

An Exploration through the Delphi Method: Ranking Dimensions of Tourism Development

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Abstract

Covid-19 is a global pandemic that significantly affects the decline in tourist visits, both domestically and internationally. In addition, tourism, being a pivotal sector fostering job creation and community well-being, has suffered from inactivity, leading to economic decline for many in the community. Therefore, this research aimed to address the crucial aspects that tourists considered when visiting attractions, from the perspective of tourism stakeholders consisting of lecturers, entrepreneurs, and tourists. A total of 30 respondents were selected, and deep interviews were conducted as the analysis method. The analysis results showed that the average group ratio fell within the range of 1.67 to 9.97. The dimensions deemed essential by stakeholders in determining crucial factors for tourism development included Tourist Attraction, Tourism Activities, Accessibility, Amenities, Ancillary, Society Participation, Tourist HR, Community, Traveller, and Business. Moreover, the analysis of Kendall yielded base of a critical value of and a p-value indicating the consistent calculations of experts. This research contributed to understanding the ranking of Tourism Development Dimensions based on a Delphi investigation conducted among stakeholders in the tourism industry.

Keywords: *Tourism Development; Delphi Method; Tourism; Tourist; Economic.*

1. Introduction

The tourism sector is considered one of the most reliable industries to bolster the economy of a nation following the end of Covid-19, which commenced in early 2020 and ended in 2021. This global pandemic significantly impacted various industries, with the tourism sector being among the hardest hit (Aburumman, 2020). The Central Statistical Agency of Indonesia (BPS) reported a drastic 75% drop in the rate of foreign tourist visits by 2020, and the growth of international tourist visits further plummeted by 89% in January 2021. Consequently, the currency suffered an approximate 80% depreciation, leading to a negative economic growth of minus 2% (BPS-Statistics, 2022).

Developing tourism concepts that align with the expectations of tourists, including attitudes, behavior, and interests, becomes a critical approach requiring re-implementation to revive tourism (Aguinis et al., 2023). This concept could be tailored to align with government policies and meet the needs of tourists (Aguinis et al., 2023). In the pursuit of

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economic revival, tourism stakeholders are diligently working to bolster the economy of their country by implementing policies and programs aimed at enhancing tourism, both at the local and international levels.

All tourism stakeholders play a significant role in supporting this government program by being ready to observe, recognize, analyze, and identify factors that instill confidence in tourists for visiting a destination, particularly concerning hygiene and safety issues (Lee & King, 2008). The tourism sector holds the trust as an alternative driving force for the economy of a country, with its various roles encompassing contributions to Gross Domestic Product (GDP), foreign exchange receipts, and labor absorption (BPS-Statistics, 1978; (Chen, 2022; Comănescu, 2021; Figini & Patuelli, 2022; Pérez-Rodríguez et al., 2022; Sokhanvar & Jenkins, 2022). Despite its potential, the development of tourism in Indonesia faces certain challenges that necessitate resolution for the sector to thrive and become a robust industry of excellence.

In tourism development, several issues need to be addressed to elevate the tourism sector to a dependable and superior level. Therefore, this research aims to analyze and identify the dimensions that tourists anticipate when visiting a tourist destination. By understanding and engaging in disputes over these dimensions, valuable insights can be derived to provide input and advice for tourism stakeholders. To achieve this objective, the Delphi method was employed to gather opinions from tourism stakeholders, including universities and entrepreneurs in Indonesia, obtaining firsthand perceptions based on their experiences.

2. Literature Review And Hypotheses Formulation

2.1 Tourism Development

Tourism development was a captivating and significant topic, engaging both tourism analysts and practitioners in serious discussions. The assertion found substantial backing from numerous books published in the past decade. These works concentrated on the development of tourism in specific destinations, providing a comprehensive overview or a more focused perspective (Darvishmotevali et al., 2023; Gartner & Mihalič, 2013; Tee et al., 2022). Therefore, the experiences of tourists in various locations served as valuable inputs for tourism development managers (Wang et al., 2022).

The development of tourism has transformed it into a vital social and economic activity. Tourism could be comprehended from three distinct perspectives, including, as a movement of people or a broader social phenomenon, being an economic sector, and a dynamic system encompassing the interactions of people, places, and processes (Sharpely, 2009). Additionally, the significance of the accommodation sector could not be overstated, as it frequently constituted the largest portion of tourist expenditure in the destination area (Robinson, 2012).

