

Exploring The Opportunities and Challenges of Digital Currency for Regional Tourism Development in Indonesia

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ABSTRACT

The development of digital currencies provides convenience in accessing various services including regional tourism development. Blockchain technology also allows for innovation in payment systems. Concepts such as "smart contracts" to optimize processes such as booking and paying for accommodation, reducing bureaucracy. This research was conducted to respond to the opportunities and challenges of digital currency in developing regional tourism in Indonesia. The sample in this study was determined by purposive sampling so that ten respondents were obtained from tourism economics lecturers, research experts, tourism economists, tourism practitioners, and tourism businesses. This research uses the SWOT analysis method by identifying strategic factors for regional tourism development by utilizing digital currency. The results showed that an aggressive strategy was chosen in the development of regional tourism by utilizing the development of digital currency in Indonesia. Digital currency can answer the opportunities and challenges of regional tourism in Indonesia to be more developed and sustainable. Digital currency can be a gateway to regional tourism leading to international tourism that is not only in demand by local tourists but foreign tourists. The presence of digital currency is not only limited to the digitization of the tourist payment system but also tourist information, digital currency rates and others. information, digital currency rates and others

Keywords: Aggressive Strategy, Digital Currency, Ecotourism, Local Tourisms, SWOT

1. Introduction

The tourism sector is a potential sector that can be developed as a source of regional income and foreign exchange. Development programs, utilization of resources, and regional tourism potential are expected to contribute to regional economic development. The arrival of tourists at a Tourist Destination Area (DTW) has provided prosperity and welfare for the local population (Ningsih & Suryasih, 2018). According to Hsu & Huang, (2008) in their book "Tourism Management", tourism is one of the new types of industries capable of generating rapid economic growth in the provision of employment, living standards and stimulating other productivity sectors. The development of the tourism sector in Indonesia from year to year shows

a positive trend. Tourist visits are not only dominated by domestic tourists, but foreign tourists are starting to be interested in various regional tourism in Indonesia (Pandaleke & Mananeke, 2019). The number of foreign tourist visits to Indonesia has increased from year to year. This shows the potential and high attractiveness of tourists to regional tourism. regional tourism. The following is presented in Table 1.1 Foreign tourist visits to Indonesia.

Table 1. Number of Foreign Tourist Visits to Indonesia

No.	Year of Tourist Visit	Number of Tourist Visit
1.	2008	6.234.497
2.	2009	6.323.730
3.	2010	7.002.944
4.	2011	7.649.731
5.	2012	8.044.462
6.	2013	8.802.129
7.	2014	9.435.411
8.	2015	10.230.775
9.	2016	11.519.275
10.	2017	14.039.799
11.	2018	15.810.305
12.	2019	16.106.954
13.	2020	4.052.923
14.	2021	1.557.530
15.	2022	5.889.031

Source: Central Bureau of Statistics, (2018-2023)

Table 1 shows the number of tourist visits which has increased significantly from 2008 to 2019. However, in 2020 the number of tourists decreased dramatically from the previous 16.106.954 people in 2019 to 4.052.923 people. Then, in the following year the number of visits decreased again to 1.557.530 people. This happened because the covid 19 pandemic in Indonesia resulted in the closure of various tourist attractions and restrictions on public spaces to reduce the spread of the covid 19 pandemic.

Foreign tourist visits can make a major contribution to increasing state revenues or sources of foreign exchange. This means that the more foreign tourists who spend their money in the country, it will increase foreign exchange. The role of tourism in the formation of Gross Domestic Product (GDP) and foreign exchange earnings indicates that the tourism sector is able to become one of the forces of development that can be relied upon and remain sustainable (Mandra Prakosa, 2023). The magnitude of the potential of the regional tourism sector requires progress and innovation for the sustainability of regional tourism. innovation for the sustainability of regional tourism. Therefore, the use of digital technology is important in advancing regional tourism. Information technology has changed the pattern of conventional transactions previously carried out by the community in a traditional manner, now shifting to more modern transactions (online / cashless). Technology as a tool that facilitates human work is closely related to sophisticated advances and innovations in information processing through internet media. Nowadays, many things and aspects in the world that are done are related to technology and internet networks, ranging from the use of applications, information systems, to websites. The technology that is developing today can provide information related to a tourist attraction to tourists. Tourism applications or software are created and developed to support the

convenience of tourists to travel. This is not only done by application developers, but also by actors and managers of the tourism industry (Preko et al., 2022).

