

## The Central Government's Role in Cultural Sustainability and Developing Tourism to Support Rural Economies: A Systematic Analysis

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**Abstract:** Tourism has become an essential sector in developed and developing nations, but cultural integrity must be preserved and protected to continue attracting tourists from across the globe. Thus, studying how to maintain cultural sustainability while simultaneously developing the tourism sector to attract international visitors is essential. The current study is a valuable addition to the cultural and tourism literature depicting the critical drivers that all developed and developing nations can consider for the growth of their tourism sector. The current study utilizes a systematic analysis approach to project the future role of the central government in sustaining cultural values and developing tourism to support the rural communities in Indonesia economically. The opinions of experts were gathered via interviews and a self-administered survey. The questionnaire was formulated based on the Cross-impact Direct Influence (CDI) matrix. Scenario Wizard software and MICMAC analysis were employed to analyze the data. The findings of the MICMAC analysis presented 13 key/important constructs with predominant roles in sustaining cultural values and developing the Indonesian tourism system in the future. In addition, the Scenario-Wizard Method identified 35 possible states of the critical constructs that were conceptualized in the second phase. The results revealed four scenarios with stronger consistencies. Scenario 1 was the most desirable and had appropriate features to preserve Indonesia's cultural sustainability while developing the tourism sector. Moreover, this study is novel in methodological terms applying future study analysis to bring valuable insights.

**Keywords:** Scenario-based planning, tourism, strategies, historical, cultural, sustainability, Indonesia.

From an economic perspective, tourism has increased in importance because of its enormous contributions to national economies (Adedoyin et al., 2021; Matthew et al., 2021). Tourism has had a significant amount of planning and investment in the last several decades, expanding the world's tourism industry (Parviznejad & Akhavan, 2021). Because of this growth, the tourism industry has provided numerous employment opportunities to the locals at various tourist destinations (Tian & Guo, 2021). Tourism is a widespread socio-economic

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phenomenon that has emerged based on individuals' need for communication with nature, leisure time, and the wish to explore historical places and cultures (Odede et al., 2020).

Based on the tourism industry's significance, a need exists to study tourism development in a country or a specific area (Dube & Nhamo, 2021; Laut et al., 2021). Comparing unsuccessful tourist destinations that failed because of lack of planning with successful destinations developed on a logical planning process is required (Nematpour et al., 2021). Developing nations must pay attention to augmented planning of tourist activities to deliver proper guidelines and excellent services to tourists (Laut et al., 2021; Odede et al., 2020). Indonesia is a lovely country with ancient civilizations, a historical background, natural tourist attractions, and human-made tourism destinations (Adinugraha et al., 2021). Unfortunately, current planning is insufficient to cater to tourists' needs and make tourism a significant source of foreign exchange (Hardjosoekarto & Lawang, 2021). Therefore, long-term strategic planning must be developed to maximize recreational activities at the country's numerous beautiful tourist destinations and make them more profitable for the locals and the government.

Expanding tourism can be valuable for sustainable rural development (Petrović et al., 2017). Researchers have highlighted the significance of rural tourism in national sustainable development strategies (Huang et al., 2021). Research also shows the potential for rural tourism development (Hardjosoekarto & Lawang, 2021). Moreover, López-Meneses et al. (2020) suggested long-term strategic planning, particularly in developing nations where most populations live in rural areas with indigenous cultural and natural lives. Tourism based on its close association with the heritage, cultural celebrations, lives of residents, and local production methods in suburban or rural areas can enhance the overall identity of a nation (Petrović et al., 2017).

Indonesia has an abundance of rural areas with exquisite scenery and tourist destinations ripe for development. The strategic development of these areas is crucial for the nation's economy because it could produce sustainable economic development if managed appropriately (Nugroho et al., 2021). Currently, the nation has low economic growth, lagging behind many G20 countries in GDP per capita (Istanti, 2021). Hence, managing the growth of vibrant tourism industry is essential (Hardjosoekarto & Lawang, 2021; Nugroho et al., 2021). Therefore, the current study examines current government policies regarding tourism development in rural areas in Indonesia and systematically analyses a projected role of the central government in developing tourism to support the economy of the rural communities in Indonesia.

This investigation used multiple strategic planning techniques and methods. Each method is valuable based on its specialized outcomes for varied destinations. Because scientific techniques and methods linked with long-term planning are ever-changing, researchers prefer using systematic models over non-systematic ones to implement strategic planning, especially in the tourism industry context (Nematpour et al., 2021). Moreover, scenario-based planning can also be an effective, appropriate tool to develop systematic models for the growth of an emerging nation's tourism industry (Weimer-Jehle et al., 2020). Using these approaches could aid the Indonesian tourism industry based on its more expansive touristic capacities. Hence, the current study applies future scenario-based strategic planning to access the best-fit government strategies for developing the tourism sector to strengthen the economic situation of the rural communities in Indonesia.

The current study uses a cross-impact analysis, primarily applied in future quantitative methodologies at national scales (Mehta et al., 2022). In addition, as proper strategic planning to attract tourists to Indonesia, the current study applied a scenario-based strategic planning approach based on future projection, using Scenario Wizard and MICMAC. We identified the main drivers and critical factors attracting tourists to Indonesian tourist destinations in phase one. In the second phase, future scenarios were developed using future research approaches and strategic management using planning models. Hence, presenting an overview of the tourism

system, cultural values, tourism development, and scenario-based strategic planning, the current study seeks answers to the following questions:

1. What driving forces and key factors can be utilized to sustain the cultural values and attract tourists from all over the globe to develop Indonesia's tourism market?
2. Which scenario-based strategic planning would be the best fit with the central government's large-and small-scale policies for cultural sustainability and tourism development to support the economies of the rural Indonesian communities?

