposal, transportation and similar services to facilitate social and economic goal.

## **METHOD**

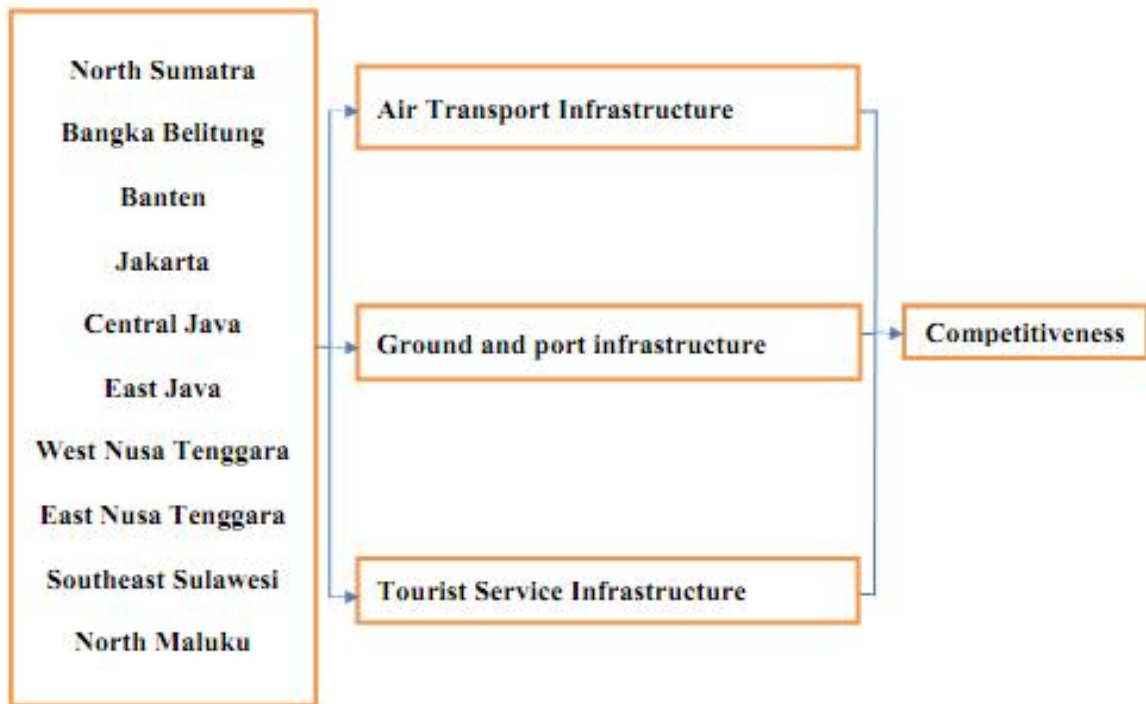
### **Research method**

This research is aimed to study about the infrastructure competitiveness of new development ten tourist destinations' performance in Indonesia. The object of the research will focus on the new development

ten tourist destinations in Indonesia. The number of tourist destination is 10 destinations. This number is becoming the population of the study.

**Conceptual framework**

The framework below intends to explore about the infrastructure competitiveness of new development ten tourist destinations’ performance in Indonesia



**Fig. 1 Conceptual framework**

**Table. 1 Conceptual Framework**

Variabel	Indicator
<b>Infrastructure</b>	
1. Air Transport Infrastructure	1.1 Available seat kilometers, domestic 1.2 Available seat kilometers, international 1.3 Aircraft departures 1.4 Airport density
2. Ground and Port Infrastructure	2.1 Quality of roads 2.2 Road density 2.3 Paved road density 2.4 Quality of port infrastructure
3. Tourist Service Infrastructure	3.1 Hotel rooms

