

## Article

# A Competitive Advantage Model for Indonesia's Sustainable Tourism Destinations from Supply and Demand Side Perspectives

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**Abstract:** Indonesia is a multicultural country with a diversity of flora and fauna, which makes Indonesia one of the most attractive tourist destinations in the world. In 2019, the Indonesian tourism industry became the second-largest foreign exchange contributor. However, there is not yet a competitive advantage model for tourist destinations that are in accordance with the unique geographic, demographic, and socioeconomic characteristics of Indonesia. The aim and novelty of this research is to formulate a competitive advantage model for Indonesian tourist destinations by providing dimensions/indicators based on an analysis of the intersection of the supply side and demand sides of the six super-priority destinations. This study used mixed research methods; data analysis was carried out using the Importance–Performance Analysis (IPA), Exploratory Factor Analysis (EFA), and the Measurement model using SmartPLS 3 software. The data were obtained from 190 respondents from the supply side and 808 respondents from the demand side using multistage sampling techniques. The study provides 63 indicators in 12 dimensions of competitive advantage for Indonesian tourist destinations. Thus, these indicators are able to provide more efficient guidance to stakeholders in managing cost-effective strategies to improve the competitive advantage of their tourist destinations.

**Keywords:** tourist destinations; competitive advantage; supply side; demand side



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## 1. Introduction

As a multicultural country, Indonesia has been a popular destination for centuries. The country consists of more than 17,000 islands with a diversity of flora and fauna along 5110 km, making Indonesia the largest archipelagic country and one of the most attractive tourist destinations.

In 2019, the tourism industry became Indonesia's second-largest foreign exchange contributor. It was predicted that Indonesian tourism would play an important role in the future. The tourism sector is expected not only to become a foreign exchange contributor but also a new source of growth [1]. Therefore, in November 2015, the government determined 10 new priority destinations, often referred to as the 10 new Balis. Of the 10 priority destinations, five of them were later designated as super-priority destinations: Lake Toba Geopark, The Borobudur–Prambanan Mendut Temples, Lombok–Mandalika, Labuan Bajo–Komodo, and Manado–Likupang–Bitung [2]. This government's serious efforts are reflected in the Strategic Plan of the Ministry of Tourism and Creative Economy/Tourism and Creative Economy Agency 2020–2024 to improve the quality and number of tourists as Strategic Objective Number 3 through increasing the competitiveness of tourist destinations and the national tourism industry and, as Strategic Objective number 4, to increase the contribution of tourism and the creative economy to the national economic resilience [3,4].

However, there is not yet a competitive advantage model for tourist destinations that is in accordance with Indonesia's unique geographic, demographic, and socioeconomic characteristics. So far, the available models for measuring tourism competitiveness are the TTCI model and the UNWTO Tourism Dashboard 'model'. Although those two models produce a rating that reflects a country's performance for tourism competitiveness, they use different parameters. The TTCI model is structured based on dimension/indicators, whereas the UNWTO model is based on the number of tourist visits.

Indonesia has been using the Travel and Tourism Competitiveness Index (TTCI) model to measure the performance of tourist destinations for several years. According to the TTCI model, Indonesia's ranking increased significantly from 81 in 2010 to 40 in 2019 [2,5]. However, it was found that the ranking in the TTCI model was not linear when compared to the United Nations of the World Tourism Organization (UNWTO) tourism arrival data.

Although the ranking position in the TTCI does not necessarily reflect a country's tourism competitiveness in terms of the number of tourist arrivals, the TTCI model is able to explain which indicators make a country's tourism competitiveness superior or inferior; some experts [6–9] have stated that the TTCI model is more suitable for developed countries, and this finding serves as the first research gap. On the other hand, the UNWTO model cannot explain what dimensions/indicators make a country's tourism competitiveness improve or worsen or determine what is important for the competitiveness of tourist destinations. This finding opens opportunities to explore this matter further and is the second research gap. In the context of Indonesia, the gap that exists between the TTCI model and the UNWTO model can be 'filled' by building a model that can complement the shortcomings of the UNWTO model. Thus, we argue that there is a need for an alternative model that has the ability to describe in detail the indicators/dimensions of the competitive advantage of Indonesian tourist destinations; however, it has to be in accordance with the geographic, demographic, and socioeconomic characteristics of Indonesia.

In addition to this, we found that previous studies have not discussed the competitiveness of Indonesian tourist destinations in a multidimensional way, involving dimensions/indicators of tourism destination competitiveness (TDC). They only discussed certain aspects/factors of the TDC. Moreover, most of the studies only involved views from one side, either the supply side or the demand side. Therefore, the current study will shed light on that matter, and these are our third and fourth research gaps. This forms the framework of the study of the formulation of a model that describes in detail the indicators/dimensions of competitive advantage for an Indonesian tourist destination in accordance with the unique geographic, demographic, and socioeconomic characteristics of Indonesia.

The gaps that appeared in the TDC research not only in Indonesia but also in other countries further strengthen the basis for conducting this research and respond to the view that a comprehensive TDC model has not been fully developed that can be applied in all destinations; every destination has a unique competitiveness model that would be appropriate to the country's characteristics [6]. There is no solid definition and consensus on the TDC concept because no single model is completely satisfactory. Conceptually, its definition and measurement are still debated depending on when and where it is applied [7,10–13].

Therefore, the purpose of this study is to formulate an alternative model for an Indonesian Tourist Destination Competitive Advantage (ITDCA) that represents its unique geography, demography, and socioeconomic characteristics. The model is built based on the multidimensional aspects of the TDC [5,11–16] and refined with Indonesian local wisdom and the relevant tourism literature. Second, it is formulated from the intersection of the supply side and demand side perspectives. Third, the study is conducted in six destinations: Bali and five super-priority destinations as designated by the Indonesian government (Lake Toba, Borobudur–Prambanan–Mendut Temple, Lombok–Mandalika, Labuan Bajo–Komodo, and Manado–Likupang–Bitung). The objective of this study is to obtain valid and reliable dimensions/indicators for the ITDCA model that support the

strategic plan of the Indonesian Ministry of Tourism to improve the quality and number of tourist visits [3,4].

## 2. Literature Review

### 2.1. Theoretical Background

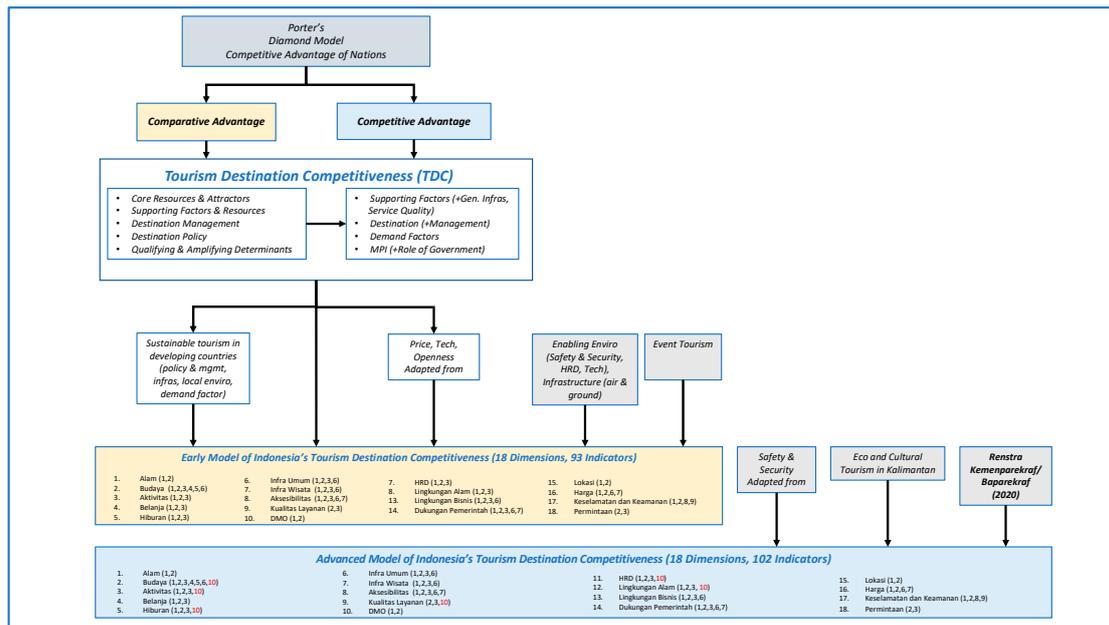
For two decades, research on destination competitiveness has been carried out through the theoretical approach developed by Porter namely the 'Porter's Diamond Model' and 'Porter's Competitive Advantage of Nations' [17–19]. These two theories are the basis for developing indicators/dimensions of the competitive advantage of tourist destinations [20].

The competitiveness of a tourism destination is the ability of a destination to provide better products and services than competitors, where the travel experience is the most important aspect for tourists [11,12]. Meanwhile, others defined competitiveness as the ability of certain tourist destinations to create and incorporate value-added tourism products into the sustainability of tourism resources while maintaining an advantageous market position relative to competitors, and its dimension not only focused on economic factors but also on social, cultural, political, technological, and environmental factors [11,12,15,21].

Tourism destination competitiveness (TDC) was introduced by Crouch and Ritchie in 1999, which became known as the Calgary model [15]. The Calgary model was created based on research of nearly one decade [14]. The conceptual model of Calgary was then refined by Dwyer and Kim in 2003 who offered a model that captured the elements of competitiveness emphasized by experts by using indicators that measured competitiveness objectively and subjectively, making the model more practical and operational; as a result, this model was able to identify the strengths and weaknesses of different tourist destinations and could be used by stakeholders to gain economic value. This model is known as the integrated model [11,12,22]. These two models became the most widely adopted and have been used by researchers to measure the competitiveness of other tourist destinations [10,23].

Meanwhile, several other researcher have also offered respective models, for example, the model introduced by Buhalis, addressing the concept of tourist destination management and marketing strategies [24]; Hassan's model, which focused on factors related to a sustainable environment [25]; Vengesayi's model, the TDCA (Tourism Destination Competitiveness and Attractiveness) model [26]; Heath's model, a South African model aimed at alleviating poverty [27] Enright and Newton's model, which proposed an additional approach to competitiveness between the industry level and tourism destinations [28]; Gooroochurn and Sugiyarto's model, the Competitiveness Monitoring model, which inspired the TTCI model [13]; Cucculelli and Goffi's Italian model [29], which was then adapted and further modified by Goffi, who offered a model and tested it in Brazil, as an example from developing countries, which aimed to examine whether sustainability affected the competitiveness of a destination [16], along with many others.