## Literature Review

### Tourism System and Cultural Values

According to system theory, a tourist site is a dynamically complex system consisting of various non-linearly interconnected elements (Klein et al., 2022). Zhou et al. (2021) asserted that a system combines organized and diverse stakeholders with a variable set of plans, interests, and goals. Moreover, multiple internal factors like cultural circumstances in community laws and regulations, national policies, and societies greatly influence this system (Krath et al., 2021). Internal factors, multiple external indicators, including natural disasters and human-generated problems (war, terrorism, global financial crisis, etc.), also influence a tourism system (Nematpour & Faraji, 2019). Additionally, structural analysis lies in system theory, and this theory links long-term planning and future scenarios with a philosophical framework. It further reflects that those systems are complicated and depend on various factors, components, and relationships (Klein et al., 2022).

In a tourism system, organizations and businesses depend on each other and rely on the facilities and attraction sites to satisfy and attract tourists (Dube & Nhamo, 2021). Destinations and origin sites collectively interact with wider environment elements where they are situated (Laut et al., 2021). These interactions further influence the residents and area's local community and cultural values. A particular area's culture is significant for influencing tourists and making a destination attractive (Salehi et al., 2018). A society's overall environment is essential for tourists before heading to destinations (Yang et al., 2019). Hence, preserving cultural values and enhancing norms is essential to attract tourists from all over the globe (Yusoff, 2019). In connection with that, a system approach is quite different from other specific approaches. In specific approaches, the various elements are primarily derived from an entire system, and these elements are studied independently of each other (Susanto et al., 2020). In contrast, a system approach considers a holistic view in which all the elements are considered and studied together to formalize strategic planning to enhance a system collectively (Valatin et al., 2022).

Implementing tourism system theory for long-term and scenario-based planning means using system dynamics to formulate and implement strategic plans for tourist destinations (Dang et al., 2020). For this purpose, the system dynamic model can be utilized to understand the nature of an existing tourism system regarding its destinations (Weimer-Jehle et al., 2020). It can also suggest alternative scenario-based or long-term strategies for developing tourism at the regional, local, or national levels (Chen, 2020). Moreover, the sustainability of scenario-based and long-term tourism development must apply a system dynamic model. This connection asserts the significance of the system approach to understanding the uncertainty and complexity of the existing tourism system, anticipating its uncertainties in the future (Chen, 2018). This system approach helps policymakers, tourism organizations, decision-makers, and planners see and understand the interrelationships and non-linear correlations in the change process.

## **Tourism Development**

Many countries have been working to comprehend growth trends in tourism to prepare policies and plans for the rapid development and growth of tourism (Darsono, 2019). This rapid development and growth eventually resulted in a universal integration of national and local policies and plans. Moreover, long discussions have occurred about the nature of tourism growth and development, how it can be encouraged and how its impacts can be measured. Although tourism has a less profound role in the economies and development of already developed countries, tourism has an enormous role in developing emerging nations (López-Sanz et al., 2021). Tourism can be an important economic activity in countries with high tourism potential and resources and can be an enormous source of economic growth for developing nations (Istanti, 2021). Research shows a need for economic policies and strategic planning for tourism expansion in developing nations to bring balanced growth and create business avenues (Nematpour et al., 2021; Nugroho et al., 2021). Hence, in developing nations, tourism can be rationalized for economic development, along with industrial and agricultural development.

Research has shown that tourism development is linked with continuous destination development and planning regarding facilities and services provided in a sustainable development context López-Sanz et al. (2021). Enormous benefits and improvements can be accrued via an effective and well-managed tourism sector and enhance living standards in a particular area (Dube & Nhamo, 2021; Mansoor & Wijaksana, 2021). In most communities, tourism has been given more weightage for economic development and enhancing a community's living standards as a whole (Darsono, 2019). Tourism has remained one of the fastest-growing industries worldwide. (Hardjosoekarto & Lawang, 2021), and tourism can be a sustainable option for communities and nations to develop on a large scale. Hence, analyzing future tourism trends for a nation's desirable development is essential (Dube & Nhamo, 2021).

## **Scenario-based Strategic Tourism Planning**

All nations, especially developing countries, should work to understand their existing tourism sector and expand that system to grow their economy at regional, local, and national levels in the future (Adinugraha et al., 2021). For this purpose, strategic tourism planning can assess the tourism benefits to attain the desirable results without affecting the destination's environment or socio-economic development in the long term (Nematpour & Faraji, 2019). It further reflects that strategic tourism development is a framework that helps destinations or tourism organizations effectively and efficiently execute various activities for the overall effectiveness of the tourism sector (Martins, 2018). In a tourism system, multiple factors are important, including stakeholders, management communities' concerns, innovative marketing strategies, efficient development, and long-term planning (Hartanto et al., 2021; Mansoor & Paul, 2022). Research shows that national, local, and regional destinations that formulate and execute good planning and strategies have a competitive edge over those that do not (Huang et al., 2021). Long-term planning is preferable to short-term because long-term planning helps enhance the overall community and living standards of a particular area.