The dimension of service quality held significant importance in influencing the satisfaction of tourists, alongside the allure of the tourist attraction (Reni et al., 2018). In the book “Tourism Development and the Environment: Beyond Sustainability” published by Sharpely (2009), there were four global factors that could profoundly impact tourism development within a country. These factors included technological, environmental/climate, economic, and political aspects. Furthermore, Sharpely identified at least five crucial destination factors, including destination characteristics, tourist attraction environment, stakeholder considerations (values, attitudes, needs), political economy, and tourists.

Cooper (2008) indicated that the dimension of a tourist destination was closely connected to its attractions, amenities, accessibility, and auxiliary services. The research by Eichhorn and Buhalis (2010) emphasized accessibility as a primary dimension of tourist

destinations. Furthermore, an equally crucial aspect contributing to tourism development was the digital economy. The digital economy of different countries or regions played a pivotal role in fostering tourism development by enhancing quality, strengthening control capabilities, and increasing trade freedom. From a government regulatory perspective, the advice put forward pertained to the development of digital infrastructure and the application of digital technology (Tang, 2022).

2.2 Tourism Development in Indonesia

Several reviews extensively explored various aspects and dimensions of tourism development, particularly in Indonesia. For instance, Rahmayani et al. (2022) conducted research indicating the availability of tourism infrastructure, encompassing accommodation, transportation, entertainment, and related services. Another crucial aspect contributing to the tourism sector boosting the economy was the presence of tourism-supporting factors, such as easy access and convenience for tourists. These factors attracted tourists to travel destinations, ultimately stimulating regional economic growth.

The Eastern Region of Indonesia experienced a significant positive impact on economic growth due to local and international tourists, as well as the level of education and health. However, non-productive-age populations did not affect economic growth in the region. To further enhanced economic prospects, there was a pressing need to develop tourism infrastructure and improve the quality of human resources in the education and health fields (Purnomo, 2022). Based on a literature review and empirical analysis, this research aimed to explore tourism development using the Delphi method.

3. Research Methodology

According to Thompson (1990), the Delphi method was a valuable strategy for collecting and integrating opinions from independent experts. Also, it involved obtaining expert opinions and assessments through specially designed instruments. The Delphi method was a systematic and qualitative approach (Miller, 1994), using a series of questions and successive rounds of expert feedback. Originally developed as an interactive prediction method relying on expert panels, it has become a structured communication approach. The Delphi method was widely used in Collective Intelligence, where collaboration, collective effort, and competition of people led to consensus decision-making. Furthermore, it was particularly suitable for investigating topics characterized by disagreement, ambiguity, or controversy (Iqbal & Pison-Young, 2009; Konu, 2015).

4. Research Results

This research engaged 30 experts, each possessing at least 5 years of extensive knowledge and experience in the field of tourism. Respondents were purposefully selected from diverse fields of expertise, including academics and practitioners in Padang City, to ensure their suitability for this analysis. During the first round of the Delphi method testing conducted in March 2023, 40 experts participated, and 30 experts responded positively to the questions. After brainstorming sessions and in-depth discussions with respondents, a total of 48 thematic items were derived and categorized into 10 dimensions. These dimensions included 6 themes related to tourist attractions, 4 themes representing tourism activities, 5 themes for amenities, 6 themes focusing on accessibility, 7 themes on ancillary, 6 themes concerning society participation, 5 themes dedicated to tourism human resources (HR), and 3 themes each for the community, traveler, and business aspects. The dimensions and themes were shown in the following table.

Table 1: Dimension of Important Factors in Tourism Development

1	TOURIST ATTRACTION (6 themes)	1	Unique tourist attractions
		2	The beauty of tourist attractions
		3	Diversity of tourist attractions
		4	Quality of tourist attractions
		5	Popularity of tourist attractions
		6	Tourist attraction protection system
2	TOURISM ACTIVITIES (4 themes)	1	Comfort when doing tourist activities
		2	Security levels
		3	Features of the activity in the tourist location
		4	Diversity of activities in tourist locations
3	AMENITIES (5 themes)	1	Accommodation availability
		2	Restaurant availability
		3	Availability of places to shop
		4	Availability of travel agencies
		5	Availability of tourist support facilities (tourist information center, ATM)
4	ACCESSIBILITY (6 themes)	1	Access to location
		2	Road infrastructure
		3	Public transportation services
		4	Diversity of transport facilities
		5	Information and communication (internet, wifi)
		6	Accessibility for the elderly and the disabled
5	ANCILLARY (7 themes)	1	Tourism management
		2	Quality management includes professionalism, transparency, security, and insurance
		3	Local human resource involvement in management
		4	Manager Support Facilities
		5	Guide to Tourist Behavior Management
		6	Crisis and Disaster Management Systems
		7	Tourism association roles
6	SOCIETY PARTICIPATION (6 themes)	1	Participation of local communities as workers
		2	Participation of local communities as entrepreneurs and informal sectors
		3	The use of local community production in tourism
		4	Economic benefits received by local communities
		5	Social responsibilities of managers to local communities