In the case of the Indonesian model, the indicators and its dimension were developed based on Porter's theory, adapted and modified from the Calgary model, Integrated model, the Brazil model, the CM model, and the TTCI model. It was also enriched with the theory of special events by Getz [30], Indonesia's tourism report conducted by Fitch Solution on safety and security [31], as well as a study on risk, crisis, and disaster management for the sustainable tourism industry [32], a study on the development of ecotourism and culture on Lake Sentarum, Kalimantan [33], and the strategic plan of Indonesia's Ministry of Tourism [3,4]. This model was then validated by qualitative research through focus group discussions and in-depth interviews conducted in Bali and Lake Toba. Figure 1 demonstrates how the model was developed.



**Figure 1.** The Model's Foundation based on adaptation [5,11–16,31–33], and qualitative research.

There have been many other models offered by scholars. However, Croes and Semrad revealed that the definition of the TDC is problematic both in terms of concept, meaning, and measurement [7]. First, there is no definite consensus in terms of units of analysis; it is referred to as either destinations or companies. Most models of competitiveness focus on the company as the unit of analysis [25]. Second, there is a lack of consensus in terms of the dependent variable. Third, there is no clear concept of the sources of competitiveness, and fourth, the nature and character of the TDC structure are not clearly defined. As long as the framework and definition of competitiveness do not reveal a causal relationship, with how strongly these items are interrelated, it cannot yet explain the success of a tourist destination; hence, its practical benefits remain limited [34]. Barbosa et al. reinforced this argument based on the result of the co-word analysis of 130 definitions of 258 TDC articles between 1999 and 2018, which showed that the evolution of TDC theory was still poor in terms of consensus; so, it remains a vague concept [10].

Cronje and du Plessis, from their research on 121 articles on TDC from 1997 to 2018, found that, first, most studies on TDC were conducted on the European continent and suggested the need to focus on other continents; second, 84% of the research was conducted on the supply side, 14% on the demand side, and 4% involving both sides. A total of 48 articles focused on a model that mostly used the Calgary and Integrated models, and 48 of the 121 articles only focused on certain factors/indicators/aspects of the TDC. Even so, the TDC remains a popular topic to research in order to maintain market share [23]. In addition, there has also been a reduction in TDC analysis based on the supply and demand side [10]. So it is advisable to conduct integrative research from the supply side, demand side, tourists, and residents in order to develop an understanding of competitiveness more broadly [10,35,36].

## 2.2. Sustainable Tourism

Sustainable tourism is tourism that is economically viable but not harmful to the resources on which the future of tourism will depend [37], especially the physical environment and the social fabric of the local community; tourism is not solely about the environment [38] but also includes the sociocultural aspects [39,40]. In other words, the idea of economic growth must occur in a way that is environmentally friendly and socially equitable. The UNWTO defines sustainable tourism as 'tourism that takes full account of current and future economic, social and environmental impacts, addressing the needs

of visitors, industry, the environment and host community' thus not only containing the three pillars of people, planet, and profit but also two other Ps, which are prosperity and partnership [37,41].

The competitiveness of the destination in the context of sustainable tourism is not only the result of the competitiveness in terms of the economic, sociocultural, and environmental dimensions but also the role of the sustainability factors in policy and governance, tourist behavior, and satisfaction [42]. Moreover, the number of tourist visits is not only influenced by the environment but also by other important factors including economic, political, social, and technological [43]. Promoting a sustainable environment requires a partnership-based approach between the private sector, the public sector, and nongovernmental organizations [25]. An integral/systemic concept of how to integrate social, environmental, and economic values into business strategy and operations has been offered [44]. A content analysis of 599 articles from 2008 to 2017 on sustainable tourism found that most of the researchers were from western countries, and the six main topics discussed were climate change, behavioral studies, poverty reduction, volunteer tourism, and indigenous tourism [45].

Although sustainable tourism is gaining popularity, it has not been followed up well with stakeholders in the industry or with tourists themselves. There is little evidence that tourists have a high interest in the concept of sustainable tourism. It is uncommon, for instance, to encounter boycotts of unsustainable airlines or hotels that pay low salaries to their employees. In fact, tourists may even think that this once-a-year vacation is a time for irresponsible hedonistic behavior [37,46]. Therefore, prioritizing competitiveness and emphasizing sustainability are equally important in destination management for the success of a destination. Economic competitiveness is an important part of true sustainability [14]. The important thing is not to limit growth but to manage growth in line with tourist interests, environmental goals, and local residents' interests [47].

One of the reasons for adopting the Calgary and Integrated models in this model is due to their recognition of the importance of environmental sustainability, social and economic sustainability, the sustainability of the tourism business, tourist satisfaction, and other factors such as destination management, politics/policy, technology, and the partnership between the public and private sectors including the interests of the population on its dimensions/indicators [11,12,14–16,22,25,27,29,48].

According to the Act of the Ministry of Tourism 2021 concerning the guidelines for Sustainable Tourism Destinations in accordance with the standards of the Global Sustainable Tourism Council (GSTC), it is stated that sustainable tourism is tourism that takes into account the current and future economic, social, and environmental impacts, meets the needs of visitors, industry, environment, and local communities, and can be applied to all forms of tourist activities in all types of tourist destinations, including mass tourism and various other types of tourist activities [49]. This is the reason why a multidimensional approach needs to be taken to build the ITDCA model.

### *2.3. The Supply and Demand Perspectives of a Destination's Competitiveness*

In the tourism context, the element of competitiveness comes from the supply side, while attractiveness comes from the demand side [26]. Competitiveness has been generally accepted as an important factor in determining the success of a tourist destination [50]. A tourist destination is said to be competitive if it has a market share as measured by the number of visitors and an increase in financial income [25] and is able to provide a good standard of living for the residents around the tourist destination [14,15,24].

The study on the competitiveness of tourist destinations from the supply and demand sides is important, because the perceptions formed from the demand side are different from the supply side. Research involving both parties of respondents will provide a holistic perspective and a solid foundation for the formulated competitiveness model. Eighty-four (84%) of TDC research has been conducted on the supply side [23]. This is because competitiveness is often seen as part of the tourist destination management approach to determine

what can be done to improve tourism products and services. However, stakeholders usually do not have a uniform view of the competitiveness of tourist destinations [51]. In addition, the opinions from the supply side are seen as more realistic for several reasons [36]. This clearly demonstrates that there is a perception gap between stakeholders and tourists. This gap indicates that tourist destination managers must combine these two valid approaches in strategic planning to provide a more complete picture of the competitiveness of tourist destinations.

The supply-side studies can be used and adapted to build demand-side perceptions by asking tourists if they agree with the supply-side perceptions [23]. It is important for stakeholders in the destinations to be able to meet expectations and maximize tourist satisfaction [10,23,35], as well as to understand the gaps and be able to detect patterns that occur because this will affect the sustainability of the destinations' competitive advantage. It is essential for managers to be able to detect patterns that emerge as part of the strategy formulation [52].

### 3. Research Methods

The study used mixed methods research (exploratory sequential design). Data collection in qualitative research was carried out through FGDs and in-depth interviews. Qualitative research was conducted to validate the previously developed questionnaire from the literature exploration. There were two different questionnaires: the supply side consisted of 102 indicators, and the demand side consisted of 111 indicators, both in 18 dimensions. The demand side questionnaire was further divided into the questionnaire for domestic tourists, which was in the Indonesian language, and the English version of the questionnaire, which was prepared for foreign tourists. All the questionnaires were pre-tested before being distributed to each of the respondents.

The study defined as many TDC indicators as possible, because the objective was to identify indicators that had the potential to become determinants for Indonesian tourist destinations' competitiveness. A reduction in the indicators in the questionnaire had the potential to reduce the country's competitive performance in the future. So, this study was around 25 months from July 2020 to July 2022. A special handcraft was prepared to be given to each of the respondents who completely filled out the questionnaire.

The important criteria set for respondents from the supply side was that they must be active and credible stakeholders in the tourism sector, while respondents from the demand side were tourists who were aged >14 years and had traveled to the respective destination at least one time, where the last visit was after 31 December 2017.

The quantitative research was conducted through surveys to tourism stakeholders (supply side), and domestic and foreign tourists (demand side), using a Likert scale of 1–5; 1 was very unimportant or very bad, while 5 was very important or very good. The research was conducted on each type of respondent in six destinations: Bali, Lake (Danau) Toba Geopark, Borobudur–Prambanan–Mendut Temple, Lombok–Mandalika, Labuan Bajo–Komodo, and Manado–Likupang–Bitung.

Regarding the number of samples, an acceptable sample size is 5–10 times the largest number of indicators used to measure a dimension, although ten (10) is better. The largest number of indicators in one dimension of this study was 12 indicators, and the number of dimensions was 18. So the minimum number of samples that should be collected was 120 [53–56]. The details of the number of samples for the whole study can be seen in Table 1 below.

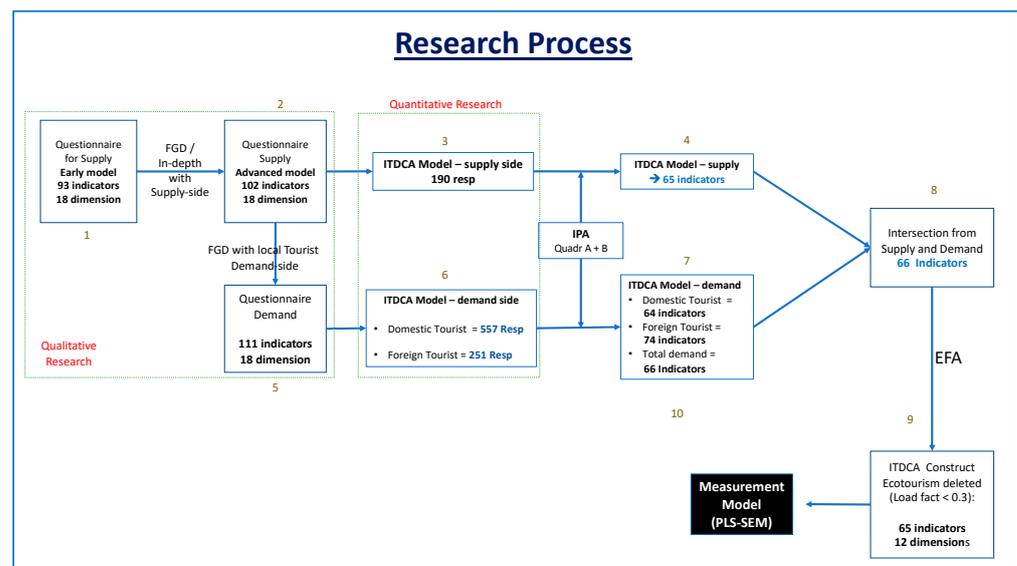
The competitive advantage model for Indonesian tourist destinations was developed and formulated based on the intersection of the supply side and demand side perceptions. The quantitative data obtained was analyzed using Importance–Performance Analysis (IPA) [57]. Only the indicators in quadrants A and B were intersected to develop the ITDCA model (quadrants A and B were the quadrants that were considered important by the respondents).