Scenario-based planning is a strategic planning method allowing decision-makers and managers to project the future and plan strategies that are more helpful for developing a particular sector (Mai & Smith, 2018). Conceptualized as a combination of systematized ways to visualize the future effectively, scenario-based planning aids entrepreneurs in bringing valuable change, dealing with uncertainty and complex situations, and executing novel ideas (Ehsan et al., 2019). The scenario-based plan opposes forecasting, as forecasting creates a mark of certainty about the future. In contrast to forecasting, scenario-based planning is ambiguous, reflecting the uncertainties related to future scenarios and encouraging individuals to take risks

to achieve capital gains (Saber et al., 2019). Moreover, various scenarios are developed to present distinctive future depictions, considering the present situation for a required time horizon. Simultaneously, various driving forces are identified in scenario-based planning, and different assumptions are made regarding how they will interact or affect the field of study. Furthermore, external and internal environments are considered (Mai & Smith, 2018).

There are two basic principles of scenario-based planning. The first is system thinking related to companies' organizational, internal, and external factors, including physical and mental environments. The second principle is that it has multiple features to depict alternative future studies and ways to consider during the strategic planning process (Ehsan et al., 2019). Scenario-based planning has two phases: 1) developing and applying stimulations to check about future possibilities and 2) assessing and applying the decision-making and managerial skills for evaluating those projected futures (Norton et al., 2019). In the context of the tourism sector, several scholars have utilized scenario planning as an organized approach to create and test various imminent scenarios in uncertain and complex environments (Mai & Smith, 2018; Nematpour et al., 2021).

Researchers also reported the possibility of applying the impact of change in the tourism sector based on the environment, society, and economy by applying counterfactual planning (Darsono, 2019; Luo et al., 2020). Luo et al. (2020) stated that only one change could create or impede the development of a competitive, well-functioning, attractive destination; hence, executing well-structured long-term planning is critical. With the help of such planning, a continuous development system can be introduced to enhance and capitalize on the existing local assets for local and national development (Saber et al., 2019). Researchers also called for creating and developing strategic scenarios with all stakeholders involved in various developing nations to enhance the tourism sector and the economy's development (Mai & Smith, 2018; Nematpour et al., 2021; Norton et al., 2019). The current study applies a scenario-based planning approach to project key drivers for developing the Indonesian tourism sector.

## **Research Method**

### **Cross-cultural Analysis**

This study used a qualitative "cross-impact analysis following structural analysis." The cross-impact analysis is an influential tool for analyzing a combination of binary future events (Mehta et al., 2022). It is also a flexible methodology applied to generate and evaluate scenarios and can be used with multiple methods, i.e., fuzzy, Delphi, and multicriteria analysis (Nematpour & Faraji, 2019). It is followed by a systematic analysis of variables in diverse combinations to derive future-based results (Kahnali & Heyrani, 2021).

### **Structural Analysis**

Structure analysis emerges from the cross-impact analysis method considering a diverse set of relationships among a diverse set of variables/constructs (Weimer-Jehle et al., 2020). This entire system of interrelated variables forms a network testing and evaluating inter-variable associations by applying future evaluations system of interconnected metrics (Norton et al., 2019). The most significant structural analysis identifies the key constructs controlling all future projections (Luo et al., 2020).

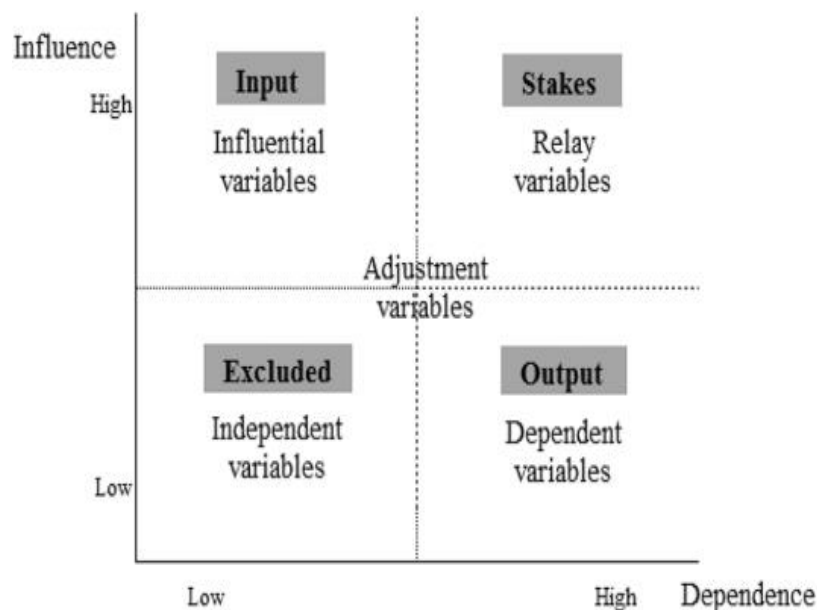
### *MICMAC Method for Structural Analysis*

Cross impact analysis applies MICMAC, where a panel of experts identifies key variables in a domain and presents a vast set of variables in a direct and indirect matrix of influence (Jasiulewicz-Kaczmarek et al., 2021; Villacorta et al., 2014). The impact of every "i" construct on each "j" construct is shown as "ij" in each cell of the Matrix of Direct Influence (MDI) (Nematpour & Faraji, 2019). These impacts are assigned values varying from 0 to 3. Where "0 = no relation between constructs, 1 = weak relations, 2 = indicates moderate relations and 3 = strong relations". Besides, the elements of the MDI matrix are reported as "a kth row and kth column," and the following formula is generated (Nematpour et al., 2021);

$$I_k = \sum_{j=1}^n MDI(k, j) \text{ and } I_k = \sum_{j=1}^n MDI(j, k)$$

The MICMAC chart reflects a two-dimensional map, i.e., vertical and horizontal axis showing impact and the dependency (See Figure 1) (Chen, 2018; Villacorta et al., 2014).

