

Tourism Industry Development Model through Support System Facilities, Stakeholder Participation, and Environmental Dynamism: Dealing with Post-Pandemic COVID-19 Approach

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Abstract—This study aims to design a conceptual model that measures the tourism industry's performance in Indonesia by considering environmental dynamics due to the COVID-19 pandemic. This research uses an exploratory descriptive approach to designing a new conceptual model based on a literature review measuring Indonesia's tourism industry's performance. The research object in this study is SMEs in Rembang Regency, Central Java, one of the areas with potential tourism objects in Indonesia. The results of this study reveal the factors that affect the performance of the tourism industry, namely supporting systems and facilities, which include telecommunications, power sources, transportation, waste management, location, clean water sources, supporting industries, spatial, hospitality, safety and security; stakeholders and environmental dynamics. The government can consider these factors to produce a policy to develop the tourism industry.

Keywords—tourism industry performance, support system and facilities, stakeholder, environmental dynamism

I. INTRODUCTION

Indonesia is one of the developing countries that have a variety of beautiful nature and tourism potential that has its own charm for domestic and foreign tourists [1, 2]. Tourism is recognized as an economic activity that has global significance and can make a significant contribution to development. Foreign exchange earnings from the tourism sector are obtained from foreign tourist visits, destination visits, and the average expenditure of foreign tourists [3]. The tourism sector has great potential to increase the country's foreign exchange. In 2019 the tourism revenue growth in Indonesia reached USD 18 billion or equivalent to Rp 57 trillion [4]. The revenue experienced a very significant decrease compared to the previous years.

The COVID-19 pandemic has impacted various sectors, one of which is the tourism sector [2]. The current tourism challenge is to increase tourist arrivals and the tourism industry's performance after the post-pandemic to increase tourism revenue [5]. Good governance in the development and management of the tourism industry is very influential on economic growth in the country, especially in archipelagic countries, which have more tourist attractions, so that income from tourism objects can increase economic growth,

especially for residents around tourist areas because of the creation of employment opportunities for workers [2, 6]. This shows that the tourism industry sector has dependent on economic growth and employment for the workforce. One of the efforts from government for optimization in the tourism sector to develop potential is “Pesona Indonesia” and “Wonderful Indonesia”, which are used to promote Indonesian tourism [2].

Indonesia has a lot of tourism potential that provides added value in the eyes of the world. In addition to the island of Bali, the Central Java Region is one of the provinces that have the potential to contribute to foreign exchange in Indonesia because it has 1,024 tourist attractions [7]. One of the districts with potential in the tourism sector in Central Java is Rembang Regency because it has the potential to be used as a tourist destination and has various ethnic groups (multiethnic), which are rarely found in tourist areas in Indonesia [2, 8]. The location map of Rembang Regency is shown in Figure 1. In addition, because it is located on the northern coast of the island of Java and is bordered by the province of East Java, namely by the sea [8], there is a lot of tourism potential that can be developed into a tourist attraction because it has more than 15 potential tourist sites and is managed by various related parties, such as the marine service, the tourism office, the forestry service, and the role of the community around the tourist area [2].



Fig. 1. Map of Rembang Regency, Central Java, Indonesia.

There are support system and facilities as well as the stakeholders' role that influence the tourism industry's development in Rembang Regency, Central Java, Indonesia. [2]. In this regard, [2, 5, 9] consider supporting systems and facilities, and stakeholders influence the potential of tourist destinations in tourism development. However, this study has not measured the changes that occur in the environment in tourist areas.

It is unfortunate that the tourism potential in Rembang Regency, which is very promising, is not optimized in its development to improve the regional economy and employment opportunities around the tourist area. To assist in increasing regional income and employment through the tourism sector, this study will design a conceptual model to measure the tourism industry's performance and suggest policy improvements.

II. RELATED WORK

A. Tourism Development

The tourism industry is an activity that involves many agencies and sectors and requires complex integration among those responsible for its development. Tourism development is a coordinated effort to attract tourists or visitors by providing the necessary facilities and infrastructure to meet the needs of tourists [1, 3]. Tourism development aims to introduce and maintain the culture in the tourism area. So, the benefits and benefits can also be felt by residents. There are "6A" tourism development components that must exist in a tourist destination, namely: Attraction, Accessibilities, Amenities, Accommodation, Activities, and Ancillary Services [1–3].