		6	The amount of tourist expenditure
7	TOURISM HR (5 themes)	1	Hospitality SDM Manager
		2	Responsibilities of the SDM Manager
		3	Honesty of SDM Manager
		4	Sustainability of SDM Managers
		5	Gender Equality SDM Manager
8	COMMUNITY (3 themes)	1	Sustainable income for local organizations and Local Businesses
		2	Cultural exchange and preservation
		3	Conservation & nature
9	TRAVELER (3 themes)	1	Authentic
		2	Participation
		3	Impressive experiences
10	BUSINESS (3 themes)	1	Integrated social purpose
		2	Marketing Story
		3	Differentiated products & services

Out of the 40 experts who participated in the first round of the Delphi method, the academic experts represented many prestigious public and private institutions in Padang City. (E6, E7, E10, E11, E12, E13, E14, E15, E16, E17, E26, E28). Additionally, the practitioner group included experienced tourist observers who have been involved in the tourism industry of Western Sumatra (E1, E3, E5, E8, E9, E19, E20, E21, E22, E23, E24, E25).

Table 2: Data of Respondents

NO	Usia	Position	Working Period
E1	55	Private	29
E2	52	Lecturer	21
E3	57	Travel Operators	28
E4	55	Ka Prodi S2 Manajemen	25
E5	52	GM Convention Centre	24
E6	62	Dean UNP	34
E7	58	Rector	25
E8	56	Chairman of the Village Tourist Accommodation Association of Bandung	23
E9	35	Chief Pokdarwis	15
E10	44	Lecturer	18
E11	43	Lecturer	17
E12	57	Lecturer	31
E13	55	Lecturer	30

E14	46	Lecturer	22
E15	56	Lecturer	32
E16	54	Ka Prodi SP2K	30
E17	52	Lecturer	22
E18	50	Chief	30
E19	45	Homestay	20
E20	42	Travel Operators	22
E21	40	Travel Operators	23
E22	38	Travel Operators	15
E23	35	Travel Operators	16
E24	36	Travel Operators	15
E25	34	Travel Operators	14
E26	37	Marketing lecturer	14
E27	36	Strategic lecturers	13
E28	36	Marketing lecturer	12
E29	43	Travel Operators	22
E30	42	Travel Operators	20

In May 2023, the second round of data collection using the Delphi method commenced. The responses of experts sought to evaluate and refine 46 themes representing 10 dimensions. The same set of experts who participated in the first round were involved in this subsequent Delphi analysis. All these respondents actively engaged in providing feedback and answers in the process. Before rating the dimensions in the second round, the grouping of themes into dimensions was shared with all experts to ensure that their contributions in the first round have been considered.

Table 3: Processed Data

Expert s	Dimension									
	Tourist Attraction	Tourism Activities	Ame nities	Acces sibility	Anci llary	Society Participation	Tourism HR	Comm unity	Trav eller	Busi ness
E1	5	2	3	1	6	4	7	8	9	10
E2	1	2	4	3	6	5	7	8	9	10
E3	1	3	6	2	4	5	7	8	9	10
E4	2	4	3	1	5	6	7	8	9	10
E5	1	2	3	4	6	5	8	7	9	10
E6	2	1	3	4	5	6	8	7	9	10
E7	2	1	3	5	4	6	7	8	9	10
E8	1	3	2	4	5	7	6	8	9	10
E9	1	3	2	5	4	6	7	8	9	10
E10	1	2	5	3	6	4	7	8	9	10