**Figure 1**  
*Influence–Dependence Chart*



*Note.* Adapted from Chen (2018).

Each chart has five zones, including;

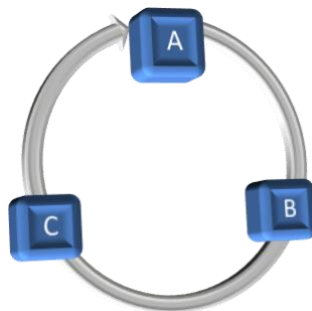
- Influential/Input Constructs with a higher level of impact on other variables
- Key/Intermediate Constructs are regarded as unstable and can be either dependent or highly influential
- Dependent/Output Constructs as highly sensitive to change due to low influence and high dependence
- Excluded Contracts as out of the chart with least impact
- Neuter/clustered construct as unpredictable to join any group

## Using Cross-Impact Balance to Build Scenarios

Cross-impact Balance (CIB) is a contemporary analysis used in a qualitative system involving different fields like political, economic, social, and technological (Weimer-Jehle et al., 2020). Knowing the various amalgamations of satisfactory, neutral, and unfavorable prediction variance required for building scenarios. In addition, using CIB analysis, the first important/key factors known as "descriptors" are found (Jasiulewicz-Kaczmarek et al., 2021). Figure 2 shows the associations among descriptors.

**Figure 2**

*A Simple CIB Network*



The steps to build scenarios in the CIB process include;

- i.** A list of the descriptors being relevant system factors. We utilize the MICMAC technique to extract key or important factors in the current study. For instance, X1, X2..... Xn.
- ii.** Defining a number of qualitative variants (alternatives) characterizing the probable states of the descriptors. For instance,
  - a.** "X1 {xa, xb, xc}"
  - b.** X2 {x, xy, xz}"
  - c.** X3 {xi, xj} Xn {x1 ... xn}"
- iii.** Step three represents the decision from "-3 strongly restricting influence to +3 strongly promoting influence" regarding the influence of "state xa of descriptor X1" on "state xx of descriptor X2", based on experts' interviews and literature reviews.

## Sampling Procedure

To develop the tourism market in Indonesia, the current study focused on the structural analysis perspective by applying MICMAC software to conduct cross-impact analysis to attain the best scenarios in Scenario Wizard. Structure analysis creates scenarios in a 6-phase process, including analysis of the problem, the definition of the variables, analysis of the associations, chart analysis, key variables selection, and possible scenarios writing for future system developments (Chen, 2020). The current study was conducted from August 2021 to January 2022. A purposive sample method was used by selecting experts with thorough knowledge and quality information regarding the study context (Devers & Frankel, 2000). As a non-probability sampling technique, purposive sampling is also known as subjective or judgmental sampling, which considers two selection criteria for the respondents of this study, i.e., experts' characteristics and study objectives. Researchers reported that the normal size for future projection studies conducting scenario-based analysis should be between 10 to 100 respondents divided into two to three expert groups (Chen, 2020; Jasiulewicz-Kaczmarek et al., 2021).

Following these guidelines, researchers approached 35 professionals, administrators, academicians, and management experts. Twenty-seven agreed to participate in the study; hence self-administered questionnaires designed in cross-impact analysis matrix form were handed over to those experts. The variables of those self-administrative questionnaires were collected in phase two of the current study.

## Results

### Application of Cross-Impact Analysis to Identify Key Variables/Constructs

We composed 52 variables from the review of the recent literature and experts' opinions through interviews to assess the Indonesian tourism industry's key or most important constructs. Later, experts extracted 7 main categories of 36 constructs from those 53 variables. Next, cross-impact  $36 \times 36 = 1296$  was adopted from 36 selected constructs. Simultaneously, MICMAC was utilized to evaluate and validate the structure analysis by experts (Patidar et al., 2017). The "matrix filtration" quantity was 69.70, presenting around 69.70% of the constructs' impact on each other. Besides, of the 1296 metrics-based associations, 392 (30.24%) showed "no association," 310 (23.91) showed "weak associations," 251 (19.36%) had "moderate associations," and the 338 (26.08%) showed "strong associations" among each other (see Table 1).

**Table 1**

*Matrix of Direct Influence MDI*

Indicators	Values
Size of the matrix	36
No. of iterations	2
No. of zeros	392
No. of ones	310
No. of twos	251
No. of trees	338
No. of Ps	0
Total	1296
Filtrate rate	69.70%

These findings of MDI cross-impact analysis revealed that the Indonesian tourism system could be improved by various constructs. Besides, many contracts strongly impacted the tourism sector's development and are considered "the key constructs." Moreover, the final "cross-impact metrics" results, as presented in Table 2, are categorized into 5 types, i.e., key, input, clustered, output, and excluded variables. In addition, Table 2 depicts tourism creativity, safety, security, integrated marketing communication channels, tourism services, facilities, research and education in tourism, and preserving historical and cultural assets as the key variables playing a significant part in the Indonesian tourism system. Simultaneously, international events, developing recreational activities, and tourism standard maintenance was regarded as input constructs for enhancing the development of the Indonesian tourism system. Besides, cultural and infrastructure property's master plans for tourism development, enhancing the public's general and specific knowledge, were reported as clustered variables. Community participation, investment, carrying capacity of the community, and privatization extension was marked as the out variables. Finally, enhancing general and specific knowledge, tourists' purchasing power, and tourism entrepreneurs had a very minimal influence in developing the Indonesian tourism sector.

