ANALYSIS OF SMART TOURISM MODEL IN SOUTH TANGERANG CITY

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ABSTRACT

The tourism industry is one of the largest foreign exchange earners in Indonesia and is able to provide new jobs. Therefore, tourism is one of the most important sectors in Indonesia, including in the South Tangerang City. South Tangerang City has various tourism potentials ranging from natural tourism, educational tourism, historical tourism, to shopping tourism. One strategy that can be implemented to maximize tourism potential in the South Tangerang City and increase tourist visits is to utilize the application of information technology innovation, also known as the Smart Tourism concept. Smart Tourism can significantly change tourist behavior, number of visits, as well as the function and structure of the tourism industry. This research will discuss how the application of smart tourism in South Tangerang City based on three components, namely smart experience, smart business ecosystem, and smart destination, the impacts of smart tourism implementation, factors that influence the implementation of smart tourism, and strategic analysis of smart tourism model using the SWOT method to determine the relationship between external opportunities and internal strengths and between internal weaknesses and external threats. From this strategic analysis, a strategy will be produced that will be applied in the smart tourism model in South Tangerang City.

Keywords: Tourism Industry; Smart Destination; Strategic Analysis; SWOT Analysis
INTRODUCTION

The development of technology and communication today brings changes in various sectors, including the tourism sector. Tourism is a variety of tourism activities and is supported by various facilities and services provided by the community, businessmen, government, and local governments (Law No. 10 of 2009 concerning Tourism). Tourism activity is one of the areas for economic development that has enormous benefits for a country (Pavithra et al. 2019). Meanwhile, Sanchez (in Ferdiansyah et al., 2020) reveals more deeply about tourism, that tourist destinations and businesses engaged in this field can be stated as a business ecosystem with high complexity due to the many interactions that occur involving various parties.

Tourism has provided substantial foreign exchange for various countries. Indonesia, as the largest archipelagic country in the world consisting of 17,508 islands or also called the archipelago or maritime country, has realized the importance of the tourism sector to the Indonesian economy because Indonesia's tourism growth is always above Indonesia's economic growth. Tourism development that has been carried out by both the government and the private sector has increased the number of tourist arrivals from one area to another. Tourist visits will stimulate social interaction with residents around tourist sites and stimulate the response of the surrounding community according to their ability to adapt both in the economic, social and cultural fields.

South Tangerang is a city that has many tourist attractions including Situ Gintung Island-1, Situ Gintung Island-2, Situ Gintung Island-3, Ocean Park BSD City Serpong, Citra Alam Lakeside, and City Park 2 BSD. These tourist attractions are very interesting to visit, because they have an exotic beauty so they are suitable for recreation. Among the several tourist attractions mentioned above, Situ Gintung-3 Island Tour is quite complete, the entry ticket price is relatively cheap, so there is no need to spend a lot of money to enjoy this tourist spot.

The presence of technology in the tourism industry has created a new environment in the world of tourism. A popular term that refers to this condition is "Smart Tourism". The smart city concept can also be applied to the tourism sector which is commonly called Smart Tourism (Liu & Liu., 2016). Smart Tourism is one of the pillars of Smart City. As well as being one of the important elements of the Smart Economy.

Smart Tourism contains several objectives, firstly creating a database related to tourism resources, supported by the development of the Internet of Things and Cloud Computing which focuses on increasing tourism through existing identification and monitoring. Second, advancing tourist destinations with tourism industry innovations for tourism promotion, tourism service improvement and tourism management. Third, expanding the scale of the tourism industry with a real time information platform, integrating tourism service providers and the role of local communities. The smart tourism system includes five elements: Information Exchange Center (IEC), government, scenic zone/beautiful zone and business (Zhu et al., 2014). This application in the field of tourism is needed because of the development of tourism activities which have become a necessity for people's lives.