**Table 1.** Total Number of Samples by Studies by Destination.

No	Destination	Sample Collected				Sample Validated				TOTAL
		Supply-1	Supply-2	Domestic Tourist	Foreign Tourists	Supply-1	Supply-2	Domestic Tourists	Foreign Tourists	
1	Lake Toba	11	23	102	55	11	23	94	48	246
2	Borobudur-Prambanan-Mendut	11	22	135	49	11	20	127	49	268
3	Bali	11	27	119	85	10	25	112	56	292
4	Lombok	8	23	90	40	8	21	89	22	201
5	Labuan Bajo	11	20	71	48	11	20	68	47	213
6	Manado-Likupang-Bitung	13	20	70	40	11	19	67	29	186
		65	135	587	317	62	128	557	251	998

In order to formulate the ITDCA model, we conducted the study by developing indicators of competitive advantage from each type of respondent’s perceptions; in detail, the stages of the research were as follows:

1. Develop a competitive advantage model for Indonesian tourist destinations;
  - a. Develop a competitive advantage model from the supply side;
    - i. Explore the dimensions/indicators from the literature (early model);
    - ii. Conduct FGD/in-depth interviews with credible stakeholders (advanced model).
  - b. Develop a competitive advantage model from the demand side.
    - i. Conduct FGD with seven experienced domestic travelers to convert the supply side questionnaire into the demand side questionnaire (domestic tourists);
    - ii. Translate the domestic tourist questionnaire into the English language and validate it by conducting a pretest on five foreign tourists to obtain a questionnaire for foreign tourists.
2. Perform analysis by determining the intersection of indicators from the supply side and the demand side, using the IPA method;
3. Further analyze the results of the intersection of the indicators using EFA (Exploratory Factor Analysis) to classify the indicators that were relevant to their respective dimensions;
4. Test the results obtained from the EFA analysis with a measurement model using SmartPLS 3, as shown in Figure 2.



**Figure 2.** The Research Process. Note: Although the research process mentions a structural model, this first article focuses on the measurement model. A second article will discuss the structural model.

### 3.1. ITDCA Model from the Supply Side

The early model of the supply-side questionnaire was developed based on the exploration and adaptation of dimensions/indicators of the Calgary model, the Integrated model, the Brazil model, the CM model, and the TTCI model, enriched with the theory of special events by Getz [30], Indonesia's tourism report by Fitch Solution on safety and security [31], as well as a study on risk, crisis, and disaster management for the sustainable tourism industry [32], a study on the development of ecotourism and culture on Lake Sentarum, Kalimantan [33], and the strategic plan of Indonesia's Ministry of Tourism. The early model had 93 indicators in 18 dimensions. The early model was then validated through FGD and in-depth interviews in Bali and Lake Toba, and we obtained nine (9) additional indicators consisting of seven (7) indicators related to the unique Indonesian culture and two (2) other indicators from the separation of the roles of the public and private sectors on the dimension of human resources and environmental management. This model was then referred to as the advanced model consisting of 111 indicators in 18 dimensions [49]. This advanced model was the basis for further quantitative research on the supply side and demand side.

There were 12 participants in the qualitative study consisting of people who were experienced in their field and held high-ranking positions such as the Chairman of the Travel Association, the Chairman of the Hotel and Restaurant Association who was also a scholar, the Vice President of the MICE Organization, the Secretary of Association, the Chairman of the Tourism Village Association, the Secretary of the Tourism Office, the Managing Director of Indonesian Tourism Development Corporation, the Managing Director of the Executive Agency of the Lake Toba Authority, Senior staff of the Tourism Promotional Agency, a Senior Tourism Journalist, and the Chairman of the Tourism Board. The mean working experience of these 12 participants was >20 years.

For the quantitative research, the advanced model of the supply side questionnaire was tested on five (5) respondents before being distributed to all respondents.

The supply side study was a continuation study from preliminary research that only involved 62 respondents [49], which was considered too low for a representative number of respondents. The distribution of questionnaires was carried out using the snowball-sampling technique. Data collection was carried out by distributing written questionnaires to industry players in each destination. Of the 200 samples collected, there were 10 samples that could not be further analyzed, as they were incomplete. There were 190 validated samples. The number was considered more than adequate and well represented; it was quite challenging to obtain credible respondents during the COVID-19 pandemic when this research was conducted, as shown in Table 2.

Of the 30 types of respondents, this study involved representatives from all elements of ABCGM (Academics, Business, Community, Government, and Media) with a mean working experience of 9.5 years. Thus, the study was well accepted. The ratio between men and women was 77.9% and 22.1% respectively.

The results of the IPA analysis showed that there were 30 indicators in quadrant B and 35 indicators in quadrant A, as illustrated by the IPA diagram below in Figure 3, and the details are listed in Table 3.

### 3.2. ITDCA Model from the Demand Side

#### 3.2.1. Domestic Tourist Respondents

The demand side questionnaire was developed using the supply side questionnaire. The FGD was conducted with seven experienced domestic travelers. The main purpose of this was to validate whether the questionnaire containing indicators from the supply side was easily understood by tourists (demand side). From the results of the FGD, nine (9) additional indicators were found; there were 16 new indicators, and we removed seven (7) indicators from eight dimensions. Thus, the questionnaire for the demand side had 111 indicators in 18 dimensions.

**Table 2.** Respondent Type from the Supply Side.

No	Respondent Type	Bali	Borobudur	Danau Toba	Labuan Bajo	Lombok	Manado	Grand Total
1	Tour Leader	1	6	4	6	4	13	34
2	Travel agent	7	7	3	6	9	2	34
3	Hotel and Resort	9	8	5	2	5	3	32
4	Restaurant	1	4	5	1	7	2	20
5	Transportation	1	3	5	1	2	3	15
6	Others		1		4		3	8
7	Artist	1		2	1		1	5
8	Boat operator				4			4
9	Theme park	1		1			2	4
10	SME Entrepreneur			3				3
11	Dive operator				3			3
12	Academician	2	1					3
13	Tourism development corporation			1	2			3
14	MICE	3						3
15	Manager, BPODT			3				3
16	Hospitality		1			1		2
17	Chairman, IHGMA	1						1
18	Managing Director, BPODT			1				1
19	BPPD	1						1
20	Sales and Marketing						1	1
21	Managing Director, ITDC	1						1
22	Chairman, Tourism Village Association	1						1
23	Chairman, ASITA	1						1
24	Supermarket					1		1
25	Secretary of Tourism Office (Government)	1						1
26	Bali Tourism Board	1						1
27	Media/Journalist			1				1
28	VP SIPCO	1						1
29	Food and Beverage				1			1
30	Secretary HPI	1						1
	Grand Total	35	31	34	31	29	30	190

The distribution and collection of questionnaires to domestic tourists were carried out using the snowball-sampling technique via email and lasted approximately six months. This method was used because when the research took place, the government had a strong travel restriction policy in almost all parts of Indonesia. The technique of distributing and collecting questionnaires via email was considered more effective and efficient because the characteristics of respondents were relatively easier to attain and the respondents could be contacted again if there was an incomplete questionnaire.

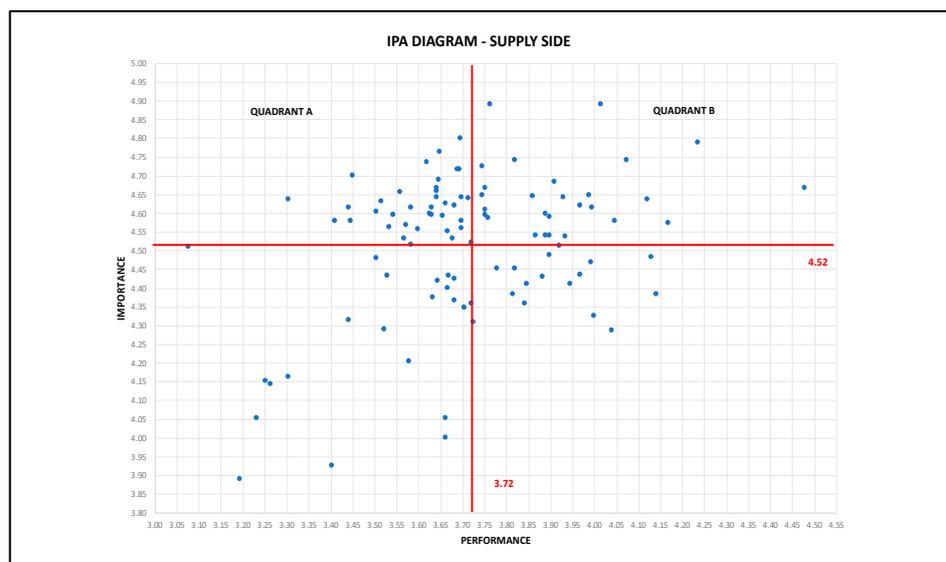


Figure 3. IPA Diagram from the Supply Side.

Table 3. List of Indicators in all Quadrants from the Supply Side.

Code	Indicator In Supply Side	Performance	Importance	Quadr B	Quadr A
KAL1	Comfortable climate for tourism	4.14	4.38		
KAL2	Cleanliness/sanitation	3.70	4.80		v
KAL3	Natural wonders/scenery	4.48	4.67	v	
KAL4	Flora and fauna	4.04	4.29		
KAL5	Unspoiled nature/green areas	3.84	4.36		
KAL6	National park/natural reserves	3.82	4.45		
KAL7	Ecotourism	3.76	4.59	v	
KBUD1	Historic/heritage sites and museums	3.78	4.45		
KBUD2	Artistic/architectural features	3.85	4.41		
KBUD3	Traditional arts	4.05	4.58	v	
KBUD4	Traditional cuisine	3.88	4.43		
KBUD5	Cultural precincts and folk villages	3.87	4.54	v	
KBUD6	Local wisdom	3.99	4.65	v	
KAK1	Water-based activities	3.95	4.41		
KAK2	Nature-based activities	4.17	4.57	v	
KAK3	Adventure-based activities	3.97	4.44		
KAK4	Recreation facilities	3.63	4.59		v
KAK5	Sports facilities	3.25	4.15		
KAK6	Culturally-based activities	3.70	4.58		v
KBEL1	Variety of shopping items	3.73	4.31		
KBEL2	Value for money of shopping items	3.63	4.38		
KBEL3	Quality of shopping items	3.72	4.36		
KBEL4	Quality/variety of local handicrafts	3.90	4.54	v	
KHIB1	Entertainment quality/variety/leisure activities	3.68	4.37		
KHIB2	Amusement/theme park	3.23	4.05		
KHIB3	Nightlife	3.41	3.93		

Table 3. Cont.