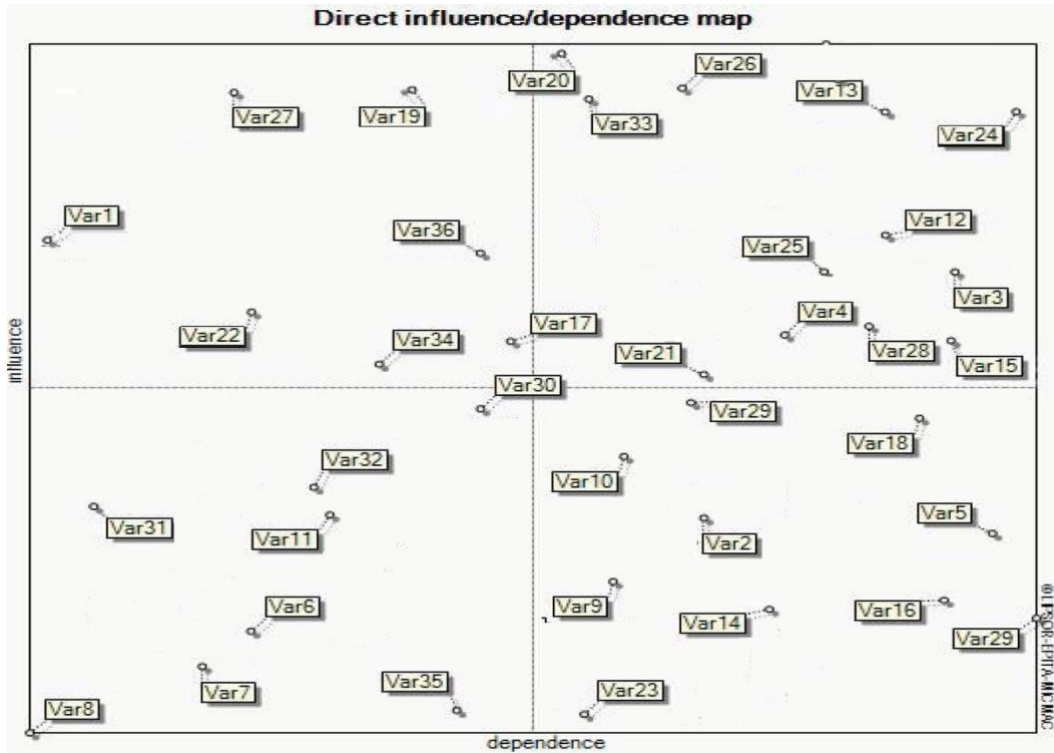


**Table 2**  
*Direct Dependence and Influence of Variables*

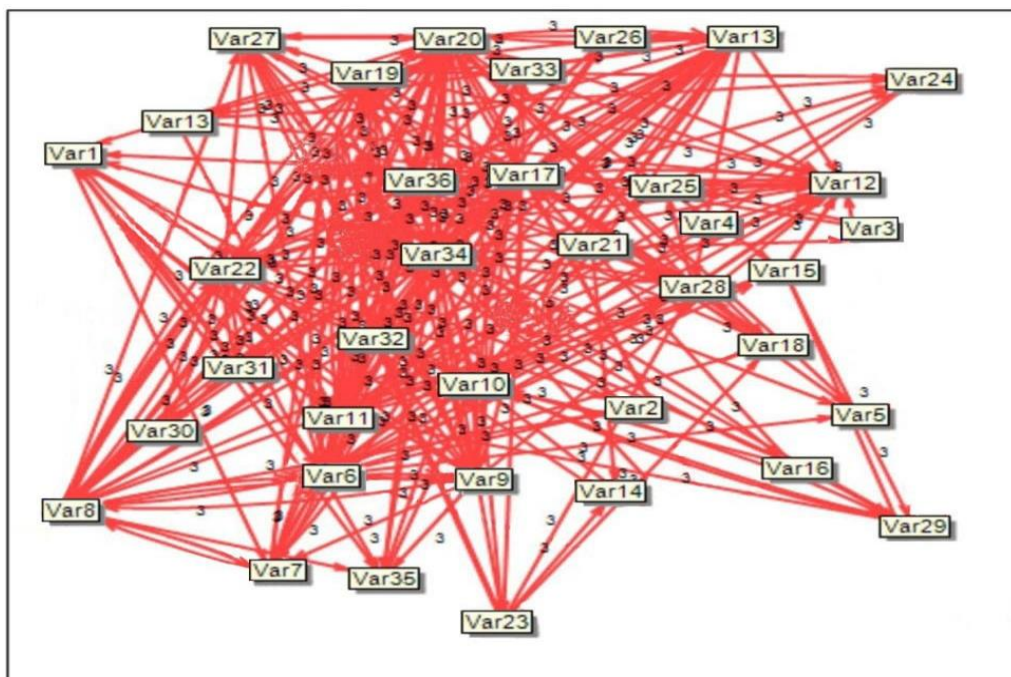
Sr. #	Role	Variables	Items	Matrix of Direct Influence (MDI)	
				Direct Influence	Direct Dependence
1	Key	VAR26	Tourism creativity	679	443
2	Key	VAR21	Safety and security	651	428
3	Key	VAR13	Research and education in tourism	649	411
4	Key	VAR33	IMC channels	644	402
5	Key	VAR24	Tourism services and facilities	630	398
6	Key	VAR28	Preservation of historical and cultural assets	621	389
7	Key	VAR27	Medical facilities	609	379
8	Key	VAR3	Building trust among the tourists	554	366
9	Key	VAR4	Holidays and traditional festival	537	320
10	Key	VAR12	Financial and economic facilities	522	314
11	Key	VAR25	Standardization of tourism agencies and Org.	489	386
12	Key	VAR20	Tourism policy making	480	373
13	Key	VAR19	Positive Image of Indonesia	478	370
14	Input	VAR1	International events	452	361
15	Input	VAR36	Developing recreational activities	430	345
16	Input	VAR22	Tourism standards maintenance	427	339
17	Input	VAR30	Digital advertising	409	233
18	Clustered	VAR17	Master plan for tourism development	403	261
19	Clustered	VAR34	Cultural and infrastructure properties	383	251
20	Clustered	VAR29	Enhancing public general and specific knowledge	377	218
21	Dependent	VAR18	Language learning programs for tourists	213	389
22	Dependent	VAR10	Investments	191	372
23	Dependent	VAR2	Community participation	156	234
24	Dependent	VAR5	Carrying capacity of the community	134	209
25	Dependent	VAR9	Privatization extension	128	197
26	Dependent	VAR14	Incentive plans for entrepreneurs	127	145
27	Dependent	VAR16	Tourist guides	126	132
28	Dependent	VAR29	Hotel industry and ecommerce in tourism	81	111
29	Dependent	VAR23	Human resource management laws and regulations	72	102
30	Excluded	VAR32	Maintain a comprehensive tourism database	43	81
31	Excluded	VAR31	Enhancing public general and specific knowledge	38	73
32	Excluded	VAR11	Tourists purchasing power	27	141
33	Excluded	VAR6	Tourism entrepreneurs	18	134
34	Excluded	VAR35	Aesthetic attributes of human made spaces	10	129
35	Excluded	VAR7	Budget allocations	2	79
36	Excluded	VAR8	Traditional marketing techniques	0	12