**The variable and measurement**

This research is trying to examine the infrastructure competitiveness of new development ten tourist destinations' performance in Indonesia. According to the Ministry of Tourism under its "Wonderful Indonesia" program, is developing and promoting Lake Toba in North Sumatra, Tanjung Kelayang beach in Belitung island, Tanjung Lesung beach in Banten, Thousand Islands in Jakarta, Borobudur Temple in Central Java, Mounts Bromo and Semeru in East Java, Mandalika beach in West Nusa Tenggara, Wakatobi in Southeast Sulawesi, Labuan Bajo in East Nusa Tenggara, and Morotai Island in North Maluku. And based

on Travel and tourism competitiveness index from World Economic Forum. The T&T Competitiveness Index measures Infrastructure board organized into three pillars factors of competitiveness. First pillar is Air transport infrastructure, second pillar is Ground and port infrastructure and third pillar is Tourist service infrastructure. Based on (Ridwan, 2007) The Ordinal scale is a scale built on the rank, how to sort all objects high to the lowest level or vice versa. In this study, researchers used 10 Point Numerical Rating Scale in data. The lowest scores is 1 and the highest scores is 10.

**Tabel 2. Variabels and Measurements**

Variabel	Indicator	Scale of Measurement	Source
<b>Infrastructure</b>			
1.Air Transport Infrastructure	1.1 Available seat kilometres, Domestic	Ordinal (1-10)	Ridwan (2007)
	1.2 Available seat kilometres, International		
	1.3 Aircraft departures		
	1.4 Airport density		
2.Ground and Port Infrastructure	2.1 Quality of roads	Ordinal (1-10)	Ridwan (2007)
	2.2 Road density		
	2.3 Paved road density		
	2.4 Quality of port infrastructure		
3.Tourist Service Infrastructure	3.1 Hotel rooms	Ordinal (1-10)	Ridwan (2007)

**Data collection procedure**

The research focuses use secondary data. Hox and Boeije (2005) defined that secondary data is data originally collected for a different purpose and reused for another research question. Well-documented data sets come with a detailed description of the methods and procedures used to collect the data. The data in this research is 9 observations, from 10 tourist

destinations on 2015 and 2016. Secondary data is "data which collected by person or other institutions such as annual report, company profile and so on." The quantitative data that would be used in this study are numeric data. (Kusmayadi and Sugiarto, 2000).

This research to know the competitiveness of new development ten tourist destinations' performance in

Indonesia. The research project will, therefore, seek to explore and investigate the following:

1. How competitive air transport infrastructure performance on new development ten tourist destinations in Indonesia (2015 and 2016).
2. How competitive ground and port infrastructure performance on new development ten tourist destinations in Indonesia (2015 and 2016).
3. How competitive tourist service infrastructure performance on new development ten tourist destinations in Indonesia (2015 and 2016).

**Method of data analysis**

The Ordinal scale is a scale built on the rank, how to sort all objects high to the lowest level or vice versa. (Ridwan, 2007:84). In this study, researchers used 10 Point Numerical Rating Scale in data. The lowest scores is 1 and the highest scores is 10. A higher data indicates a higher score are indicator 1.1 Available seat kilometres, domestic, 1.2 Available seat kilometres, international, 1.3 Aircraft departures, 1.4 Airport density, 2.1 Quality of roads, 2.2 Road density, 2.3 Paved road density, 2.4 Quality of port infrastructure, 3.1 Hotel rooms. After that researcher analyze the data for this study, the statistical software, SPSS version 20.0, was used as the instrument for the data analysis.

**RESULT**

The purpose of research will focus on infrastructure competitiveness from new development 10 tourist destinations’ performance in Indonesia. These Infrastructure are organized into three pillars: 1.Air Transport Infrastructure,

2.Ground and Port Infrastructure, 3.Tourist Service Infrastructure.

**Profile of the respondents**

The research was conducted by using secondary data which is using 9 observations, from new development 10 tourist destinations on 2015 and 2016.

**Finding for The Research Objectives**

**A. The Infrastructure**

Firstly it was conducted the descriptive statistic to see the competitiveness of air transport infrastructure from new development 10 tourist destinations’ performance in Indonesia.