Code	Indicator In Supply Side	Performance	Importance	Quadr B	Quadr A
KHIB4	Festival	3.44	4.32		
KHIB5	Carnival	3.31	4.16		
KHIB6	Hallmark event	3.27	4.14		
KHIB7	Concert	3.19	3.89		
KHIB8	MICE	3.58	4.21		
KHIB9	Culinary	3.90	4.59	v	
KHIB10	Cultural events	3.92	4.51	v	
KIU1	Adequacy of infrastructure to meet visitor needs	3.56	4.66		v
KIU2	Health/medical facilities to serve tourists	3.31	4.64		v
KIU3	Financial institution and currency exchange facilities	3.57	4.53		v
KIU4	Telecommunication system for tourists	3.75	4.61	v	
KIU5	Quality of local transport system	3.60	4.56		v
KIU6	Quality of payment system services	3.67	4.55		v
KIW1	Accommodation quality/variety	3.94	4.54	v	
KIW2	Airport efficiency/quality	3.86	4.64	v	
KIW3	Number of operating airlines	3.54	4.60		v
KIW4	Sea transport efficiency/quality	3.53	4.43		
KIW5	Local transport efficiency/quality	3.75	4.60	v	
KIW6	Tourist guidance/information	3.65	4.76		v
KIW7	Convention/exhibition facilities (capacity/quality)	3.67	4.43		
KAKS1	Ease/cost of obtaining visa	3.65	4.42		
KAKS2	Ease of combining travel to destination with other destinations	3.72	4.52	v	
KAKS3	Frequency/capacity of access transport to destination	3.58	4.52		v
KAKS4	Accessibility of facilities for people with disabilities	3.08	4.51		
KLY1	Level of professional skill in tourism	3.82	4.74	v	
KLY2	Attitudes of custom/immigration officials	3.54	4.56		v
KLY3	Tourist-oriented services	3.72	4.64	v	
KLY4	Friendliness of residents toward tourists	4.24	4.79	v	
KLY5	Over-tourism in destination	3.66	4.59		v
KDMO1	Role of NTO/DMO in planning, developing, coordinating, and implementing strategy in tourism	3.64	4.66		v
KDMO2	NTO/DMO strategic monitoring and evaluation of the nature and type of tourism development	3.75	4.65	v	
KDMO3	Existence of a formal long-term vision for tourism industry development	3.75	4.67	v	
KSDM1	Public sector commitment to tourism/hospitality education and training	3.65	4.69		v
KSDM2	Private sector commitment to tourism/hospitality education and training	3.66	4.63		v

Table 3. Cont.

Code	Indicator In Supply Side	Performance	Importance	Quadr B	Quadr A
KSDM3	Quality of certified human resources in tourist industry	3.70	4.64		v
KSDM4	Quantity of certified human resources in tourist industry	3.58	4.62		v
KLI1	Public sector recognition of importance of sustainable tourism development	3.64	4.67		v
KLI2	Private sector recognition of importance of sustainable tourism development	3.68	4.62		v
KLI3	Existence of laws and regulations protecting the environment and heritage	3.64	4.64		v
KLI4	Research and monitoring of environmental impacts of tourism	3.51	4.61		v
KBI1	Management capabilities of tourism firms	3.69	4.72		v
KBI2	Firms use of computer technology/commerce to achieve competitive advantage	3.57	4.57		v
KPEM1	Political stability	3.68	4.43		
KPEM2	Legal/regulatory environment	3.70	4.56		v
KPEM3	Government policies for tourism development	3.63	4.62		v
KPEM4	Sociocultural environment	3.93	4.64	v	
KPEM5	Investment environment for tourism development	3.63	4.60		v
KPEM6	Support for IT infrastructure for tourism development	3.44	4.62		v
KPEM7	Integrated approach to tourism planning	3.41	4.58		v
KPEM8	Investment in tourist industry from domestic sources	3.51	4.48		
KPEM9	Foreign direct investment in tourism industry	3.52	4.29		
KPEM10	Access to venture capital	3.45	4.58		v
KPEM11	Support for transport infrastructure	3.45	4.70		v
KPEM12	Implementation of the tourism policy for the benefit of the community	3.52	4.63		v
KLO1	Perceived exoticness of location	4.13	4.48		
KLO2	Proximity to other destinations	4.00	4.33		
KLO3	Distance from major origin markets	3.66	4.00		
KLO4	Travel time from major origin markets	3.66	4.05		
KHA1	Value for money in destination tourism	3.90	4.49		
KHA2	Exchange rate	3.67	4.40		
KHA3	Air ticket prices from major origin markets	3.71	4.35		
KHA4	Accommodation prices	3.99	4.47		
KHA5	Destination package tour prices	3.89	4.54	v	
KHA6	Price of destination visits relative to competitor destinations	3.82	4.38		
KHA7	Labor costs	3.68	4.53		v
KSEL1	Level of visitor safety in destination	4.02	4.89	v	

Table 3. Cont.

Code	Indicator In Supply Side	Performance	Importance	Quadr B	Quadr A
KSEL2	Reliability of police services	3.62	4.74		v
KSEL3	Safety standard of land, sea, and air transport	3.76	4.89	v	
KSEL4	Mitigation measures for natural disasters	3.75	4.73	v	
KSEL5	Mitigation measures for terrorist attacks	3.69	4.72		v
KDEM1	Destination awareness of tourists	3.89	4.60	v	
KDEM2	Destination perception of tourists	3.97	4.62	v	
KDEM3	Destination preference of tourists	4.00	4.61	v	
KDEM4	Tourists' respect for local traditions and values	4.12	4.64	v	
KDEM5	Tourists' environmental awareness	4.07	4.74	v	
KDEM6	Level of repeat visitors	3.91	4.68	v	
	Mean 190 respondents	3.72	4.52	30	35

Note: no v sign represents being in quadrant C or D.

This study succeeded in collecting 587 responses, of which 30 samples could not be analyzed further due to being incomplete, and the participant could not be reached or did not respond when contacted. So, 557 samples were further analyzed using the IPA technique.

The respondents were 49.0% male and 51.0% female; the youngest was 15 years of age, and the oldest was 64 years of age, with a mean age of 31.1 years. The number of trips/year was 2.9, the average expenditure/trip was almost USD 500, and the average visit to a destination was 1.35 times/respondent. Table 4 shows the demographic profile of the domestic tourists.

The respondents came from 27 provinces throughout Indonesia, with 78% from five (5) provinces on Java Island, the most populated island in Indonesia. In particular, of the total number of visitors to Lake Toba Geopark, 47.8% came from North Sumatra.

### 3.2.2. Foreign Tourist Respondents

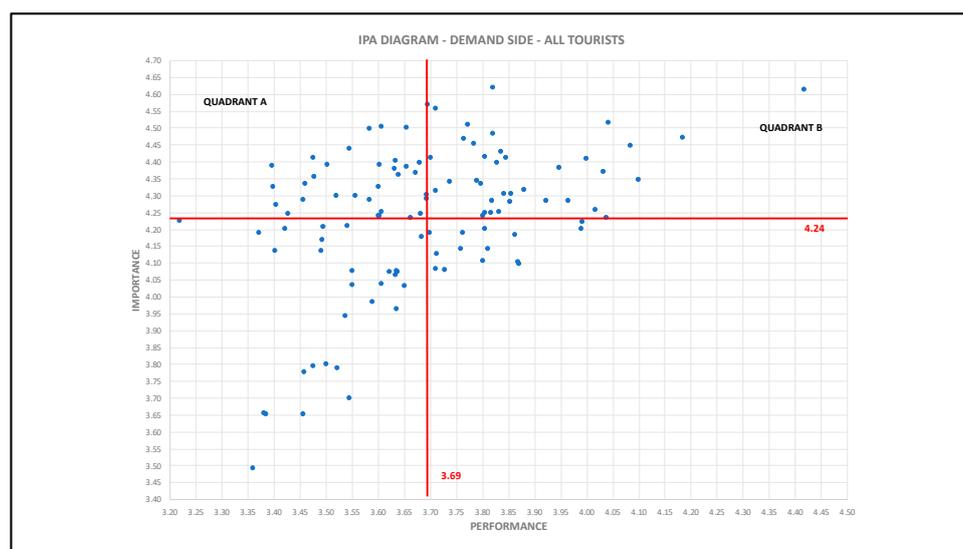
The distribution of questionnaires to foreign tourists was conducted over six months, similar to the domestic tourists, although the number of respondents was less than half that of the domestic respondents. This was again due to the impact of the travel restriction policy, due to the COVID-19 pandemic. The distribution and collection of foreign tourist questionnaires were in printed form and distributed by the researcher or interviewers who were trained as a research team before and had equal ability in collecting the data. They were tour guides, travel agents, hotel management, dive masters, and a few others. They conducted a face-to-face meeting with the respondents at each destination: the airport, the beach, restaurants, the boat during a diving trip, and so on.

The initial plan was to gather at least 60 samples for each destination; however, this study achieved 40–60 respondents per destination. In particular, for Lombok and Manado, although each place collected 40 samples, 14 respondents from Lombok and seven respondents from Manado actually gave their perception of Bali, not for Lombok or Manado. The study collected 317 responses from six destinations, where 64 samples were not valid due to being incomplete, and two respondents were under 14 years old. So, there were 251 responses from foreign tourists used for further analysis with IPA.

The demographic profile showed that 53.8% of the respondents were male, 46.2% were female, the youngest was 18 years of age, the oldest was 76 years old, and the mean age of the respondents was 36.6 years old. In terms of the number of trips, the mean was 2.9 times/year with a mean expenditure/trip of USD 4956, and the mean number of visits to the destination was 1.3 times/respondent. The details are provided in Table 5.