Researchers highlighted the significance of identifying key constructs based on their degree of influence. Hence, as shown in Figure 3, 13 constructs situated in the map's north-eastern are the key constructs based on their higher degree of direct impact in developing the Indonesian tourism system.

**Figure 3**  
*Map for Influence/Dependent Variables*



**Figure 4**  
*Direct Indicators in Spatial Structure of Tourism Development*



Furthermore, Figure 4 shows the direct predictors of the spatial structure of the Indonesian tourism system. Of these, 17% include tourism creativity, safety and security, research and education in tourism, integration of marketing communication channels, tourism services and facilities, preservation of historical and cultural assets, mass medical facilities, building trust among the tourists, holidays, and traditional festivals, financial and economic facilities, standardization of tourism agencies and organizations reflecting their great influence on other indicators or may have a high dependence on others. The 100% rate of direct indicators in spatial structure for the Indonesian tourism sector reflects associations ranging from strong to none.

### Using CIB to Build Consistent Scenarios

After determining the key constructs for developing the Indonesian tourism system via cross-impact analysis, an appropriate structure of scenario assumptions has been provided to evaluate further the significance of the attained indicators in the system in different combinations. The possible scenarios of the 13 key constructs identified in cross-impact algorithms were built utilizing the coded rules in the CIB method. The key descriptors were organized and again disbursed to the expert panel members. To review the key descriptors, we formulated a 35x35 matrix to evaluate the Indonesian tourism systems' growth and development due to any projected changes in any descriptor variables stated as "strategic drivers" in developing the tourism sector. The study descriptors are presented in Table 4.

Later X's state x's influence on descriptor Y's state y was assessed via judgments based on literature review and experts' interviews. Moreover, we only considered the direct impacts of these judgments. This resulted in a "cross-impact matrix in Scenario Wizard Software" with 35 states for 13 key/important constructs influencing the Indonesian tourism development system. From these possible states' numbers, we extracted 944,794 possible combining scenarios (from  $3 \times 3 \times 3 \times 2 \times 3 \times 3 \times 2 \times 3 \times 3 \times 3 \times 3 \times 2 \times 2$ ). These scenarios further presented varied consistencies, i.e., stronger consistencies=4, weak=2510, and nil=723. Finally, considering different features, the four most consistent scenarios were categorized differentially, as presented in Table 3.

**Table 3**  
*Scenarios with Strong Consistencies for Developing Indonesian Tourism System in the Future*

Scenario 1	Scenario 2	Scenario 3	Scenario 4
A1	A2	A2	A3
B2	B1	B2	B3
C1	C2	C2	C3
D2	D1	D1	D3
E1	E3	E2	E2
F2	F1	F2	F3
G2	G3	G3	G1
H2	H2	H1	H3
I2	I3	I1	I2
J1	J2	J2	J3
K2	K1	K2	K3
L1	L2	L3	L1
M1	M2	M2	M3