**Table 3. Air Transport Infrastructure**

	N	Minimum	Maximum	Mean
North Sumatra (2016)	4	8	8	8.00
North Sumatra (2015)	4	8	8	8.00
Bangka Belitung (2016)	4	0	3	2.25
Bangka Belitung (2015)	4	2	3	2.75
Banten (2016)	4	10	10	10.00
Banten (2015)	4	10	10	10.00
Jakarta (2016)	4	5	6	5.50
Jakarta (2015)	4	4	6	5.25
Central Java (2016)	4	6	7	6.50
Central Java (2015)	4	6	7	6.75
East Java (2016)	4	9	9	9.00
East Java (2015)	4	9	9	9.00
West Nusa Tenggara (2016)	4	4	7	5.25
West Nusa Tenggara (2015)	4	4	7	5.25
East Nusa Tenggara (2016)	4	4	7	4.75
East Nusa Tenggara (2015)	4	4	6	4.75
Southeast Sulawesi (2016)	4	0	2	1.50
Southeast Sulawesi (2015)	4	1	3	2.00
North Maluku (2016)	4	0	1	.75
North Maluku (2015)	4	1	2	1.25

From the descriptive statistic above, the highest air transport infrastructure is Banten with Mean 10.00 and stable from 2015 and 2016, the second highest air transport infrastructure is East Java with Mean 9.00 and stable from 2015 and 2016, the third highest air transport infrastructure is North Sumatra with Mean 8.00 and stable from 2015 and 2016, the fourth highest air transport infrastructure is Central Java with Mean 6.50 on 2016, but is going down performance with mean 6.75 on 2015, the fifth highest air transport infrastructure is Jakarta with Mean 5.50 on 2016 and is going up performance with mean 5.25 on 2015, the lowest air transport infrastructure is North Maluku with Mean 0.75 on 2016 and going down performance with mean 1.25 on 2015, the second lowest air transport infrastructure is Southeast Sulawesi with Mean 1.50 on 2016 and going down performance with mean 2.00 on 2015, the third lowest air transport infrastructure is Bangka Belitung with Mean 2.25 on 2016 and going down performance with mean 2.75 on 2015, the fourth lowest air transport infrastructure is East Nusa Tenggara with Mean 4.75 and stable from 2015 and 2016, the fifth lowest air transport infrastructure is West Nusa Tenggara with Mean 5.25 and stable from 2015 and 2016

Secondly it was conducted the descriptive statistic to see the competitiveness of ground and port infrastructure from new development 10 tourist destinations' performance in Indonesia.

**Tabel 4. Ground and Port Infrastructure**

	N	Minimum	Maximum	Mean
North Sumatra (2016)	4	2	6	4.25
North Sumatra (2015)	4	1	7	5.00
Bangka Belitung (2016)	4	2	9	4.25
Bangka Belitung (2015)	4	2	3	2.75
Banten (2016)	4	2	10	6.50
Banten (2015)	4	1	10	6.25
Jakarta (2016)	4	1	10	6.25
Jakarta (2015)	4	1	10	6.75
Central Java (2016)	4	2	9	6.75
Central Java (2015)	4	2	9	7.00
East Java (2016)	4	1	8	6.25
East Java (2015)	4	2	9	6.75
West Nusa Tenggara (2016)	4	0	5	3.25
West Nusa Tenggara (2015)	4	0	5	3.25
East Nusa Tenggara (2016)	4	1	5	3.25
East Nusa Tenggara (2015)	4	1	5	3.75
Southeast Sulawesi (2016)	4	2	6	3.00
Southeast Sulawesi (2015)	4	1	2	1.75
North Maluku (2016)	4	1	2	1.50
North Maluku (2015)	4	1	1	1.00

From the descriptive statistic above, the highest ground and port infrastructure is Central Java with Mean 6.75 on 2016, but is going down performance with mean 7.00 on 2015, the second highest ground and port infrastructure is Banten with Mean 6.50 on 2016 and is going up performance with mean 6.25 on 2015, the third highest ground and port infrastructure is Jakarta and