**Table 4.** Profile of the Domestic Tourist Respondents for the ITDCA model.

Sample	%	Sample	%
Sex		Marital status	
Male	49.0	Single	49.2
Female	51.0	Married	49.4
		Divorced	1.4
Age		Occupation	
15–24	18.5	Employed	68.9
25–34	53.0	Unemployed	6.8
35–44	20.8	Student	16.0
45–54	5.7	Retired	0.7
55–64	2.0	Other	7.5
Education		Average travel per year	
High School	25.0	1×	30.3
Diploma	14.5	2×	34.5
Bachelor's	54.9	3×	14.7
Master's	5.2	>3×	20.5
Doctorate	0.4		
Average spending per travel event (IDR)		Number of visits to each destination	
<5	47.0	1×	56.4
5.01–10	40.2	1–3×	29.4
10.01–15	7.7	>3×	14.2
15.01–20	3.1		
20.01–25	1.1		
>25.01	0.9		

**Figure 4.** IPA Diagram from the Demand Side.

**Table 5.** Profile of the Foreign Tourist Respondents.

Sample	%	Sample	%
Sex		Marital status	
Male	53.8	Single	48.6
Female	46.2	Married	41.8
		Divorced	5.6
		Other	4.0
Age		Occupation	
15–24	7.6	Employed	55.7
25–34	47.0	Unemployed	7.2
35–44	21.9	Student	6.0
45–54	12.7	Retired	3.2
55–64	10.0	Other	27.9
NA	0.8		
Education		Average travel per year	
High School	9.2	1×	17.9
Diploma	17.1	2×	39.8
Bachelor's	38.2	3×	19.1
Master's	27.5	>3×	23.1
Doctorate	5.6		
NA	2.4		
Average spending per travel (USD)		Number of visits to each destination	
<1000	21.1	1×	65.3
1000.01–2000	26.3	1–3×	25.9
2000.01–3000	15.1	>3×	8.0
3000.01–4000	5.2	NA	0.8
4000.01–5000	6.8		
5000.01–6000	4.4		
6000.01–7000	2.4		
>7000	13.5		
NA	5.2		

The respondents came from 39 countries, and 79.1% of the respondents were from 10 countries: Singapore (13.1%), Malaysia (10.0%), Germany (9.2%), the USA (9.2%), the Netherlands (8.8%), Australia (8.4%), the UK (8.0%), France (5.6%), Italy (3.6%), and Belgium (3.2%).

The results of the IPA analysis of a total of 808 respondents (557 domestic tourists and 251 foreign tourists) found 66 indicators that had the potential to become indicators in the ITDCA model. The mean performance value was 3.69, and the mean value of importance was 4.24, as shown in Figure 4. The details are provided in Table 6.

**Table 6.** List of Indicators in All Quadrants from the Demand Side.

Code	Indicators From Demand Side	Performance	Importance	Quadr B	Quadr A
Kal1	Comfortable Climate For Tourism	3.99	4.22		
Kal2	Cleanliness/Sanitation	3.71	4.56	V	
Kal3	Natural Wonders/Scenery	4.42	4.61	V	
Kal4	Flora And Fauna	3.87	4.10		
Kal5	Unspoiled Nature/Green Areas	3.81	4.20		
Kal6	National Park/Natural Reserves	3.81	4.14		
Kal7	Ecotourism	3.82	4.25	V	
Kbud1	Historic/Heritage Sites And Museums	3.80	4.10		
Kbud2	Artistic/Architectural Features	3.87	4.10		
Kbud3	Traditional Arts	3.99	4.20		
Kbud4	Traditional Cuisine	4.03	4.37	V	
Kbud5	Cultural Precincts And Folk Villages	3.86	4.18		
Kbud6	Local Wisdom	3.97	4.28	V	
Kak1	Water-Based Activities	4.04	4.23		
Kak2	Nature-Based Activities	4.18	4.47	V	
Kak3	Adventure-Based Activities	4.02	4.26	V	
Kak4	Recreation Facilities	3.83	4.25	V	
Kak5	Sports Facilities	3.39	3.65		
Kak6	Culturally-Based Activities	3.76	4.14		
Kbel1	Quality Of Shopping Items	3.65	4.03		
Kbel2	Variety Of Shopping Items	3.64	3.96		
Kbel3	Value For Money Of Shopping Items	3.64	4.08		
Kbel4	Quality Of Shopping Facilities	3.59	3.98		
Kbel5	Quality Of Local Handicrafts	3.76	4.19		
Kbel6	Variety Of Local Handicrafts	3.73	4.08		
Khib1	Entertainment Quality/Variety/Leisure Activities	3.71	4.13		
Khib2	Amusement/Theme Park	3.48	3.79		
Khib3	Nightlife	3.55	3.70		
Khib4	Festival	3.50	3.80		
Khib5	Carnival	3.38	3.65		
Khib6	Hallmark Event	3.52	3.79		
Khib7	Concert	3.36	3.49		
Khib8	Mice	3.46	3.65		
Khib9	Culinary	3.92	4.28	V	
Khib10	Cultural Events	3.71	4.08		
Kiu1	Adequacy Of Infrastructure To Meet Visitor Needs	3.67	4.37		V
Kiu2	Health/Medical Facilities To Serve Tourists	3.50	4.39		V
Kiu3	Financial Institution And Currency Exchange Facilities	3.58	4.29		V
Kiu4	Telecommunication System For Tourists	3.63	4.38		V
Kiu5	Quality Of Payment System Services	3.68	4.40		V
Kiw1	Accommodation Quality	3.84	4.43	V	
Kiw2	Accommodation Variety	3.74	4.34	V	
Kiw3	Airport Efficiency	3.78	4.45	V	
Kiw4	Airport Quality	3.85	4.41	V	
Kiw5	Number Of Operating Airlines	3.69	4.29	V	
Kiw6	Sea Transport Efficiency	3.60	4.24		V
Kiw7	Sea Transport Quality	3.61	4.25		V
Kiw8	Local Transport Efficiency	3.64	4.36		V
Kiw9	Local Transport Quality	3.60	4.39		V
Kiw10	Tourist Guidance/Information	3.70	4.41	V	

Table 6. Cont.

Code	Indicators From Demand Side	Performance	Importance	Quadr B	Quadr A
Kiw11	Convention/Exhibition Quality	3.55	4.08		
Kiw12	Convention/Exhibition Capacity	3.55	4.04		
Kaks1	Ease/Cost Of Obtaining Visa	3.76	4.47	V	
Kaks2	Ease Of Combining Travel To Destination With Other Destinations	3.65	4.38		V
Kaks3	Frequency/Capacity Of Access Transport To Destination	3.60	4.32		V
Kaks4	Accessibility Of Facilities For People With Disabilities	3.22	4.23		
Kly1	Level Of Professional Skill In Tourism	3.82	4.48	V	
Kly2	Attitudes Of Custom/Immigration Officials	3.77	4.51	V	
Kly3	Tourist-Oriented Services	3.80	4.41	V	
Kly4	Friendliness Of Residents Towards Tourists	4.04	4.52	V	
Kly5	Over-Tourism In Destination	3.63	4.40		V
Kdmo1	Well-Advertised And Promoted Destination	3.80	4.25	V	
Kdmo2	Existence Of Visitor Information Center/Call Center/Interpretation Center And An Officer At The Destination	3.60	4.24		V
Kdmo3	Existence Of Universal Pricing Allowing Rotating Access By Day, Week, Origin Of Visitor, Or Unit Pricing (Per Activity)	3.54	3.94		
Kdmo4	Pre-Visitation Reservation System	3.64	4.07		
Kdmo5	Destination Provides An Enjoyable And Memorable Experience	4.08	4.45	V	
Kdmo6	The Physical And Ecological Integrity Of The Natural Environment	3.83	4.40	V	
Kdmo7	The Physical And Ecological Integrity Of The Built Environment	3.68	4.25		V
Kdmo8	The Physical And Ecological Integrity Of The Cultural And Social Environment	3.84	4.30	V	
Kdmo9	Existence Of Facilities That Reflect The Destination	3.88	4.32	V	
Kdmo10	Existence Of Attractive Events That Reflect The Destination	3.80	4.24	V	
Ksdm1	Public Sector Commitment To Tourism/Hospitality Education And Training	3.46	4.29		V
Ksdm2	Private Sector Commitment To Tourism/Hospitality Education And Training	3.54	4.21		
Ksdm3	The Importance Of Certification Of Professionalism In Tourism	3.40	4.13		
Kli1	Public Sector Recognition Of Importance Of Sustainable Tourism Development	3.48	4.41		V
Kli2	Private Sector Recognition Of Importance Of Sustainable Tourism Development	3.52	4.30		V
Kli3	Existence Of Laws And Regulations Protecting The Environment And Heritage	3.40	4.39		V
Kli4	Research And Monitoring Of Environmental Impacts Of Tourism	3.40	4.32		V
Kbi1	Management Capabilities Of Tourism Firms	3.49	4.17		
Kbi2	Firms Use Of Computer Technology/Commerce To Achieve Competitive Advantage	3.37	4.19		
Kpem1	Political Stability	3.49	4.13		
Kpem2	Legal/Regulatory Environment	3.43	4.24		V
Kpem3	Sociocultural Environment	3.69	4.30	V	
Kpem4	Support For It Infrastructure For Tourism Development	3.41	4.27		V
Kpem5	Integrated Approach To Tourism Planning	3.42	4.20		
Kpem6	Investment In Tourist Industry From Domestic Firms/Sources	3.50	4.21		

Table 6. Cont.

Code	Indicators From Demand Side	Performance	Importance	Quadr B	Quadr A
Kpem7	Foreign Direct Investment In Tourist Industry	3.46	3.78		
Kpem8	Quality Of Life Of The Communities Around Tourist Destination	3.46	4.33		V
Klo1	Perceived Exoticness Of Location	4.00	4.41	V	
Klo2	Proximity To Other Destinations	3.70	4.19		
Klo3	Distance From Major Origin Markets	3.62	4.07		
Klo4	Travel Time From Major Origin Markets	3.63	4.06		
Kha1	Value For Money In Destination Tourism	3.79	4.34	V	
Kha2	Exchange Rate	3.61	4.04		
Kha3	Air Ticket Prices From Major Origin Markets	3.56	4.30		V
Kha4	Accommodation Prices	3.71	4.31	V	
Kha5	Destination Package Tour Prices	3.68	4.18		
Kha6	Price Of Destination Visit Relative To Competitor Destinations	3.66	4.23		
Ksel1	Level Of Visitor Safety In Destination	3.82	4.62	V	
Ksel2	Reliability Of Police Services	3.58	4.50		V
Ksel3	Safety Standard Of Land, Sea, And Air Transport	3.70	4.57	V	
Ksel4	Mitigation Measures For Natural Disasters	3.65	4.50		V
Ksel5	Mitigation Measures For Terrorist Attacks	3.61	4.50		V
Ksel6	Mitigation Measures For Wild Animals	3.55	4.44		V
Ksel7	Mitigation Measures For Poisonous Plants	3.48	4.36		V
Kdem1	Destination Awareness Of Tourists	3.82	4.28	V	
Kdem2	Destination Perception Of Tourists	3.85	4.28	V	
Kdem3	Destination Preference Of Tourists	3.85	4.30	V	
Kdem4	Tourists' Respect For Local Traditions And Values	3.95	4.38	V	
Kdem5	Tourist' Environmental Awareness	3.80	4.33	V	
Kdem6	Level Of Your Return/Revisit	4.10	4.35	V	
	Mean 808 Respondents	3.69	4.24	35	28

Note: no v sign is an indicator of being in quadrant C or D.