Tourism industry startups have recently emerged and play an important role in providing convenience and choice in traveling. Tourism startups play an important role in disseminating information about tourist objects in it to the ticket transaction process at a tourist destination. Tourist objects that have the potential for beauty and comfort will be unfortunate if they are not balanced with an optimal work process support system in them. Therefore, information technology can facilitate access to tourists in reaching a tourist destination, including the process of booking and online payments related to tourist destinations. online payments related to tourist destinations (Yanti, 2019). In addition, the development of digital money also plays an important role in developing digital-based regional tourism. Research conducted by Amelda, (2021) revealed that digital currencies such as Bitcoin or Ethereum can facilitate international transactions without the need to involve banks or traditional currency conversion processes. This encourages tourists to make payments and reservations faster, without high currency conversion costs. The blockchain technology underlying digital currencies can enhance transaction security and reduce the risk of fraud or manipulation of transactions. The existence of such technology gives travelers more confidence when they make ticket purchases or accommodation bookings. Another study conducted by Wilda & Harris, (2022) showed that transactions with digital currencies generally have lower fees compared to traditional payment methods such as credit cards, so these transactions can reduce transaction costs for tourism service providers and consumers. transaction costs for tourism service providers and consumers.

Digital currencies can provide access to tourism services for those who have limited access to traditional banking systems. Digital currencies can expand the affordability of global tourism. Blockchain technology also allows for innovation in payment systems. Concepts such as "smart contracts" are used to optimize processes such as booking and paying for accommodation, reducing bureaucracy (Alparani, 2022). However, digital currencies are also prone to significant fluctuations in value over short periods of time. This can be problematic for the tourism industry, as the price of services can change drastically in a short period of time. Travelers and service providers need to consider this risk. Regulations related to cryptocurrencies may impact the way the tourism industry interacts with these technologies. Some countries may ban or restrict the use of digital currencies. However, many countries have adopted digital money systems as the standard for tourism payments. The acceptance of digital currencies in the tourism industry depends on the level of consumer acceptance. If tourists feel comfortable using digital currency, it will be used more. However, the utilization of digital money does not always go as expected. The various challenges and risks associated with digital money can have the opposite effect if the utilization is not oriented towards the best way to use it.

2. Literature Review

2.1 Tourism

Tourism is a service activity and product of the tourism industry that is able to create travel experiences for tourists. Etymologically, the term tourism comes from the *Sansekerta* "*pari*" which means 'all, all or full' and "*wisata*" which means 'travel'. Tourism is defined as a full or complete trip, namely traveling from a certain place to one or several places, stopping or staying

for a while without intending to settle down, and then returning to the place of origin (Gamal, 2004). According to Law No. 10 of 2009 concerning tourism in article 1 paragraph 3, tourism is all types of tourism activities and is supported by all facilities and services provided by the community, entrepreneurs, government, and local governments. In addition, tourism is everything related to tourism, including the development of objects and tourist attractions, as well as other businesses related to the tourism sector. All everything that is the target of tourism in question is the object and attraction of tourism (Supriadi et al., 2022).