E11	1	4	5	3	2	6	7	8	9	10
E12	1	2	4	3	6	5	7	8	9	10
E13	2	1	3	4	6	5	7	8	9	10
E14	1	4	3	2	5	6	7	8	9	10
E15	1	2	3	5	4	7	6	8	9	10
E16	4	1	3	2	6	5	7	8	9	10
E17	2	1	3	4	5	6	7	8	9	10
E18	1	2	4	3	6	5	7	8	9	10
E19	2	1	3	4	5	6	7	8	9	10
E20	1	2	4	3	6	5	7	8	9	10
E21	1	3	2	4	5	7	6	8	10	9
E22	2	1	3	4	5	6	8	7	9	10
E23	2	1	4	3	6	5	7	8	9	10
E24	2	3	4	4	5	6	8	7	9	10
E25	4	1	3	2	6	5	7	8	9	10
E26	2	4	3	1	5	6	7	8	9	10
E27	1	2	3	4	6	5	8	7	9	10
E28	1	4	3	2	5	6	7	8	9	10
E29	2	1	3	4	5	6	7	8	9	10
E30	1	2	4	3	6	5	7	8	9	10
Mean	1.67	2.13	3.35	3.18	5.2	5.57	7.07	7.83	9.03	9.97
Group Rank	1	2	4	3	5	6	7	8	9	10

Kendall's W of 0.927; p-value of 0.00

In the second round of the Delphi method, it was essential to note that there was no absolute right or wrong answer. Experts were asked to assign each number only once for each factor, indicating repeating rankings was not allowed to avoid confusion. As shown in the table above, the average group ratio ranged from 1.67 to 9.97. The results showed that the dimensions considered most important by experts in determining significant factors in tourism development included Tourist Attraction (1.67), Tourism Activities (2.13), and Accessibility (3.18). These dimensions also involved Amenities (3.35), Ancillary (5.2), Society Participation (5.57), Tourist HR (7.07), Community (7.83), Traveller (9.03), and Business (9.97). Moreover, the critical value for the Kendall (Kendall W) analysis was 0.927 and the p-value was 0.000. This indicated that the calculations performed by experts were valid and consistent.

Ancillary are facilities and secondary services that support the primary amenities in tourism sector. These are important for the success of the tourism business. These services are the 'Extras' that form the part of tourists experience and make them all more comfortable and enjoyable. are facilities and secondary services that support the primary amenities in tourism sector. These are important for the success of the tourism business. These services are the 'Extras' that form the part of tourists experience and make them all more comfortable and enjoyable.

Accessibility is a contemporary tourism issue (Gillovic & McIntosh, 2020). Accessible tourism is an integral part of implementing sustainable tourism. In its broadest sense, accessibility ensures the development of products, services and environments that allow everyone to use and derive benefit from them. An example is that of universal design principles, which enable usability by people with disabilities without the need for adaptation. It is important to consider where disability and tourism fit within the broader sustainability agenda, as well as the need for accessibility and inclusion in tourism. While tourism is considered an integral part of modern life, for people with disabilities, it is not always accessible or inclusive. People with disabilities are not always able to partake in this leisure activity due to its barrier-laden and socially exclusive nature.

Community participation has been on the spotlight in tourism academia as a tool to induce sustainable tourism development. However, despite profound commendations of literature, destinations often fail to adequately operationalize effective community participation (Wondirad & Ewnetu, 2019). Tourism continues to be an agent of economic development, particularly in a setting where there are fewer economic alternatives to tackle poverty and reduce unemployment (Mitchell et al., 2009). It provides with various economic benefits including the development of small and medium-sized tourism enterprises, employment opportunities for local residents including women and the youth, injection of fresh income into local economies and other non-economic benefits such as cultural.

5. Conclusions

In conclusion, the tourism industry required a comprehensive reevaluation following the challenges imposed by Covid-19. To address this issue, the Delphi method was employed, seeking the opinions of various Indonesian stakeholders, including academics, to directly perceived the crucial dimensions of tourism development. Although this research has numerous strengths, it was essential to acknowledge its limitations. Firstly, the data were solely obtained from tourism stakeholders such as academics, entrepreneurs, and tourists. Future reviews could expand the scope by involving other stakeholders in different countries, using the Delphi method for comparative analysis. Additional survey questionnaires encompassing the nine dimensions examined in this research were also promoted. This would enable a more comprehensive quantitative analysis, fostering greater depth and relevance in the analysis results. Lastly, it was essential to acknowledge that the data used and analyzed were cross-sectional, offering an overview of the insights collected during the two Delphi rounds. To gain a deeper understanding and minimized bias, there was strong advocacy for future reviews to adopt mixed methods, incorporating both qualitative and quantitative data through triangulation.

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