### 3.3. The Intersection Analysis of the Supply Side and the Demand Side

We had two ITDCA models, one from the supply side and the other from the demand side. The results of the IPA analysis from the 808 respondents showed that there were 38 indicators in quadrant B and 28 indicators in quadrant A. Table 7 shows the summary of the IPA Analysis of the supply side and the demand side.

Table 7. Data Summary of the IPA Analysis of the Supply Side and Demand Side.

No	Respondent Type	$\Sigma$ Respondent	Mean Importance	Mean Performance	$\Sigma$ Indicator in Quadrant B	$\Sigma$ Indicator in Quadrant A	$\Sigma$ Indicator in Quadrant B + A
1	Supply side	190	4.52	3.72	30	35	65
2	Demand side (Total)	808	4.24	3.69	38	28	66

The intersection of the indicators from the supply side and the demand side was conducted manually using an Excel spreadsheet. We matched each indicator and located each of the indicators in the box of combinations; there were nine combinations, as follows:

- Both the supply side and demand side assessed these indicators as important with good performance;

2. Both the supply side and demand side assessed these indicators as important, but only the demand side rated the performance as good. In contrast, the supply side rated the performance as not satisfactory;
3. Both the supply side and demand side assessed these indicators as important, but only the supply side rated the performance as good. In contrast, the demand side rated the performance as not satisfactory;
4. Both the supply side and demand side assessed these indicators as important, but both agreed that the performance was not satisfactory;
5. The demand side rated these indicators as important and considered the performance to be good, but the supply side considered these indicators to be less important;
6. The demand side rated these indicators as important and considered the performance unsatisfactory, but the supply side considered these indicators to be less important;
7. The supply side assessed these indicators as important, but they were less important for the demand side;
8. The supply side considered these indicators to be important with good performance, but they were less important for the demand side;
9. Both the supply side and demand side assessed these indicators as less important.

Only the indicators that were perceived as important by the tourists were included for further analysis, as the objective of the study was to improve the quality and number of tourist visits.

#### 3.4. EFA Analysis of the Intersection of the Supply Side and the Demand Side

EFA (Exploratory Factor Analysis) is an interdependence technique whose main objective is to determine the basic structure of several indicators that represent a variable/dimension [50]. We conducted an analysis using the EFA technique with orthogonal rotation. A statistically significant result of Bartlett's test of sphericity  $<0.05$  indicated a sufficient correlation existed among the variables, and the measure of sampling adequacy (MSA) had to be  $>0.5$  for both the overall test and each variable, with the higher the better. In this study, the factor loading criteria used to assess the indicators were set to  $>0.3$  in order to maximize the survival of indicators.

#### 3.5. Measurement Model

In this study, the measurement model was conducted using SmartPLS 3. The measurement model in this study used the exploratory research method, and PLS-SEM was determined to be more suitable for further testing the models. PLS-SEM provides the possibility not to omit indicators in its measurement, which plays an important role in the development of the ITDCA model as a representation of the competitive advantage indicators [58–60].

In contrast to the CB-SEM, which relies heavily on the goodness-of-fit criteria, the important parameters used in the measurement model of PLS-SEM are reliability, convergent validity, and discriminant validity [61–64]. The first step was to carry out a reflective measurement model with a recommended standard loading factor of  $>0.700$  or  $>0.600$  for exploratory research, meaning that the constructs explained more than 50% of the indicator variance. The second step was to assess the consistency of the internal reliability with composite reliability or the rho Alpha. The value of the rho Alpha is often used as a compromise parameter between Cronbach's Alpha and composite reliability. The third step was to calculate the convergent validity of each construct being measured. The metric used was the average variance extraction (AVE). The acceptable value of AVE was  $>0.5$ . The fourth step was to calculate the discriminant validity, which shows that one construct is different from another. A general approach to measure discriminant validity is the Fornell–Larcker and HTMT criterion [60,62–65].

## 4. Results and Discussion

### 4.1. Results and Discussion from the Supply Side Perspective

Comparing the result of the IPA analysis from the preliminary study (62 respondents) against the current study (190 respondents), the mean performance value was 3.68 vs. 3.72, while the mean importance value of the IPA was 4.60 vs. 4.52, which was similar. However, there was one additional indicator in quadrant B, and there were three additional indicators in quadrant A.

No	# of Respondents	Quadrant B	Quadrant A	Mean Performance	Mean Importance
1	62	29	32	3.68	4.60
2	190	30	35	3.72	4.52

Those four indicators came from seven (7) new indicators: cultural precincts and folk villages, recreation facilities, cultural-based activities, cultural events, financial institutions, quality of the payment system, and labor cost, and the three (3) former indicators that were removed were: ease/cost of obtaining a visa, accommodation price, and the perceived exoticness of the location. This was understandable, considering that with larger and more diverse respondents, the data tend to be more normally distributed, which can result in a slight shift that affects the final result. However, on closer inspection, three of the seven new indicators added above were indicators related to culture and tradition. With a larger number of respondents, these three indicators reappeared and were reflected in quadrants B and A. Second, factors such as financial institutions, payment systems, and labor costs were factors that were directly related to the interest of the respondents. So, with a larger number of respondents, these indicators became more visible.

In terms of the indicators removed, these three indicators were not directly related and were beyond the control of industry players. The ease of obtaining a visa is under the authority of the government, accommodation prices are also determined by hotel managers, while the perceived exoticness of the locations, although discarded as a less important indicator in this study, was actually considered an important indicator from the demand side perception.

### 4.2. Result and Discussion from the Demand Side Perspective

As mentioned earlier, the additional nine indicators in the demand side questionnaire, added during the supply-side questionnaire validation were derived from 16 new indicators and seven (7) omitted indicators, in eight dimensions. The details are as follows:

1. Shopping Dimension: addition of two (2) indicators due to the separation between the quality and variety of shopping items;
2. General Infrastructure Dimension: omission of one (1) indicator: the quality of the local transportation system;
3. Tourism infrastructure dimension: addition of five (5) indicators due to the separation between the quality and variety of accommodation, the efficiency and quality of airports, ports, and land transportation, as well as the quality and capacity of conference venues;
4. DMO Dimension: addition of seven (7) indicators, due to the development of the indicators:
  - a. The role of the tourism agency in planning, developing, coordinating, and implementing strategy was broken down into:
    - i. Well-advertised and promoted destination;
    - ii. Existence of a visitor information center/call center/interpretation center and an officer at the destination;
    - iii. Existence of universal pricing allowing rotating access by day, week, origin of visitor, or unit pricing (activity-based price);
    - iv. Pre-visitation reservation system;
    - v. Destination provides an enjoyable and memorable experience.

- b. The effectiveness of the tourism agency in the promotion and continuous evaluation of developing the tourism industry was broken down into:
  - i. The physical and ecological integrity of the natural environment;
  - ii. The physical and ecological integrity of the built environment;
  - iii. The physical and ecological integrity of the cultural and social environment.
- c. The existence of a long-term vision for the development of the tourism industry was broken down into:
  - i. Existence of facilities that reflect the destination (icon/landmark);
  - ii. Existence of attractive events that reflect the destination.
- 5. HR Dimension: omission of one (1) indicator due to the merging of the quality and quantity of certified HR;
- 6. The Government Support for Tourism dimension: elimination of four (4) indicators regarding:
  - i. Government policies on tourism development/political commitment to tourism;
  - ii. Ease of investment in tourism development;
  - iii. Access to venture capital;
  - iv. Support for transport infrastructure.

There were four (4) indicators that needed to be adjusted at the sentence level to make it easier for the demand-side respondent to understand;
- 7. Price (competition) dimension: omission of one (1) indicator: labor cost;
- 8. Safety/Security dimension: addition of two (2) indicators:
  - i. mitigation measures for wild animals [32]
  - ii. mitigation measures for poisonous plants [32].

For domestic tourists, the ease of access to the destination was one of the reasons for choosing the destination, which included the proximity of the visitor's domicile to the destination and the budget available.

There were several reasons important to foreign tourists, they want to enjoy the tropical sun, the natural landscape, flora, fauna, Indonesian cultural traditions, and natural and cultural activities. One of the serious concerns was the issue of the cleanliness and environmental sustainability of the destination. Urgent steps are needed to improve this issue in order to increase its competitive advantage. This is in accordance with previous research where sustainability played an important role in the destination's competitiveness [16].

#### 4.3. Result from the Intersection Analysis between the Supply Side and the Demand Side

The nine combinations of the intersection of the supply side and demand side produced 85 indicators that had the potential to be indicators of the competitive advantage of Indonesian tourist destinations. However, in accordance with the main objective of this study to develop indicators that would improve the quality and number of tourist visits by increasing the competitiveness of tourism destinations, numbers 7, 8, and, 9 were not included, only six combinations were further analyzed. The six combinations above had 66 indicators to be analyzed with EFA to group the relevant indicators with their respective dimensions.

#### 4.4. Results from the EFA Analysis

The results of the EFA showed that there were 12 total variances that explained 68.8% of the variables. There was one indicator that did not belong to any one of the dimensions and had no loading factor. That indicator was Ecotourism from the Natural dimension; ecotourism was not correlated with the other indicators due to the underlying factor or the error variation. This indicator was thus not included in the analysis, resulting in 65 indicators in 12 dimensions.

The measurement of the adequacy of the number of samples with the KMO test was 0.965, which was close to 1.000, and the correlation between the variables with Bartlett's

sphericity test showed a significance of 0.000, far below  $<0.05$ . Thus, it had good reliability, as shown in Table 8.

**Table 8.** KMO test and Goodness-of-Fit.

KMO and Bartlett's Test		
Kaiser–Meyer–Olkin Measure of Sampling Adequacy.		0.965
Bartlett's Test of Sphericity	Approx. Chi-Square	40,128.725
	df	2145
	Sig.	0.000
Goodness-of-Fit Test		
Chi-Square	df	Sig.
4489.373	1419	0.000

There were several previous dimensions, which were not included in this new model. They were Shopping, Entertainment, and Special Events, HR, Business Environment, Government Support, and Location.

The five (5) dimensions that remained intact were Service Quality, Price Competition, Safety and Security, and the Demand Factor.