2.2 Digital Tourism

The digital era emerges along with digitalization, especially digitalization in the field of information and communication. New media in the digital era has characteristics that can be manipulated, flexible, networked or internet (connected to each other). The use of mass media has shifted to internet media because there is a cultural change in seeking and obtaining information (Rofiaregina et al., 2023). Barykin & Poza, (2021) explain that digital tourism or what is often called e-tourism utilizes many features from the field of information technology and supporting multimedia such as images, videos via the internet, such as user databases, tourism information data using computer networks as media.

2.3 Financial Technology

The development of information and communication technology has penetrated into various aspects of life in this digital era, one of which is the application of information technology in the financial sector, commonly referred to as financial technology (fintech). Various definitions of fintech are explained by many parties, but in general fintech can be defined as technological innovation in financial services. Financial service providers develop technologies that can disrupt traditional financial markets by developing new applications that can be used from payments to more complex applications for artificial intelligence and big data (Utami & Kartini, 2023). The payments segment is an umbrella term that applies to fintech whose applications and services concern national and international payment transactions. Under this umbrella are the blockchain and cryptocurrency subsegments that include fintech that offer virtual currencies (cryptocurrencies) as an alternative to regular fiat money, such as a legal way of payment where it is possible to store, use, and exchange cryptocurrencies (Afrinanda et al., 2023). Banks do not need to serve as intermediaries. One of the most well-known cryptocurrencies is bitcoin. Bitcoin, which has experienced large fluctuations in value in the past, has not been able to establish itself as a serious competitor with official currencies issued by central banks.

2.4 Digital Currency

Cryptocurrency is a digital asset that has a function to be used as a medium of exchange where records of individual coin ownership are stored in ledgers and balance sheets that exist in a database consisting of a series of cryptographic mechanisms (Banjarani et al., 2021). Cryptocurrency is a peer-to-peer (P2P) electronic financial system that allows users to make online payments to be sent directly from one party to another without going through financial institutions such as banks. Apart from being used as a means of payment, cryptocurrencies can also be used as an investment tool and also as a tool in trading digital assets (Nurbaiti, 2018).

3. Research Methodology

This research refers to a qualitative descriptive approach. The research method used interviews (in-depth interviews) based on a research questionnaire containing a number of questions related to the research data needed in completing this research. The data used in this research are primary data and secondary data. Respondents in this study used purposive sampling, namely respondents were selected based on their knowledge, capacity, and ability to respond to various questions and information regarding research data. Respondents in this study amounted to ten respondents, including tourism economics lecturers, tourism economics research experts, tourism practitioners, and tourism businesses. The data analysis technique used is the SWOT method with a qualitative approach, which consists of Strength, Weaknesses, Opportunities and Threats. SWOT analysis aims to maximize strengths and opportunities, but can minimize weaknesses and threats. According to Rangkuti, (2014), SWOT analysis is a systematic identification of strategic factors to formulate strategies. Strategy is a very important tool for achieving goals. Strategy is a comprehensive master plan that explains how to achieve all previously set goals (Rangkuti, 2014).

4. Results

4.1 Description of Research Objects

Law Number 10 of 2009 concerning Tourism, tourism discusses various kinds of tourism activities and is supported by various facilities and services provided by the community, entrepreneurs, Government, and Local Government. Tourism is a travel activity carried out by a person or group of people by visiting certain places for the purpose of recreation, personal development, or studying the uniqueness of the tourist attraction visited within a temporary period. Tourism has several objectives, namely increasing economic growth, improving people's welfare, advancing culture, and so on. Tourism development needs to be carried out to achieve the objectives of tourism which include the development of the tourism industry, tourism destinations, marketing, and tourism institutions (Aristeus, 2014). Currently, the world's industrial development has entered the fourth generation or generation 4.0, which means that there is an intervention of an intelligent and automated system in the industry. It changes the pattern of economic activities and human activities, such as payment methods using mobile banking or internet banking, promotions using social media, and so on. In tourism, generation 4.0 in tourism is known to be characterized by digital tourism which is one of the effective strategies in promoting various tourism destinations and potentials through various platforms. This can be used as an opportunity in developing tourism (Anggariani & Paramartha, 2021).