**Table 4**  
*Descriptors' Possible States*

Descriptors	Variables		
Tourism Creativity	A1. Nature-based recreational activities	A2. Novel crafting and fun-based activities	A. No planning to develop creative tourism
Safety and security	B1. Surety of physical safety in public	B2. Legal and political security of tourists	B3. Increase in political instability in Indonesia
Research and education in tourism	C1. Valuable guidelines available to tourists	C2. assessment of tourists' interests based on continuous research	C3. no research and education in the tourism sector
IMC channels	D1. Integration of various digital media channels to highlight the positive sides of the Indonesian tourism sector	D2. digital content creation via vlogs and blogs to attract tourists	D3. developing digital advertising only by governmental sectors
Tourism services and facilities	E1. Auxiliary facilities, accommodations, and support considering quantity and quality	E2. Provision of tourism facilities in terms of quantity	E3. Relying on the current facilities and prevailing situation in the tourism system
Preserving historical and cultural assets	F1. Artistic and historical-cultural tourism products	F2. Religious and regional cultural tourism products	F3. Commodifying cultural assets
Medical facilities	G1. Modern medical facilities with low cost and high quality	G2. Quick medical facilities	G3. Poor- and low-quality medical facilities
Building trust among the tourists	H1. Providing safety and security in terms of life and valuables	H2. Fairly treating and guiding the tourists	H3. Deceiving tourists based on their lack of knowledge regarding the things and area
Holidays and traditional festival	I1. Recreational activities and arrangement of festivals on weekends	I2. Maintenance of holidays portfolio arrangement of various events	I3. No track of holidays and normal routines for traditional festivals
Financial and economic facilities	J1. Investment of national government to enhance the feasibility of the tourists	J2. Investments for enhancement of the infrastructure	J3. No financial and economic facilities
Standardization of tourism agencies and Organizations	K1. Keeping records of all the tourist agencies and organizations	K2. Bounding tourism agencies and organizations to follow certain levels and regulations	K3. No standardization of tourism agencies and organizations
Tourism policymaking	L1. Strategic tourism planning at the national level	L2. Tourism enhancement policies at lower administrative levels	L3. Standard policies applied in every sector
Positive Image of Indonesia	M1. Providing facilities to issue visas easily, such as airport visas	M2. Special mutual tourism-related relationships with neighboring countries	M3. Antagonistic diplomacy approach on an international scale

Table 5 shows that Scenario 1 seems to be more desirable and relevant regarded as a "driving scenario." Comparatively, Scenarios 2 and 3 showed "the intermediate status," and scenario 4 showed "undesirable status" with no probability of developing the Indonesian tourism system. Furthermore, Table 5 reflects the reliability values of each probable state.

**Table 5**  
*Value Consistency of Each Possible State*

Descriptors	Possible sates	Value Consistency
Tourism policymaking	L1	574
IMC channels	D2	531
Positive Image of Indonesia	M1	502
Preservation of historical and cultural assets	F2	488
safety and security	B2	456
Tourism services and facilities	E1	372
Medical facilities	G2	328
Building trust among the tourists	H2	298
Tourism creativity	A1	275
Standardization of tourism agencies and Organizations	K2	112
Holidays and traditional festival	I2	78
Financial and economic facilities	J1	33
Research and education in tourism	C1	21

The findings revealed the most probable state of strategic tourism planning at the national level as a significant measure to enhance the development of the Indonesian tourism sector. Further, results demonstrate the highest consistency of digital content creation via vlogs and blogs to attract tourists utilizing integrated marketing communication channels. Moreover, results also revealed a higher consistency value based on valuable improvements in facilitating tourists via issuance of issue visas easily and other such measures to build and enhance the positive image of Indonesia to attract tourists from all over the world. Indonesia has strong religious, cultural, and historical protentional to attract international tourists all over the globe. In addition, tourists also prefer to visit places with high-security measures and provide quality auxiliary facilities and accommodations. These are reflected with the moderate consistency to be improved and utilized by the Indonesian government on a large scale to bring more tourists to various rural destinations.

## Discussion and Conclusion

Tourism is among the largest industries worldwide, with an enormous influence on a country's social, political, economic, cultural, and environmental situations (Ioannides et al., 2021). Therefore, to reap the advantages and benefits of tourism, it is important to strategically plan the development of different tourist destinations, especially in rural areas. Such areas are rich in culture with beautiful sceneries that attract tourists worldwide (Huang et al., 2021). Hence, attention should be paid to these tourist destinations at the national level. Moreover, future study methods are helpful for building scenarios to identify key drivers important for tourism development and help formulate strategies at the national level to develop the tourism market (Nematpour et al., 2021). Moreover, Cross-impact Analysis (CIA) (Kahnali & Heyrani, 2021) and Cross-impact balance (CIB) (Stankov et al., 2021) as future study tools highlight the significant characteristics and roles of each construct concerning other constructs in a system.

It also examines potential interactions and designs possible scenarios (Weimer-Jehle et al., 2020).

The current study found the contextual associations among 36 tourism development constructs via a CIA-based systematic framework. Moreover, fuzzy MICMAC analysis based on CIA findings was utilized to develop an integrated model to evaluate the interaction among various constructs important for developing the Indonesian tourism system. After a consolidated analysis, we identified 13 key constructs. Simultaneously all possible scenarios of the 13 key constructs identified during the cross-impact algorithm were generated. According to software classifications and experts, subjective influence following key variables was identified.