In the context of tourism, the implementation of smart tourism is more complex than other fields. Existing technology cannot run without synergy with support between government institutions, industry players, and the community. The embodiment of smart tourism, there are three components and the main layers are Smart Experience, Smart
Business Ecosystem, Smart Destination. ICT tools and widely accessible applications also allow the tourism industry to become smarter. This means that relevant parties must participate in improving the performance and level of competition between one tourist destination and another. There is a rapid flow of information on the business side. This will have an impact on marketing strategies, business management, and service standards for tourists. Therefore, this study aims to determine the readiness of South Tangerang City in implementing the concept of smart tourism, knowing the possible impacts that arise if South Tangerang City applies the concept smart tourism, and knowing the factors that can affect the application of smart tourism in South Tangerang City.

Definition of Tourism

Word tourism in Indonesian is called "pariwisata", etymologically the word "pariwisata" comes from the Sanskrit language, namely pari and wisata. The word pari means together or around. The word wisata means travel. So, literally tourism means traveling around together.

Huziesker and Krauf explain in more depth the definition of tourism, as follows: Tourism can be defined as the entire network and symptoms associated with the stay of foreigners in a place, provided that they do not stay there to do an important job that provides a natural advantage, permanent or temporary (Soekadijo., 2000).

Based on the understanding mentioned above, it can be seen that basically tourism includes all forms/types of travel related to recreational activities. This understanding indicates the existence of a special characteristic or factors - factors forming tourism as follows:

a. Travel is done for a while.
b. Travel is done from one place to another.
c. Travel (whatever its form) should always be associated with recreation.
d. People who travel do not make a living in the places they visit and are solely consumers of those places.

Tourism based on the factors above, is defined as a trip that is carried out temporarily from one place to another, with the intention not of doing business or earning a living in the place visited, but only for fun and fulfilling various desires.

Types of Tourism

Tourism must be distinguished for planning and development purposes, because it will facilitate the determination of policies to support this, so that the types and types of tourism developed are realized as expected from tourism itself.

When viewed from an economic point of view, the classification of types of tourism is very important because in this way the government can determine how much foreign exchange earnings it receives from a type of tourism developed in a certain place or area. In addition, it is also useful for compiling tourism statistics or research data needed for further planning in the future.

According to Wibowo (2008), there are 5 types of tourism based on geographic location:

a. Local Tourism

Tourism which has a relatively narrow scope and is limited to only one area. For example, tourism in Bandung, DKI Jakarta, South Tangerang and others.
b. Regional Tourism
   Tourism that develops in a place or area whose scope is wider when compared to local tourism, the area covers one province. For example, North Sumatra Tourism, Bali, and others.

c. National Tourism
   In a narrow sense, national tourism is a tourism activity that develops within the territory of a country. This understanding is the same as domestic tourism or domestic tourism, where the emphasis is on people who travel on tours are citizens of the country itself and foreigners who are domiciled in that country.
   In a broad sense, national tourism is a tourism activity that develops within the territory of a country, in addition to domestic tourism activities, foreign tourism is also developed, which includes inbound tourism and outgoing tourism. So, in addition to tourist traffic within the country itself, there is also tourist traffic from abroad, as well as from within the country to abroad.

d. Regional-International Tourism
   Activities that develop in a limited international area, but cross the boundaries of more than two or three countries in the region. For example, tourism in the ASEAN region, the Middle East, South Asia, Western Europe, and others.

e. International Tourism
   Activities that are developing in all countries in the world, including Regional-International tourism and National tourism (Wibowo, 2008).

Tourism Strategy
   According to Wibowo (2008), tourism facilities have 3 (three) parts as follows:
   a. Main Tourism Superstructures
      Company whose lives and lives are highly dependent on the flow of people traveling on tours.
   b. Supplementing Tourism superstructures
      Company or place - a place that provides recreational facilities for functions not only complements the principal means of tourism, but the important thing is to make the tourists longer live in a tourist destination.
   c. Supporting Tourism superstructures
      Company supporting and complementary means equal principal. In addition to functioning to make tourists stay longer in a tourist destination, tourism supporting facilities have a much more important function, namely to make tourists spend more or spend their money in the places visited (Wibowo, 2008).