4.2 Data Analysis

SWOT analysis according to Boseman's framework begins with analyzing the external environment to identify opportunities and threats. Through this analysis, key success factors are obtained which are used as indicators for assessing this research. This was followed by an assessment conducted by selected respondents based on their capacity, ability and role in accordance with the key success factors. The ability of respondents to answer and key success

factors objectively will result in the identification of strengths and weaknesses called strategic factors of regional tourism development in Indonesia by utilizing the development of digital currency. These strategic factors (SWOT) are combined with a matrix with quadrants that explain the suitability of digital currency implementation for regional tourism development in Indonesia..

4.2.1 Internal Factor Evaluation Matrix

The Internal Factor Evaluation Matrix (IFE Matrix) is a strategy formulation that summarizes and evaluates the main strengths and weaknesses in a functional area, and also provides a basis for identifying and evaluating relationships to develop the IFE Matrix, so that the appearance of a scientific approach does not have to be entered more than the actual number. The following is the Internal Factor Evaluation Matrix (IFE Matrix) on regional tourism development in Indonesia by utilization of digital currency development.

Table 2. Internal Factor Evaluation Matrix (IFE Matrix)

No.	Key Success Factors	Weight	Rating	Score
Strength				
1.	Increase in the number of tourist visits regions in Indonesia	0.3	3	0.9
2.	Potential natural beauty and uniqueness of regional tourism products in Indonesia	0.3	4	1.2
3.	The existence of local communities that are active in developing tourism region.	0.1	3	0.3
4.	The number of digital media users increasing	0.3	5	1.5
Total Score Strength		1.0	15	3.9
Weaknesses				
1.	Lack of Human Resources (HR) excellence	0.3	5	1.3
2.	Limited capital and budget tourism development	0.1	3	0.4
3.	Regional tourism is still conventional	0.4	4	1.5
4.	Financial literacy or understanding of public finance is still low	0.3	2	0.5
Total Score Weaknesses		1.0	14	3.6

Source: Respondent assessment, 2023

Table 2 shows the weight, rating, and score values of each key success factors from the evaluation of internal factors (IFE Matrix) including aspects of strengths and weaknesses. Score is obtained from the accumulated weight and rating of each key success factors. The highest score for the strength aspect is the increasing number of digital media users, followed by the potential natural beauty and uniqueness of regional tourism products in Indonesia, and other key success factors. While the highest score for the weakness aspect is that regional tourism is still conventional, followed by the lack of superior Human Resources (HR) and other key success factors. The total strength score is 3.9 points while the total weakness score is 3.6 points.

4.2.2 External Factor Evaluation Matrix

The External Factor-Evaluation Matrix (EFE Matrix) allows strategy makers to summarize and evaluate external information related to regional tourism development by utilizing the development of digital currency. The following is the External Factor Evaluation Matrix (EFE

Matrix) on regional tourism development in Indonesia with the utilization of digital currency development.

Table 3. External Factor Evaluation Matrix (IFE Matrix)

No.	Key Success Factors	Weight	Rating	Score
Opportunities				
1.	The release of various apps travel apps	0.3	4.5	1.4
2.	Central and local government support in optimizing regional tourism	0.2	4	0.8
3.	The scope of tourism is getting wider to reach tourists foreign tourists	0.2	2	0.4
4.	The advancement of digital technology which is used in various aspects of regional tourism	0.3	5	1.5
Total Score Strength		1.0	15.5	4.1
Threat				
1.	Competition between regional tourist destinations in various places	0.2	2	0.4
2.	Changes in government policies that may affect regional tourism operations	0.2	4	1.0
3.	Value uncertainty and risk use of digital currency	0.3	5	1.4
4.	Connection and network issues internet connection and network problems in tourist areas	0.3	4	1.1
Total Score Weaknesses		1.0	16	3.9