The first dimension was now referred to as the Core Attractors dimension, which consisted of five (5) indicators, as shown in Table 7. These five indicators came from three different previous dimensions: the Range of Activities dimension, with seven indicators, contributed three indicators of nature-based activities, adventure-based activities, and recreation facilities; the Natural dimension, with six indicators, contributed one indicator of natural wonders/scenery; and the Culture/Heritage dimension, with six indicators, contributed one indicator of traditional cuisine.

The Tourism Infrastructure dimension, which previously consisted of indicators related to airports, land, and sea transportation systems, and accommodation was separated into three new dimensions: the Accommodation Quality dimension, the Airport Quality dimension, and the Quality of Land and Sea Transportation System. The name was changed to the Basic Tourism Infrastructure dimension, as this was thought to be more appropriate to support the destination's competitiveness because it related to the basic needs of tourism facilities such as telecommunication, payment, and health facilities.

The results of the EFA analysis showed that the indicators of land transport quality and land transport efficiency had cross-loading values on three dimensions. They were joined with the dimensions of Safety and Security, Ease of Access, or Quality of Sea Transportation. We decided to combine these two indicators of land transportation systems together with the indicators of the sea transportation system to create a dimension named Quality of Land and Sea Transportation Systems. So, this dimension then consisted of four indicators, land transport quality, land transport efficiency, sea transport quality, and sea transport efficiency.

The new dimension of Accessibility was a combination of the previous dimension of Ease of Access and Tourism Infrastructure, which contributed one indicator of tourist guidance/information.

The DMO's Role and Activities dimension had two additional indicators: local wisdom (Cultural dimension) and Culinary (Entertainment and Special Event dimension), where these two indicators became additional tasks unique to the DMO Indonesia.

The new dimension called Tourism Policy and Government Support was also a mixture of four (4) previous dimensions: Environmental Management, Human Resources, Natural, and Government Support for Tourism. This dimension was a part of the previous dimension of supporting factors [11,12,14,15]. The details of the 65 indicators in the 12 dimensions are shown in Table 9.

**Table 9.** The 65 Indicators in 12 Dimensions.

NO	DIMENSION	NO	CODE	INDICATOR
1	Core Attractors (Natural, Cultural, and Activities)	1	KCA1	Nature-based activities **
		2	KCA2	Adventure-based activities **
		3	KCA3	Recreation facilities **
		4	KCA4	Natural wonders/scenery **
		5	KCA5	Traditional cuisine **
2	Basic Tourism Infrastructure	1	KBTI1	Quality of payment system services *
		2	KBTI2	Financial institution and currency exchange facilities *
		3	KBTI3	Health/medical facilities to serve tourists *
		4	KBTI4	Telecommunication system for tourists *
		5	KBTI5	Adequacy of infrastructure to meet visitor needs *
3	Accessibility	1	KAE1	Ease of combining travel to destinations *
		2	KAE2	Frequency/capacity of access to transport to destinations *
		3	KAE3	Ease/cost of obtaining visa **
		4	KAE4	Tourist guidance/information **
4	Quality of Airport	1	KQA1	Airport quality **
		2	KQA2	Number of operating airlines **
		3	KQA3	Airport efficiency **
5	Quality of Land and Sea Transportation System	1	KQLST1	Land transport quality *
		2	KQLST2	Land transport efficiency *
		3	KQLST3	Sea transport quality *
		4	KQLST4	Sea transport efficiency *
6	Quality of Accommodation	1	KQAcc1	Accommodation quality **
		2	KQAcc2	Accommodation variety **
7	Quality of Service	1	KQS1	Attitudes of customs/immigration officials **
		2	KQS2	Level of professional skills in tourism **
		3	KQS3	Tourist-oriented services **
		4	KQS4	Friendliness of residents towards tourists/hospitality of residents **
		5	KQS5	Over-tourism in destination (crowded, queuing, etc.) *
8	Price Competitiveness	1	KPC1	Accommodation prices
		2	KPC2	Air ticket prices from major origin markets *
		3	KPC3	Value for money in tourism destination **
9	DMO's Role and Activities	1	KDMO1	Existence of facilities that reflect the destination **
		2	KDMO2	The physical and ecological integrity of the cultural and social environment **
		3	KDMO3	Existence of attractive events that reflect the destination ***
		4	KDMO4	The physical and ecological integrity of the built environment *
		5	KDMO5	The physical and ecological integrity of the natural environment **
		6	KDMO6	Destination provides an enjoyable and memorable experience **
		7	KDMO7	Well-advertised and promoted destination **
		8	KDMO8	Existence of visitor information center/call center/interpretation center and an officer at the destination *
		9	KDMO9	Local wisdom (spiritual, individual, communal, global ethics) **
		10	KDMO10	Culinary facilities ***
10	Tourism Policy and Government Support	1	KEMCS1	Public sector recognition of importance of sustainable tourism development *

Table 9. Cont.

NO	DIMENSION	NO	CODE	INDICATOR
		2	KEMCS2	Private sector recognition of importance of sustainable tourism development *
		3	KEMCS3	Existence of laws and regulation protecting the environment and heritage *
		4	KEMCS4	Research and monitoring of environmental impacts of tourism *
		5	KEMCS5	Public sector commitment to tourism/hospitality education and training *
		6	KEMCS6	Legal/regulatory environment *
		7	KEMCS7	Support for IT infrastructure for tourism development *
		8	KEMCS8	Quality of life of the communities around the tourism destination (implementation of tourism policy) *
		9	KEMCS9	Cleanliness/sanitation **
		10	KEMCS10	Sociocultural environment **
11	Safety and Security	1	KSS1	Mitigation measures for wild animals *
		2	KSS2	Mitigation measures for poisonous plants *
		3	KSS3	Mitigation measures for terrorist attacks *
		4	KSS4	Mitigation measures for natural disasters *
		5	KSS5	Reliability of police services *
		6	KSS6	Level of visitor safety in destination **
		7	KSS7	Safety standard of land, sea, and air transport **
12	Demand Factors	1	KDEM1	Destination perception of tourists **
		2	KDEM2	Destination preference of tourists **
		3	KDEM3	Destination awareness of tourists **
		4	KDEM4	Tourists' respect for local traditions **
		5	KDEM5	Tourists' environmental awareness **
		6	KDEM6	Level of tourist return/revisit **
		7	KDEM7	Perceived exoticness of location **

Note: \* indicators that were perceived as lower performing; \*\* indicators that were perceived as higher performing; \*\*\* omitted indicators.

#### 4.5. Results and Discussion of the Measurement Model

The analysis of the measurement model was carried out using SmartPLS 3 software. The first stage was to test the reliability and validity of the 65 indicators that were reflected in the 12 dimensions. The result of the analysis found that there were 12 indicators that had a loading factor  $<0.7$ , as shown in Table 10.

Considering that the 65 indicators above were the result of a robust research process and were considered important by tourists, we kept as many indicators as possible. Maintaining these 12 indicators (if  $<0.7$ ), or 5 indicators (if  $<0.6$ ) caused the AVE score of the KDMO dimension = 0.450 or  $<0.50$ , meaning that the dimension was considered unable to explain at least 50% of the valid relationship between the indicators in the KDMO dimension and the KDMO itself. Convergent validity was not achieved. Removing one indicator, KDMO 3, was also unable to increase the AVE value above 0.5.

Removing two indicators that had a loading factor of  $<0.55$  increased the AVE score of the KDMO dimension to  $>0.5$ , which meant that convergent validity was achieved. Thus, we removed two indicators from the dimension of DMO's Role and Activities, which were KDMO-3, the existence of attractive events that reflect the destination, and KDMO-10, culinary. These two indicators were not considered important by foreign tourists, but they were considered important by domestic tourists and industry stakeholders. Thus, the model had 63 indicators in 12 dimensions.

**Table 10.** Results of the Measurement Model Analysis.

No	Loading Factor	Code—Loading Factor	Description of Indicator
1	<0.50	KDMO-3 = 0.478	The existence of attractive events that reflect the destination
2	<0.55	KDMO-10 = 0.522	Culinary
3	<0.60	KCA-4 = 0.575	Natural wonders/scenery
		KDMO-6 = 0.563	Destination provides an enjoyable and memorable experience
		KQS-4 = 0.560	Friendliness of residents towards tourists/hospitality of residents
4	<0.65	KDEM-4 = 0.632	Tourists' respect for local traditions and values
		KDMO-9 = 0.634	Local wisdom (spiritual, personal, communal, global ethics)
5	<0.70	KEMCS-10 = 0.659	Sociocultural environment
		KQS-5 = 0.666	Over-tourism in destination
		KDMO-7 = 0.674	Well-advertised and promoted destination
		KDEM-5 = 0.677	Tourists' environmental awareness
		KSS-6 = 0.686	Level of visitor safety in destination

The next step was to test the reliability and validity of the 63 indicators in the 12 dimensions by measuring the reliability test, the internal consistency reliability, the convergent validity, and the discriminant validity.

The results of the reliability analysis found that in general each indicator and its dimensions had good reliability shown by the values of factor loading over 0.400 [53]. There were three indicators that had loading factors <0.600; those were 0.559; 0.560, and 0.575; six indicators were between >0.600 and 0.700; the other 54 indicators had loading factors > 0.700, where the highest value of the loading factor was 0.894.

The internal consistency reliability is indicated by the values of rho alpha, composite reliability, and Cronbach's alpha. The result of the analysis showed those parameters were between 0.7 and 0.9, meaning that the reliability of the internal consistency was satisfactory to good.

The third step of the analysis was to assess the convergent validity. The result of the analysis of the AVE for all constructs was >0.0.500 with the AVE score between 0.507 and 0.796, indicating that the reflective construct explained more than 50% of the variance of its indicator [63]. All three tests above are shown in Table 11.

The final test was to measure the validity of the reflective measurement using Fornell–Larcker and the HTMT criterion. The Fornell–Larcker criterion compares the square root of the AVE of each construct and should be higher than the correlations of any other construct in the model.

The Fornell–Larcker test showed that there was one square root of AVE of the Tourism Policy and Government Support that at 0.776 was slightly greater than the DMO construct of 0.712. However, this can be tolerated for two reasons. First, we were not willing to remove an additional indicator, and second, according to Hair [64], the HTMT value is seen as more appropriate for calculating discriminant validity. Even though the indicator was not removed, the construct validity was well maintained. Thus, the Fornell–Larcker test was fulfilled, and there were no collinearity issues in the model.