B. Support System and Facilities

Tourists need a support system and facilities in visiting a tourist destination. Support systems and facilities are developed directly or indirectly to support and encourage tourism potential [2, 3]. Along with the development of tourism, it will also be balanced with an adequate level of facilities because the needs of tourists for carrying capacity and facilities reflect the development of tourism in a tourist destination [3]. Support system facilities have a significant positive effect on the relationship between destination attractors and destination management of tourism to support the performance of the tourism industry [2, 3].

C. Stakeholder

The factor of cooperation with various parties, such as the government, tourism area management institutions which can come from developers or investors, local communities, and other industrial parties, is needed in the development of the tourism industry [2]. The more stakeholders involved in the decision-making process for resource integrators who together will create an ecosystem value in tourist attractions and attractions [5, 9].

D. Environmental Dynamism

Environmental dynamism is an environmental factor that does not have a pattern and has high environmental uncertainty, so an organization is required to be able to utilize science and technology effectively so that an organization can

quickly adapt to its environment [10, 11]. In the context of the tourism industry, environmental changes are discussed such as government regulations, technology in tourism, the economy, and the community environment [12].

III. PROPOSED METHOD

This research uses an exploratory descriptive approach. The use of the exploratory method aims to provide insight and understanding of the problems of the tourism industry. Descriptive research aims to describe the characteristics of the tourism industry. In addition, the preparation of a conceptual model based on a literature review on measuring the performance of the tourism industry, support systems and facilities, and stakeholders in the tourism industry was also carried out. In Table 1, the definitions of the concepts used in this study are presented.

Table 1. Definition research concept

Concept	Definition
Tourism Industry Performance	The performance of various business activities consisting of various interrelated business fields to produce the production of goods and services needed by tourists [13]
Support System and Facilities	Facilities and services are developed either directly or indirectly to support and encourage the potential of the tourism industry [2, 3, 14–17]
Stakeholder	Various parties are involved and interact with each other that create value in the process of developing, supporting, and building the tourism industry [2, 5, 9].
Environmental Dynamism	Environmental conditions that refer to the current environment, there are no patterns and instability that require organizations to quickly adapt to their environment to continue to explore and exploit external pressures [10, 11, 12]

SMEs which is the object of this research, is in Rembang Regency, Central Java, where Rembang Regency is one of the potential tourist objects in Indonesia. Respondents were selected using a purposive sampling technique for stakeholders and SMEs around the tourist area in Rembang Regency. Sources of data in this study include primary data and secondary data. Primary data was obtained directly from the survey by distributing questionnaires to SMEs around tourist areas and interviewing stakeholders based on certain criteria. Meanwhile, secondary data was obtained from agency data from Rembang Regency.

IV. RESULT AND DISCUSSION

The existence of the tourism industry is a major asset in foreign exchange income, regional income, and community income with the existence of employment opportunities for people around tourist areas [18, 19]. Realizing the benefits derived from the development of the tourism sector, the government in Indonesia has high hopes for the tourism sector in the future [2, 18]. The main function of the tourism industry is to serve tourists [20]. This study was conducted to determine the effect of the support system and facilities, stakeholders, environmental dynamism as a moderator on the tourism industry performance.

A. The Role of the Support System and Facilities in the Tourism Industry

Support systems and facilities are developed directly or indirectly to support tourism industry activities [3]. The support system and facilities factors in the development of the tourism performance industry model are elaborated [2], which suggests that there are 10 factors driving the potential of tourism areas to assist the government in making strategies for tourism development. These factors are telecommunications, power source, transportation, waste management, location, clean water source, supporting industry, spatial, hospitality, safety, and security [2, 14–17]. Several studies have applied these factors to the tourism potential of the region. However, there is still little research that discusses how the performance of the tourism industry in an area through systems and supporting facilities. Based on the literature on the role of the support system and facilities in the tourism industry, this study proposes the following hypothesis:

H1: Support system and facilities positively influences tourism industry performance

B. The Role of Stakeholders in the Tourism Industry

Success in the development of the tourism industry depends on positive relationships among all sector stakeholders [20]. This, in line with the literature review from several studies, states that stakeholder factors are highly considered to create value in the process of developing the tourism industry [3, 5, 9]. The results of [5], using a case study approach by conducting interviews to explore the role of the tourism industry in dealing with tourism, stated that. Stakeholders who play a significant role in the growth of the tourism industry are facing several challenges during the COVID-19 pandemic, which will have an impact on the arrival of domestic and foreign tourists [5]. Stakeholders are needed in the tourism industry sector related to the provision of capital assistance, industrial licensing, policies, and cooperation between sectors [17]. Based on the literature on the role of stakeholders, this study proposes the following hypothesis:

H2: Stakeholder positively influences tourism industry performance

C. Effect of Environmental Dynamism as a Moderator on Tourism Industry Performance

Environmental dynamism is considered a factor that can influence innovation strategies in developing tourism potential in Rembang Regency, Central Java, Indonesia, which has a significant impact on tourism development in developing countries [10–12, 21]. Environmental dynamism affects an organization or stakeholder in taking action to adapt [10, 11]. In this study, the factors that influence environmental dynamism are i) government regulations, ii) the habits of the people around the tourist area towards technological developments, and iii) developments and changes in the environment [10, 11]. Organizations must respond quickly to changes that occur in the dynamic tourism industry environment and can take advantage of emerging business opportunities to deal with threats due to changes in the business environment [10–12, 21]. When the environment is stable, and there is no significant technological

development, the relationship between dynamic capabilities and competitiveness will be weakened [12, 21]. Changes in digitalization and the environment can facilitate business models by offering a better experience for tourists in the tourism industry [21]. Based on the literature on environmental dynamism, this shows that a very dynamic environmental moderator provides reinforcement for stakeholders, which in turn will have a positive impact on tourism industry performance [9, 18].

H3: Environmental dynamism moderates the positive influences tourism industry performance.

The development of a framework that elaborates and analyzes the concepts that support the tourism industry performance that has been described previously, along with a depiction in the form of a schematic model that supports the performance of the tourism industry as shown in Fig. 2.

Fig. 2 shows the framework model for developing the tourism industry performance as the main construction in this research. Variables that are structured to support the tourism industry's performance has several indicators analyzed. This study aims to develop a model of variables and indicators that describe the tourism industry to improve the performance of the tourism industry, which needs to be prepared for the development of tourism areas in Rembang Regency, Central Java, Indonesia.

The model in this study aims to provide a framework for measuring and assessing the performance of the tourism industry through mapping the factors that influence the tourism industry [17]. The targets used in achieving the objectives are i) to identify the performance and type of the tourism industry in Rembang Regency, Central Java, Indonesia, ii) to analyze the general description of the existing conditions, and iii) to identify the factors that influence the performance of the tourism industry [13]. This can be useful for the tourism industry and local governments that are vertically or horizontally integrated to measure internal and external effectiveness in designing tourism industry development strategies [2, 22]. This study proposes the integration of Support System and Facilities, Stakeholders, and Environment Dynamism which has been elaborated from several studies to develop a model framework for driving the tourism performance industry in Rembang Regency, Central Java, Indonesia in dealing with an environmental dynamism.

Support systems and facilities were developed to support the tourism industry [3]. Support System and Facilities influence the tourism industry's performance. The indicators of the support system and facilities are telecommunications, power source, transportation, waste management, location, clean water source, supporting industry, spatial, hospitality, safety, and security [2, 14–17]. Support systems and facilities are needed by tourist destinations to serve tourists well, because in tourism development facilities are needed that can support tourism activities in Rembang Regency, Central Java, Indonesia [23]. So, hypothesis 1 is proposed in this study.

In the context of stakeholders, researchers develop a hypothesis in this study that stakeholders have a positive relationship with tourism industry performance. The role of stakeholders is highly considered in the process of developing the tourism industry [3, 5, 9, 17]. Stakeholders are needed in the tourism industry sector related to the provision of capital

assistance, industrial licensing, and policies [17]. The involvement of organizations and the government of Rembang Regency, Central Java, Indonesia, is one of the most important factors in developing the tourism industry [2]. The Government of Rembang Regency, Central Java, Indonesia, has contributed to the development of regional tourism by issuing the Rembang Regency Regional

Regulation No 12 of 2019 concerning the Rembang Regency Tourism Development Master Plan for 2019-2025. Many researchers argue that stakeholders can be considered resource integrators who contribute to creating ecosystem values that support each other [5]. So, hypothesis 2 is proposed in this study.