- VAR3:** Building trust among the tourists
- VAR4:** Holidays and traditional festival
- VAR12:** Financial and economic facilities
- VAR13:** Research and education in tourism
- VAR19:** Positive image of Indonesia
- VAR20:** Tourism policymaking
- VAR21:** Safety and security
- VAR24:** Tourism services and facilities
- VAR25:** Standardization of tourism agencies and organizations
- VAR26:** Creativity
- VAR27:** Preservation of historical and cultural assets
- VAR28:** Medical facilities
- VAR33:** IMC channels

Moreover, CIA results confirmed that some key variables considered unimportant played an important, leading role in developing the Indonesian tourism system. Previous researchers also highlighted some important factors that impact tourism development in the South Asian tourism sector (Dewangan et al., 2015; Nematpour & Faraji, 2019). After building scenarios, any key variable identified in cross-impact matrix algorithms for tourism development systems in Indonesia might lead to better strategies for developing the entire system. Moreover, based on CIB, four scenarios with stronger consistencies were identified. Further analysis showed that scenario 1 offered the desirable features for the development of the Indonesian tourism market. In addition, this scenario was found more valuable in attracting more tourists from all over the globe. Although scenarios 2 and 3 presented stable characteristics, they were inappropriate to design long-term tourism development strategies. Finally, scenario 4 reflected no determinantal characteristics or appropriate characteristics for the future development of the Indonesian tourism system.

Results also revealed that if scenario 1 as a driving scenario for the development of the Indonesian tourism sector happens, this would be beneficial for attracting tourists from all over the globe. Moreover, all 13 key constructs identified in this scenario are stable and very important for the tourism development sector with their positive nature. One of the most influential states in scenario 1 included the L1 (Strategic tourism planning at the national level). This reflects that if the government representatives take the rural area tourism sector seriously and formalize these strategies accordingly, a large amount of foreign exchange can be earned (Odede et al., 2020). The second most influential state in scenario one was D2 (Digital content creation via vlogs and blogs to attract tourists). As it is an era of digital media, people all over the globe rely more on digital channels to collect news regarding different affairs (Mansoor, 2021). Hence utilizing digital media via vlogs and blogs, Indonesian tourist destinations can be highlighted all over the globe, and it can further attract tourists to such destinations based on their rich culture, historical backgrounds, and religious values.

The third most influential state impacting the development of the tourism sector was found M1 (Providing facilities to issue visas), linked with a positive image building. This is a significant factor that many scholars of tourism market development have considered (Yusoff, 2019). Building a strong national brand and recognizable image has become an integral way of representing the values and norms of a country at international forums in a nowadays competitive environment (Hartanto et al., 2021). Hence government representatives should focus on this image-building construct to further attract tourists to various destinations. Moreover, F2 (Religious and regional cultural tourism products) was also considered an important key construct that can influence the tourism market in the future based on the rich cultural values of various tourist destinations in Indonesia. Indeed, researchers highlighted the significance of cultural norms and religious values in enhancing tourism (Salehi et al., 2018).

Another important variant found in the current study results is B2 (Legal and political security of tourists). Generally, quality tourism security and security are considered vital factors (Odede et al., 2020). Beyond any economic activity, the tourism sector's success depends on the safety and security measures available in tourist areas (Nematpour et al., 2021). Hence, the Indonesian government should consider the legal and political stability of the tourists for the longer term to make the tourism system a sustainable sector. Moreover, the tourism sector has been the most affected because of travel restrictions on international flights during the Covid-19 pandemic (Amka & Dalle, 2021). Hence, it is time to reorganize and enact proper security and safety measures so tourists feel safe.

In addition to safety and security, E1 (auxiliary facilities, accommodations, and support considering quantity and quality) is also vital to developing the tourism sector. G2 (quick medical facilities), H2 (fairly treating and guiding the tourists for building trust among tourists, A1 (nature-based recreational activities), K2 (bounding tourism agencies and organizations to follow certain levels and regulations), I2 (maintenance of holidays portfolio arrangement of various events), J1 (investment of national government to enhance the feasibility of the tourists) and C2 (assessment of tourists' interests based on continuous research) were also found to be significant determinants of the Indonesian tourism sector in future, which must be considered at large scale.

## **Implications and Limitations**

The current study is valuable to academicians, policymakers, and governments in the tourism sector in various ways.

- This study has presented key factors related to developing the Indonesian tourism sector that can be considered the leading influencers in the regional and national tourism development strategies on a large scale.
- The results reflect the significance of strategic planning for attracting international tourists that the Indonesian Ministry of Cultural Heritage and Tourism should prioritize. The key variables with higher consistencies to influence the development of tourism markets should be seriously considered at the national level to reap the advantages and benefits of the tourism industry on a large scale.
- Tourists should be treated with care and provided with safety and security measures to feel confident to visit any tourist destination in Indonesia's rural areas.
- It is also important to harmonize the integrated marketing communication channels and utilize digital media at large to attract international tourists by highlighting the positive image of Indonesia as well as promoting the beautiful destinations to attract such tourists.

- High-quality hospitality services should be provided. Long-term planning includes various new strategies and modern technologies introduced at tourist destinations to enhance the area's beauty or attract tourists to such destinations.
- Various recreational activities like festivals and game competitions can be introduced at such places to make them more attractive.

The current study has limitations that should be considered in future research.

- Although "MICMAC and Scenario Wizard analysis" is efficient in highlighting the complexities among the constructs, an expert panel's knowledge is critical because the method depends on their skills and knowledge. However, dominating group members can influence others, and the results can be biased. Therefore, future researchers should use a multidisciplinary team. This technique does not specify the time for the development process based on uncertainties and ambiguities in the future.
- Simultaneously, the focus of the current study was the supply side and attracting tourists to tourist destinations; however, the demand side has been ignored. Hence, the demand side for attractive tourist destinations can be considered in future research.
- Finally, a comparative study can be conducted by analyzing the available policies, procedures, and facilities in the tourism sector and highlighting the loopholes that need to be emphasized in the future to make the tourism sector more profitable.

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