Tourism Infrastructure
   Suwantoro (in Ghani, 2017) Tourism infrastructure is natural resources and human resources that are absolutely needed by tourists on their journey to tourist destinations, such as roads, electricity, water, telecommunications, terminals, bridges, and so on.
   According to Wibowo (2008), tourism infrastructure has 3 (three) parts as follows:
   a. General Infrastructures
      Infrastructure which concerns the needs of many people whose procurement aims to help smooth the wheels of the economy.
   b. Basic Needs of Civilized Life
Infrastructure that concerns the needs of many people, such as hospitals, pharmacies, banks, post offices, gas stations, and government administration (police, courts, legislatures, and others).

c. Tourism Infrastructure
   • Receptive Tourist Plant
     All forms of business entities or organizations whose activities are specifically to prepare for tourist arrivals in a tourist destination.
   • Residential Tourist Plant
     All facilities that can accommodate the arrival of tourists to stay and stay for a while in tourist destinations.
   • Recreative and Sportive Plant
     All facilities that can be used for recreational and sports purposes (Wibowo., 2008).

Understanding Smart Tourism

In general, smart tourism aims to develop infrastructure and information and communication capabilities to improve management and governance, facilitate services (product innovation), and increase tourism variety. In the end, improve the competitiveness of existing enterprises and tourist destinations. Paying attention to the role of tourism is a primary need for central and local governments to improve the national economic sector. Smart tourism can provide a promising direction for sustainable tourism development and has the potential to influence tourist destinations and representation in the electronic market at different levels (Redjeki et al., 2018).

Smart Tourism Components

In realizing smart tourism, there are three main components and layers. The first is the Smart Experience which provides more experiences for visitors, such as updating the latest information, and so on. The second is the Smart Business Ecosystem, of course the tourism industry cannot be separated from business matters, so its implementation must be investor-friendly. Third is Smart Destination, in addition to improving user experience, tourist destinations must also be able to offer more value that distinguishes them from other places. The three elements above both generate and use patterned data: collection, exchange, and processing.

![Smart Tourism Component](https://www.google.com/amp/s/blog.gamatechno.com/pariwisata-indonesia/amp/)
Smart Tourism

Destinations Every destination can be a smart tourism destination if it consists of the following two things:

a. Soft intelligence, including collaboration, innovation, and leadership.
b. Smart intelligence refers to all technologies and infrastructure.

However, the availability of any of the above does not make for a smart goal. It depends on the availability of hard smartness that enables increased human capital and intelligent decisions based on technology and infrastructure applications.

Smart tourism requires several attributes, including:
1. Embedded technology environment
2. Responsive processes at the micro and macro levels
3. devices End – user
4. Power Holders who are actively using smart – platforms

Smart Tourism tools refer to the combination of hardware, software and mobile networks to enable interaction between tourists, stakeholders and physical objects. Communications must be able to provide personalized service and real-time information to make smart decisions.

There are three specific intelligent tourism tools:

a. Applications
   Applications must be able to provide information that will assist tourists in making informed choices such as making reservations, translation services, directions, audio guides, and others. It should also enable real-time communication between stakeholders and customers. Examples: ViaHero application which allows users to create personalized trips made with the help of local residents.

b. Augmented Reality
   Augmented Reality is the experience of augmenting the real world environment with information with the help of a lens system or gadget. This can contribute significantly to cultural tourism.

c. Near Field Communication
   Near Field Communication can be mostly used in tourist places such as museums and which allows tourists to scan information points in historical paintings/statues/artifacts which then allows mobile phones to provide translations. NFC however, requires a compatible device.

Each location requires a different tool application. Both tourists and destinations benefit from smart tourism. Benefits for the purpose include economic rewards, potential FDI, preservation of cultural heritage. As for the tourists, including convenience and reduced costs.