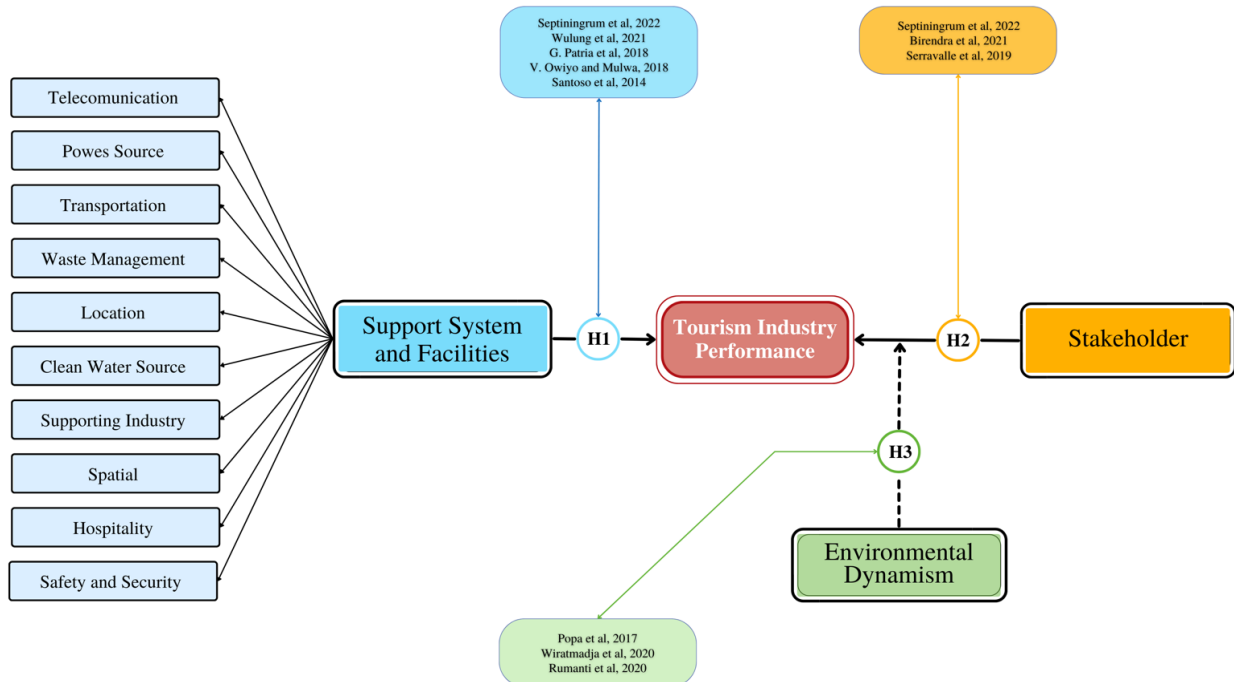


Fig. 2. Conceptual model for tourism industry performance.

In the context of the environment, the tourism industry that can adapt well will take advantage of the opportunities generated by environmental dynamics [9]. In a dynamic environment, stakeholders exert influence in developing actions that will ultimately positively impact the performance of the tourism industry [12]. A dynamic environment can provide unstable pressure to implement strategies that can adapt to the environment to gain a long-term competitive advantage [21, 24]. Increasing digitalization makes the tourism industry more complex and very challenging. In an environment that has moved towards technology, the Government of Rembang Regency, Central Java, Indonesia, has carried out promotional innovations through digital technology such as Enjoy Rembang [25]. Acceleration of tourism promotion as a vision and mission of the government of Rembang Regency. So, hypothesis 3 proposed in this study where environmental dynamism has a positive relationship to tourism industry performance.

V. CONCLUSIONS AND FUTURE WORK

This research has produced a conceptual model that relates the tourism industry's performance, supporting systems and facilities, stakeholders, and environmental dynamism that the government can consider producing a policy to develop the tourism industry. Based on the results of the research that has been done, there are still several opportunities that can be developed for further research. The results of the conceptual model of tourism industry performance have not been tested empirically on whether the framework of the model is relevant

and rational for the tourism industry in areas with more complex construction.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

Fandi Achmad and Lutfia Septiningrum the conceptual and theoretical parameters for the research. Augustina Asih Rumanti, Yudha Prambudia and Iwan Inrawan Wiratmadja oriented the research, gave suggestions, and supported the process of finding the research topic. After that, Fandi Achmad analyzed and compared the models and wrote the paper. All authors had approved the final version.

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