Source: Respondent assessment, 2023

Table 3 shows the weight, rating, and score of each key success factor from the evaluation of external factors (EFE Matrix) including aspects of opportunities and threats. Score is obtained from the accumulated weight and rating of each key success factors. The highest score for the opportunity aspect is the advancement of digital technology used in various aspects of regional tourism, followed by the release of various travel applications supporting tourism, and other key success factors. While the highest score for the threat aspect is the uncertainty of the value and risk of using digital currency, followed by problems with internet connections and networks in tourist areas and other key success factors. The total score of opportunities is 4.1 points while the total score of threats is 3.9 points.

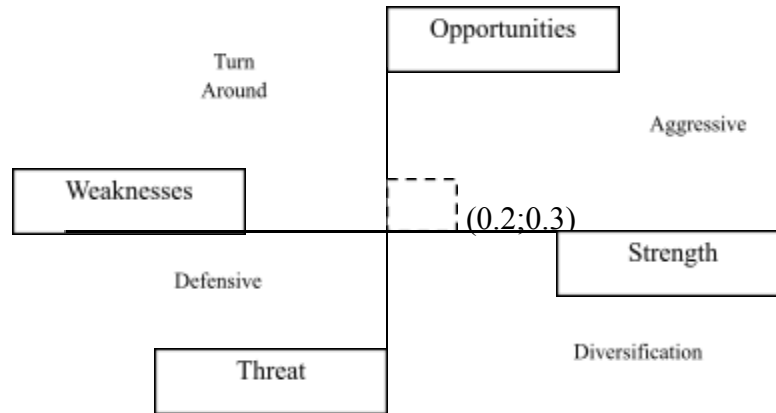
4.2. Space Matrix

The SPACE matrix shows whether aggressive, turn around, defensive or diversification strategies are most suitable for regional tourism development by utilizing the development of digital currency. The space matrix is based on as much actual information as possible. Various key success factors can map each dimension shown in the SPACE matrix axis. Based on the results obtained from the evaluation analysis of internal and evaluation analysis of internal and external factors, it can be concluded as follows.

Table 4. *Space Matrix*

Description	Score
Internal Factor	
Strength	3.9
Weaknesses	3.6
Difference (Strength - Weaknesses)	0.3
External Factors	
Opportunities	4.1
Threat	3.9
Difference (Opportunities - Threat)	0.2

Source: Respondent assessment, 2023



5. Discussion

In developing regional tourism by utilizing the development of digital currency, the right strategy is obtained, namely an aggressive strategy. The results of this analysis show the importance of optimizing digital currency systems in aspects of tourism development such as digital payment systems or digital tourism-based tourism promotion (Anggariani & Paramartha, 2021). The space matrix shows the calculation of the IFAS and EFAS matrices which results in an aggressive strategy with a cut point (0.2: 0.3) which is in quadrant 1, meaning that regional tourism in various regions in Indonesia can optimize the digital currency system with a digital tourism model because the digital money system is considered to have great potential in increasing tourism opportunities to reach international markets. Regional tourism can use strengths as the basic capital of its tourism operations, namely the use of digital media and the potential diversity of regional tourism and maximize various tourism opportunities to anticipate and overcome threats that will hinder regional tourism development. Therefore, digital currency can answer the challenges and opportunities for sustainable regional tourism development.

6. Conclusion

Selected aggressive strategies in regional tourism development by utilizing the development of digital currency in Indonesia. Digital currency can answer the opportunities and challenges of regional tourism in Indonesia to be more developed and sustainable. Digital currency can be a gateway to regional tourism to international tourism that is not only attractive to local tourists but foreign tourists. The presence of digital currency is not only limited to digitizing the tourist

payment system but also tourist information, digital currency rates and others. In addition, digital currency can be applied in various tourism areas in Indonesia because of its flexibility and technology. technology that is very relevant to the development of the current tourism industry.

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