Challenges of Smart Tourism

Reliance on gadgets to run applications and power for system functioning. There is a gap between digital and non-digital devices. It does not meet the needs of those who wish to experience tourism outside the smart city area. Higher amount of knowledge and infrastructure. Companies already impacted by tourism will be increasingly encouraged to step in with the start of smart tourism.
RESEARCH METHODS

This study using a descriptive qualitative research approach to describe the situation of implementing the smart tourism model in South Tangerang City, based on available documentation or report data or other sources, this is because the problems raised are complex and dynamic, and are still temporary or tentative so that exploration activities are carried out in order to understand and explain the problems that are the focus of this research.

Bogdan & Taylor (in Moleong., 2007) defines qualitative research as a research procedure that provides descriptive data, both in the form of words, verbally, and the behavior of the people who are the object of observation.

Data analysis in this study used SWOT analysis and data triangulation. SWOT analysis is a systematic procedure to identify the factors that determine the success of an organization, namely internal strengths and weaknesses, opportunities, and external threats (Blocher et al., 2007). While data triangulation is defined as one of the data checking techniques using other data outside the data to be a comparison of the data that has been obtained (Moleong., 2007)

RESULTS AND DISCUSSION

The smart tourism model in South Tangerang City was reviewed based on three components namely smart experience, smart business ecosystem, smart destination and the use of three tools, smart tourism namely applications, augmented reality, and close field communication.

<table>
<thead>
<tr>
<th>Table 1. Swot Strategy Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IFAS</strong></td>
</tr>
<tr>
<td>1) South Tangerang City offers various forms of tourism such as nature tourism, cultural tourism, shopping tourism.</td>
</tr>
<tr>
<td>2) South Tangerang City is the center of industry and trade.</td>
</tr>
<tr>
<td>3) South Tangerang City is preparing to implement a smart city.</td>
</tr>
<tr>
<td>4) South Tangerang City is bordered by four major cities.</td>
</tr>
<tr>
<td>5) There is support from the government to develop tourism in South Tangerang City.</td>
</tr>
</tbody>
</table>
Opportunities (O)

1) The existence of an online motorcycle taxi transportation application that facilitates the mobility of tourists.
2) The high interest of tourists towards nature tourism and education in South Tangerang City.
3) The existence of a digital tourism development program by the Indonesian Ministry of Tourism.
4) The characteristics of tourists who are technology literate and actively use social media.
5) Not many other regions have implemented digital tour packages.

Strategi SO
- Develop cooperation with online transportation applications and ticket reservation applications to promote tourism in South Tangerang City.
- Provide facilities to increase competitiveness and provide tourist comfort.
- Provide NFC facilities for the provision of information at several tourist attraction points in South Tangerang City.

Strategi WO
- To promote tourism through print media, official websites, and government social media.
- Develop digital tour packages according to the type of tourism and tailored to the needs and desires of tourists.
- Invite travel bloggers to cover tourist attractions in South Tangerang City on social media.

Threats (T)

1) People who tend to regard industry and trade as the leading sector in South Tangerang City, which results in the tourism sector being not given much attention.
2) There is a perception that other tourist attractions outside South Tangerang City are more attractive.
3) The development of other tour packages outside the City of South Tangerang which increases competition.
4) The rapid development of travel agents outside the city of South Tangerang.
5) There is a perception of tourists stating that tourism in South Tangerang City is less attractive.

Strategi ST
- Develop augmented reality and NFC technology that is integrated with information applications and travel guides to attract tourists.
- Develop new tourist objects in South Tangerang City to attract tourists.
- Develop a virtual city tour to attract tourists to visit tourist attractions in South Tangerang City.

Strategi WT
- Increase promotion and digital marketing related to tourism products offered in South Tangerang City.
- Developing public transportation applications and booking tour packages to attract tourists from outside South Tangerang City.
- Develop tourist attractions that can attract tourists from within and outside the City of South Tangerang.