East Java with Mean 6.25 on 2016, but is going down performance with mean 6.75 on 2015, the fourth highest ground and port infrastructure is North Sumatra and Bangka Belitung with Mean 4.25 on 2016, but for North Sumatra is going down performance with mean 5.00 on 2015 and for Bangka Belitung is going up performance with mean 2.75 on 2015, the lowest ground and port infrastructure is North Maluku with Mean 1.50 on 2016 and is going up performance with mean 1.00 on 2015, the second lowest ground and port infrastructure is Southeast Sulawesi with Mean 3.00 on 2016 and is going up

performance with mean 1.75 on 2015, the third lowest ground and port infrastructure is West Nusa Tenggara and East Nusa Tenggara with Mean 3.25 on 2016, for West Nusa Tenggara is stable from 2015 and 2016, but for East Nusa Tenggara is going down performance with mean 3.75 on 2015.

Thirdly it was conducted the descriptive statistic to see the competitiveness of tourist service infrastructure from new development 10 tourist destinations' performance in Indonesia.

**Tabel 5. Tourist Service Infrastructure**

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>
<b>North Sumatra (2016)</b>	1	7	7	7.00
<b>North Sumatra (2015)</b>	1	7	7	7.00
<b>Bangka Belitung (2016)</b>	1	2	2	2.00
<b>Bangka Belitung (2015)</b>	1	2	2	2.00
<b>Banten (2016)</b>	1	5	5	5.00
<b>Banten (2015)</b>	1	5	5	5.00
<b>Jakarta (2016)</b>	1	9	9	9.00
<b>Jakarta (2015)</b>	1	9	9	9.00
<b>Central Java (2016)</b>	1	8	8	8.00
<b>Central Java (2015)</b>	1	8	8	8.00
<b>East Java (2016)</b>	1	10	10	10.00
<b>East Java (2015)</b>	1	10	10	10.00
<b>West Nusa Tenggara (2016)</b>	1	6	6	6.00
<b>West Nusa Tenggara (2015)</b>	1	6	6	6.00
<b>East Nusa Tenggara (2016)</b>	1	4	4	4.00
<b>East Nusa Tenggara (2015)</b>	1	4	4	4.00
<b>Southeast Sulawesi (2016)</b>	1	3	3	3.00
<b>Southeast Sulawesi (2015)</b>	1	3	3	3.00
<b>North Maluku (2016)</b>	1	1	1	1.00
<b>North Maluku (2015)</b>	1	1	1	1.00

From the descriptive statistic above, the highest tourist service infrastructure is East Java with Mean 10.00 and stable from 2015 and 2016, the second highest tourist service infrastructure is Jakarta with Mean 9.00 and

stable from 2015 and 2016, the third highest tourist service infrastructure is Central Java with Mean 8.00 and stable from 2015 and 2016, the fourth highest tourist service infrastructure is North Sumatra with Mean

7.00 and stable from 2015 and 2016, the fifth highest tourist service infrastructure is West Nusa Tenggara with Mean 6.00 and stable from 2015 and 2016, the lowest tourist service infrastructure is North Maluku with Mean 1.00 and stable from 2015 and 2016, the second lowest tourist service infrastructure is Bangka Belitung with Mean 2.00 and stable from 2015 and 2016, the third lowest tourist service infrastructure is Southeast Sulawesi with Mean 3.00 and stable from 2015 and 2016, the fourth lowest tourist service infrastructure is East Nusa Tenggara with Mean 4.00 and stable from 2015 and 2016, the fifth lowest tourist service infrastructure is Banten with Mean 5.00 and stable from 2015 and 2016.

### CONCLUSION AND SUGGESTION

This research has conduct several tests using SPSS software.