**Table 11.** Measurement Model Testing: Factor Loading, Cronbach's Alpha, rho A, CR, and AVE values.

Dimension	Indicator	Loading Factor	Cronbach's Alpha	rho Alpha	CR	AVE
Access	KAE1	0.835	0.819	0.822	0.881	0.649
	KAE2	0.843				
	KAE3	0.773				
	KAE4	0.767				
Basinfra	KBTI1	0.745	0.829	0.832	0.880	0.594
	KBTI2	0.771				
	KBTI3	0.744				
	KBTI4	0.806				
	KBTI5	0.787				
CoreAtt	KCA1	0.762	0.773	0.791	0.845	0.524
	KCA2	0.787				
	KCA3	0.747				
	KCA4	0.575				
	KCA5	0.727				
Demand	KDEM1	0.798	0.859	0.866	0.892	0.544
	KDEM2	0.817				
	KDEM3	0.801				
	KDEM4	0.632				
	KDEM5	0.677				
	KDEM6	0.710				
	KDEM7	0.708				
DMO's Role and Activities	KDMO1	0.748	0.859	0.868	0.891	0.507
	KDMO2	0.770				
	KDMO4	0.766				
	KDMO5	0.776				
	KDMO6	0.559				
	KDMO7	0.679				
	KDMO8	0.733				
	KDMO9	0.636				
	Tourism Policy and Government Support	KEMCS1				
KEMCS10		0.659				
KEMCS2		0.768				
KEMCS3		0.789				
KEMCS4		0.812				
KEMCS5		0.780				
KEMCS6		0.796				
KEMCS7		0.792				
KEMCS8		0.785				
KEMCS9		0.757				
PriceComp	KPC1	0.804	0.746	0.757	0.854	0.662
	KPC2	0.838				
	KPC3	0.798				
QualAirport	KQA1	0.866	0.856	0.856	0.912	0.776
	KQA2	0.890				
	KQA3	0.887				
QualAccom	KQAcc1	0.894	0.744	0.744	0.887	0.796
	KQAcc2	0.890				
QualSea-LandTrans	KQLST1	0.848	0.859	0.860	0.905	0.703
	KQLST2	0.808				
	KQLST3	0.867				
	KQLST4	0.831				
QualServ	KQS1	0.764	0.780	0.800	0.850	0.535
	KQS2	0.816				
	KQS3	0.818				
	KQS4	0.560				
	KQS5	0.666				
SafeSec	KSS1	0.794	0.878	0.880	0.906	0.579
	KSS2	0.783				
	KSS3	0.797				
	KSS4	0.804				
	KSS5	0.735				
	KSS6	0.686				
	KSS7	0.718				

The HTMT is the mean value of the indicator's correlations across constructs relative to the (geometric) mean of the average correlations for the indicators measuring the same construct where the threshold value is <0.900. The HTMT test showed that all 12 dimensions had a value <0.9; hence, each construct was different from the others. Thus, the 12

reflectively measured dimensions had good convergent validity. The discriminant validity test indicated that each construct was empirically unique and not represented by another construct in the model. The result of the Fornell–Larcker and HTMT tests are shown in Tables 12 and 13, respectively.

**Table 12.** Discriminant Validity Test Using the Fornell–Larcker Criterion.

	Access	Basinfra	CoreAtt	DMO's Role and Acti	Demand	Touri Policy and Gove Sup	Price-Comp	Qual-Accom	Qual-Airport	QualSea-LandTrans	Qual-Serv	SafeSec
Access	0.805											
Basinfra	0.655	0.771										
CoreAtt	0.505	0.498	0.724									
DMO's Role and Acti	0.618	0.680	0.500	0.712								
Demand	0.638	0.606	0.521	0.656	0.738							
Tour Policy and Gove Sup	0.552	0.693	0.456	0.766	0.652	0.776						
Price-Comp	0.529	0.438	0.362	0.491	0.529	0.416	0.814					
QualAccom	0.510	0.478	0.428	0.514	0.517	0.411	0.469	0.892				
Qual-Airport	0.515	0.547	0.399	0.471	0.447	0.487	0.372	0.327	0.881			
QualSea-LandTrans	0.639	0.673	0.464	0.647	0.606	0.668	0.447	0.459	0.500	0.839		
Qual-Serv	0.626	0.530	0.469	0.598	0.552	0.504	0.545	0.571	0.487	0.489	0.732	
SafeSec	0.595	0.619	0.455	0.611	0.679	0.699	0.494	0.430	0.451	0.592	0.458	0.761

**Table 13.** Discriminant Validity Test Using the HTMT Criterion.

	Access	Basinfra	CoreAtt	DMO's Role and Acti	Demand	Touri Policy and Gove Sup	Price-Comp	Qual-Accom	Qual-Airport	QualSea-LandTrans	Qual-Serv	SafeSec
Access												
Basinfra	0.787											
CoreAtt	0.621	0.596										
DMO's Role and Acti	0.730	0.791	0.584									
Demand	0.755	0.711	0.616	0.756								
Touri Policy and Gove Sup	0.634	0.786	0.511	0.846	0.732							
Price-Comp	0.672	0.547	0.462	0.611	0.661	0.485						
Qual-Accom	0.650	0.606	0.541	0.648	0.642	0.495	0.635					
Qual-Airport	0.615	0.646	0.477	0.548	0.518	0.548	0.458	0.411				
QualSea-LandTrans	0.759	0.793	0.549	0.746	0.703	0.749	0.549	0.574	0.583			
QualServ	0.775	0.632	0.593	0.711	0.663	0.558	0.719	0.750	0.584	0.582		
SafeSec	0.702	0.721	0.532	0.692	0.787	0.773	0.600	0.532	0.519	0.679	0.537	

It was concluded that the 63 indicators reflected in the 12 dimensions were reliable and valid based on the measurement model testing.

The 63 indicators reflected in the 12 dimensions above showed that these were the factors that had the potential to improve the competitiveness of Indonesian tourist destinations. Moreover, this is the foundation that must be met if a destination wants to have a competitive advantage to attract more tourists or a requirement if one wants to establish a destination. Second, the model was able to provide a clear picture to destination managers and stakeholders about which dimensions/indicators need attention as the top priority and which dimensions/indicators can be subsequent priorities. Thus, these indicators are able to provide more efficient guidance to stakeholders in managing cost-effective strategies.

From the seven new indicators related to Indonesian culture in the previous studies [66], three of them proved to be part of the indicators that make up the ITDCA model: traditional cuisine, the unique friendliness of residents towards tourists (or hospitality of the residents according to [12,16]), and local wisdom/genius. Unfortunately, there were four factors that were removed during the analysis process. One indicator that was omitted

was cultural-based activities though it was considered important for foreign tourists. Three indicators of traditional art, cultural precincts and (folk) villages, and cultural events were considered important by local tourists and industry players.

There were seven indicators that were perceived as important in the eyes of foreign tourists; however, they were removed during the EFA analysis (ecotourism) and the process of the intersection analysis between the supply side and the demand side. Those seven indicators were:

- Ecotourism;
- Comfortable climate for tourism;
- Flora and fauna;
- Unspoiled nature/green areas;
- National parks/nature reserves;
- Water-based activities;
- Cultural-based activities.

In general, the 12 dimensions of the ITDCA model were similar to previous studies where the Core attractors, DMO, Infrastructure, Accommodation, Air, sea, and land transportation quality, Accessibility, Price competitiveness, Safety and security, and Quality of service were part of the 10 important attributes in destination competitiveness [67,68]. However, there were three indicators that characterized the ITDCA model not found in the other five TDC models [5,11–16], namely traditional cuisine, friendliness of the residents, and local wisdom, which were significant contributions and part of the novelty of this research, which confirmed the previous findings [66].

## 5. Conclusions

There needs to be an alternative model that can be used by the government to measure the performance of its tourist destinations in accordance with the unique geographic, demographic, and socioeconomic characteristics of Indonesia, rather than using the TTCI model, which is more suitable for developed countries with well-established infrastructure [6–9,69].

This study was able to formulate an alternative model that described in detail the indicators of the competitive advantage of an Indonesian tourism destination (ITDCA) according to the unique geographic, demographic, and socioeconomic characteristics of Indonesia. The model provided 63 valid and reliable indicators, which were reflected in 12 dimensions based on the intersection of the indicators from the supply side and the demand side, using the IPA, EFA, and PLS measurement methods.

### 5.1. Implication

This study provided a theoretical contribution in that the grand theory of comparative and competitive advantage by Porter [17,19] can be expanded to identify new indicators of destination competitiveness that are unique to Indonesian culture: the traditional arts, traditional food, cultural events, local wisdom (the Balinese say local genius); cultural-based activities, and the friendliness of residents towards tourists (hospitality of the residents [12,16].

Three of those were indicators not found in previous TDC models: traditional food, the friendliness of the residents toward tourists, and local wisdom/genius. In addition, this research proved that the indicators/dimensions of the ITDCA model were distinctive from the TTCI model. This study also confirmed previous findings regarding differences in perceptions between the supply side and the demand side [35]. This model enriches the existing TDC models, particularly for countries with geographic, demographic, and socioeconomic similarities to Indonesia. It also proves that tourism destination competitiveness is dynamic [11–13].

As a managerial contribution, the ITDCA model explained in detail what indicators can be used to measure the competitiveness of a destination and create a competitive advantage relevant to a destination. Second, this model provided effective information about which indicators should be prioritized and which indicators can be a lower priority for increasing competitiveness. This model can become a source of information for tourism

stakeholders in terms of resource optimization, so they are able to formulate strategies that can strengthen the competitive advantage of destinations and improve the quality and number of tourist visits by diverting attention from the dimensions/indicators that consume more resources but are less valued by tourists. Resource optimization will further strengthen the tourism strategy and the strategic plan of the Ministry of Tourism.

### 5.2. Limitations and Further Research

Aside from the time and budget constraints, this research was conducted during the COVID-19 pandemic. We encountered some challenging issues in terms of having face-to-face meetings with the participants for FGD and in-depth interviews. Some were conducted through a virtual meeting. Obtaining respondents who were willing to spend 30–40 min of their time to fill out a questionnaire of more than 200 questions (2 × 100 indicators, although it only required marking an X) was a challenge. The supply side referred to in this study was limited to tourism stakeholders.

As this study was only conducted on 5 out of the 10 priority destinations, they have their own uniqueness and cannot be generalized. Therefore, first, further research is recommended to focus on one destination and develop a model based on its uniqueness that focuses on certain market segments only involving certain types of tourists (domestic or foreign tourists only) with the aim of reducing the possibility that indicators are removed due to statistical analysis, although considered important by one type of respondent. It would result in a sharper competitive advantage model for a specific destination. On the other hand, further research should be carried out involving the five other priority destinations to enrich this ITDCA model with new findings from a number of representative destinations and a higher number of respondents.

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