Based on the results of the research that has been done, it can be seen several internal and external factors in the model smart tourism in South Tangerang City. Several important internal and external factors IFAS (Internal Strategic Factor Analysis
Summary) and EFAS (External Strategic Factor Analysis Summary) can be identified as follows:

### Table 2. IFAS Matrix

<table>
<thead>
<tr>
<th>No.</th>
<th>Strength Factor (S)</th>
<th>Weight</th>
<th>Rating</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>South Tangerang City offers various forms of tourism such as nature tourism, cultural tourism, and shopping tourism.</td>
<td>0.11</td>
<td>3</td>
<td>0.33</td>
</tr>
<tr>
<td>2.</td>
<td>South Tangerang City is a center of industry and trade</td>
<td>0.08</td>
<td>4</td>
<td>0.32</td>
</tr>
<tr>
<td>3.</td>
<td>South Tangerang City is preparing to become a smart city.</td>
<td>0.11</td>
<td>3</td>
<td>0.33</td>
</tr>
<tr>
<td>4.</td>
<td>South Tangerang City is bordered by four major cities.</td>
<td>0.10</td>
<td>4</td>
<td>0.40</td>
</tr>
<tr>
<td>5.</td>
<td>There is support from the government to develop tourism in South Tangerang City.</td>
<td>0.10</td>
<td>3</td>
<td>0.30</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>1.68</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>Weakness Factor (W)</th>
<th>Weight</th>
<th>Rating</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Lack of local community awareness in developing existing applications, namely Tangsel Cmore City.</td>
<td>0.12</td>
<td>2</td>
<td>0.24</td>
</tr>
<tr>
<td>2.</td>
<td>Lack of digital marketing and promotion of tourism objects.</td>
<td>0.12</td>
<td>2</td>
<td>0.24</td>
</tr>
<tr>
<td>3.</td>
<td>The South Tangerang City Government does not yet have its own application related to public transportation and the provision of tour packages and accommodation.</td>
<td>0.10</td>
<td>2</td>
<td>0.20</td>
</tr>
<tr>
<td>4.</td>
<td>Lack of tourist attractions in tourist destinations.</td>
<td>0.09</td>
<td>3</td>
<td>0.27</td>
</tr>
<tr>
<td>5.</td>
<td>Lack of references about tourism that has historical value and represents the City of South Tangerang.</td>
<td>0.07</td>
<td>2</td>
<td>0.14</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
</tbody>
</table>

### Table 3. EFAS Matrix

<table>
<thead>
<tr>
<th>No.</th>
<th>Opportunity Factor (O)</th>
<th>Weight</th>
<th>Rating</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The existence of a motorcycle taxi transportation application online that facilitates the mobility of tourists</td>
<td>0.1</td>
<td>4</td>
<td>0.40</td>
</tr>
<tr>
<td>2.</td>
<td>The high interest of tourists towards nature tourism and education in South Tangerang City</td>
<td>0.11</td>
<td>2</td>
<td>0.22</td>
</tr>
<tr>
<td>3.</td>
<td>The existence of digital tourism development program by the Indonesian Ministry of Tourism</td>
<td>0.10</td>
<td>3</td>
<td>0.30</td>
</tr>
<tr>
<td>4.</td>
<td>The characteristics of tourists who are technology literate and actively use social media</td>
<td>0.12</td>
<td>4</td>
<td>0.48</td>
</tr>
<tr>
<td>5.</td>
<td>Not many other areas have implemented digital tour packages</td>
<td>0.07</td>
<td>3</td>
<td>0.21</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>1.61</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>Threat Factor (T)</th>
<th>Weight</th>
<th>Rating</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>People who tend to think of industry and trade as the leading sector in South Tangerang City which results in the tourism sector not getting too much attention</td>
<td>0.12</td>
<td>2</td>
<td>0.24</td>
</tr>
<tr>
<td>2.</td>
<td>There is a perception that other tourist attractions outside Tangerang City Southmore attractive</td>
<td>0.10</td>
<td>3</td>
<td>0.30</td>
</tr>
<tr>
<td>3.</td>
<td>Tangerang isThe emergence of other tour packages outside South Tangerang City which increases competition</td>
<td>0.09</td>
<td>2</td>
<td>0.18</td>
</tr>
<tr>
<td>4.</td>
<td>The rapid development of travel agencies outside South Tangerang City</td>
<td>0.08</td>
<td>2</td>
<td>0.16</td>
</tr>
<tr>
<td>5.</td>
<td>There is the perception of tourists stating that travel in South Tangerang City less attractive</td>
<td>0.11</td>
<td>3</td>
<td>0.33</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>1.21</td>
</tr>
</tbody>
</table>
Based on Table 3 above, factors strengths have a value score of 1.68 while the factors of weakness (weaknesses) have a score of 1.09. This means that the model smart tourism in South Tangerang City has a higher strength than the weakness factor in determining marketing strategies to increase competitiveness. Furthermore, in Table 3 above, opportunity factors had a score of 1.61 and the factor threats had a value score of 1.21. From these scores, it shows that the effort to determine the competitive strategy, the model smart tourism in South Tangerang City has a large enough opportunity compared to the threats that will arise.