**Tabel 6. Infrastructure**

	N	Minimum	Maximum	Mean
North Sumatra (2016)	9	2	8	6.22
North Sumatra (2015)	9	1	8	6.56
Bangka Belitung (2016)	9	0	9	3.11
Bangka Belitung (2015)	9	2	3	2.67
Banten (2016)	9	2	10	7.89
Banten (2015)	9	1	10	7.78
Jakarta (2016)	9	1	10	6.22
Jakarta (2015)	9	1	10	6.33
Central Java (2016)	9	2	9	6.78
Central Java (2015)	9	2	9	7.00
East Java (2016)	9	1	10	7.89
East Java (2015)	9	2	10	8.11
West Nusa Tenggara (2016)	9	0	7	4.44
West Nusa Tenggara (2015)	9	0	7	4.44
East Nusa Tenggara (2016)	9	1	7	4.00
East Nusa Tenggara (2015)	9	1	6	4.22
Southeast Sulawesi (2016)	9	0	6	2.33
Southeast Sulawesi (2015)	9	1	3	2.00
North Maluku (2016)	9	0	2	1.11
North Maluku (2015)	9	1	2	1.11

From the table above, Banten and East Java are on the 1<sup>st</sup> and 2<sup>nd</sup> place in the infrastructure competitiveness of new development ten tourist destinations' performance in Indonesia. With Mean 7.89 on 2016, for Banten is going up performance with mean 7.78 on 2015, but for East Java is going down performance with mean 8.11 on 2015.

Central Java is on the 3<sup>rd</sup> place in the infrastructure competitiveness of new development ten tourist destinations' performance in Indonesia. With Mean 6.78 on 2016, but for Central Java is going down performance with mean 7.00 on 2015.

Jakarta and North Sumatra is on the 4<sup>th</sup> and 5<sup>th</sup> place in the infrastructure competitiveness of new development ten tourist destinations' performance in Indonesia. With Mean 6.22 on 2016, but for both Jakarta and North Sumatra is going down performance with mean 6.33 and 6.56 on 2015.

West Nusa Tenggara is on the 6<sup>th</sup> place in the infrastructure competitiveness of new development ten tourist destinations' performance in Indonesia. With Mean 4.44 and stable from 2015 and 2016.

East Nusa Tenggara is on the 7<sup>th</sup> place in the infrastructure competitiveness of new development ten tourist destinations' performance in Indonesia. With Mean 4.00, but is going down performance with mean 4.22 on 2015.

Bangka Belitung is on the 8<sup>th</sup> place in the infrastructure competitiveness of new development ten tourist destinations' performance in Indonesia. With Mean 3.11, and is going up performance with mean 2.67 on 2015

Southeast Sulawesi is on the 9<sup>th</sup> place in the infrastructure competitiveness of new development ten tourist destinations' performance in Indonesia. With Mean 2.33,



and is going up performance with mean 2.00 on 2015.

North Maluku is on the 10<sup>th</sup> place in the infrastructure competitiveness of new development ten tourist destinations' performance in Indonesia. With Mean 1.11, and is going up performance with mean 2.00 and stable from 2015 and 2016.

## REFERENCES

- Antara News. (2016). *Ten new tourist destinations planned in Indonesia*. Retrieved from <https://en.antaraneews.com/news>
- Hox, J. P., & Boeije, H. R. (2005). Data collection primary vs secondary In *Encyclopedia of Measurement* (pp. 593-599). Oxford: Elsevier Inc.
- Kusmayadi & Sugiarto, E. (2000). *Metodologi penelitian dalam bidang kepariwisataan*. Jakarta : PT. Gramedia Pustaka Utama.
- The Travel & Tourism Competitiveness Report 2017* (Rep.). (n.d.). Retrieved from [http://www3.weforum.org/docs/WEF\\_TTCR\\_2017\\_web\\_0401.pdf](http://www3.weforum.org/docs/WEF_TTCR_2017_web_0401.pdf)
- United Nation (UN). (2001). *Managing Sustainable Tourism Development*. Retrieved from [www.unescap.org/ttdw/Publications](http://www.unescap.org/ttdw/Publications)