The composition of the internal and external factors above produces a series of scores as follows:

a. IFAS = 2.77
   1. Strengths = 1.68
   2. Weaknesses = 1.09

b. EFAS = 2.82
   1. Opportunities = 1.61
   2. Threats = 1.21

The next stage is based on the total score obtained in the table of internal and external strategic factors, it can be seen the position of South Tangerang City to implement a strategy that is in accordance with current conditions by entering the total score into the internal external matrix as follows:

Table 4. Internal-External Matrix Diagram

<table>
<thead>
<tr>
<th>The EFE Total Weight Score</th>
<th>The IFE Total Weight Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strong (3-4)</td>
</tr>
<tr>
<td>High (3-4)</td>
<td>4.0</td>
</tr>
<tr>
<td>Medium (2-2.99)</td>
<td>2.82</td>
</tr>
<tr>
<td>Low (1-1.99)</td>
<td>1.0</td>
</tr>
</tbody>
</table>

In Table 4, the internal – external (IE) matrix shows that the condition of South Tangerang City is in cell V. In that position, the model smart tourism in the City South Tangerang can be managed with a hold and keep, where market penetration and product development strategies are the two strategies used for this position.

Market penetration strategy is done by intensifying the marketing mix elements in the promotion of South Tangerang City, namely through promotion and digital marketing through social media such as Facebook, Instagram, Twitter, and other media.

Product development strategy is a strategy that is executed to increase the number of tourists to South Tangerang City to provide services in the form of digital travel packages and travel product booking application development.
The position of the smart tourism model in South Tangerang City is currently in the cell V position which shows a growth strategy through horizontal integration and stability. In cell V the internal - external matrix (IE) the internal and external values of the model smart tourism in South Tangerang City have a value of more than 2, which can be concluded that the model smart tourism in South Tangerang City is in a position that has sufficient strengths and opportunities.

CONCLUSIONS AND SUGGESTIONS

Based on the results and discussions that have been carried out, the following conclusions can be drawn.

1. South Tangerang City is considered to be quite ready if you want to implement smart tourism. It can be seen from the several supporting tools in the smart tourism model (Applications, Augmented Reality, and Near Field Communication) that are already available, although the tools that are already available still need to be developed and perfected. In addition, from the results of the SWOT analysis, the application of smart tourism in South Tangerang City has a positive opportunity. This is reinforced by the internal-external matrix (IE) of the smart tourism model in South Tangerang City, which occupies cell V, which has sufficient strengths and opportunities.

2. The positive impact if South Tangerang City applies the smart tourism concept is that it can promote tourism in South Tangerang City because the ease of access to information offered in the application of smart tourism can reach a wider range of potential tourists, so that more people (potential tourists) know the destinations tourism in South Tangerang City that can be visited.

3. Factors that can affect the implementation of smart tourism in South Tangerang City include the existence of a digital tourism development program by the Ministry of Tourism of the Republic of Indonesia, the development of tourism potential in South Tangerang City, the design of South Tangerang City as a smart city, and the acceptance of the people of Tangerang City. South towards the application of smart tourism.

REFERENCES


