

Analysis of Actor, Needs, Constraints, and Action Plans for the Development of Traditional Game Cultural Tourism Attraction in the Tourism Villages of Durensari, Trenggalek and Kampung Dolanan Borobudur, Magelang

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ABSTRACT

The purpose of this study is to analyze and find out the actors, needs, constraints, and action plans for the development of traditional game cultural tourist attractions in the Tourist Villages of Durensari, Trenggalek, and Kampung Dolanan Borobudur, Magelang. This analysis is needed to provide direction to stakeholders as the basis for a comprehensive, effective, and efficient strategic plan supporting the development of traditional game cultural tourism attractions. This research employs case studies, the purposive approach of selecting respondents, and the qualitative descriptive method. Data collection methods encompass observation, interviews, documentation, and filling out questionnaires. The analysis method is the ISM (Interpretive Structural Modeling) method supported by ISM Expert software. According to this study, the factors that most strongly propel and impact the growth of traditional game tourism attractions are (1) the actor element, namely the tourist attraction manager; (2) elements of need, namely publication and promotion; (3) element of constraints, namely limited government facilitation; and (4) element of action plans, namely networking and collaboration. These main elements should be a reference in developing traditional game tourism attractions in the Tourist Village Durensari and Kampung Dolanan Borobudur.

Keywords: Cultural Tourism Attraction, Actor, Constraints, Needs, Action, Traditional Game, Tourism Village.

INTRODUCTION

Tourist attractions or products are the key to attracting tourists to a particular destination. Intensification, linkage, and product diversification are significant for competitiveness and new tourism marketing strategies (Francisca et al., 2019). This strategy can refer primarily to the geography and demographics of the domestic tourist market, more specifically to location and age, which can influence purchases. Let's look at the location of domestic tourists. It is explained that the 2022 data shows that the five provinces of origin and destination of domestic tourists are on one island, namely Java, so it can be said that the circulation of domestic tourism on the island of Java is potential.

McNeal and Ji (2003) argue that the children's market has three market types in determining consumer market potential based on age. First, children are the primary market; this type of market places children as the primary marketing target. Second, children are an influencer market where their parents, people around them, and the child are the primary targets for product marketing. Children do not have the power

to buy what they want, but they have the power to influence those around them to buy what they want. Not only do children enjoy making regular consumption decisions with their parents, but they also have a desire to purchase the products they want. Since children are customers and impact family purchases, marketers have targeted them since the early 1990s, according to Caruana and Vassallo (2003). Because older children have stronger cognitive capacities, the child's age is a crucial aspect that determines how much of an influence they have in family decision-making (Piaget, 1970). Third, children are a future market. In this type, a child becomes a potential marketing target in the future; if we look at Indonesia's population statistics in 2022, of the total population, namely 272,682,515, 29.15% or 79,486,424 are children aged 0 - 17 years, with great potential to be seen as consumers who can influence the purchasing decision-making process as in the three market types. child above. If we look more deeply, based on gender and location, the top 5 domestic tourists, according to BPS 2022 data, are shown in the table below.

Table 1. Number of residents aged 0-17 years (men and women) based on the 5 provinces with the highest number of domestic tourists

Source: (central statistical agency, processed in-house)

No	Provinsi	Usia 0 - 17 tahun (2022)	
		Laki-laki	Perempuan
1	Jatim	5,321,769	5,066,998
2	Jateng	5,025,907	4,771,062
3	Jabar	7,281,114	6,906,246
4	DKI Jakarta	1,483,591	1,414,668
5	Banten	1,901,670	1,804,720

Regarding children as potential consumers in tourism, appropriate tourist attraction products are needed for children. Apart from being fun, this attraction also benefits children's development. One of the cultural products that has the potential to become a tourist attraction product is traditional games. Traditional games have many positive benefits for players that researchers have found in previous studies. Introverted kids may be more motivated and open when playing conventional games in a group setting, according to research by Trajkovic

et al. (2018) which examined the association between personality traits and student motivation. Increasing motivation and openness is essential for developing children's personalities to create positive self-motivation and open-mindedness for their environment. Another benefit stated by Rizal et al., 2019, is that traditional games can educate elementary school students on how to deal with disasters. Providing education about something that may not be fun but by playing. In research by Febrianty et al., 2021, it was stated that traditional games have a big influence on changes in polite character in children. So traditional games can change and improve children's polite character, which is currently a polite crisis. Children's social skills, including collaboration in games, communication and care for others, and social and personal responsibility, can be developed through the classic game "Gobak Sodor" (Irmansyah et al., 2020). It's possible that playing traditional Javanese games would help kids become more adept at solving problems (Iswinarti et al., 2019). Because of socialization and enculturation through games, traditional children's activities preserve positive values that demonstrate the existence and longevity of local culture. Thus, traditional games are vital in the moral, emotional, and character development of the country's youth; additionally, playing games is an enjoyable way to acquire new skills and abilities (Iswinarti, 2020).

There have been changes in rural communities, where people in these locations are usually very accustomed to cultural values regarding social life, cultural and religious aspects, and the habits of children who always play traditional games using materials. around him as a medium for playing. Meanwhile, nowadays, even young people are unfamiliar with traditional dances and musical instruments. Likewise, traditional games passed down from previous generations to the next have begun to fade (Husein, 2021). In Muslimin et al.,

2021, the disappearance of several traditional games was caused by several factors, both human and environmental factors. (Tedi, 2015 on Muslihin et al., 2021) said that the causes of the disappearance of traditional games were (1) There were no playing facilities and places; (2) There was a narrowing of time; (3) Pressured by modern games abroad that could be played at any time; and (4) Cultural inheritance is interrupted because there is no time to record, record and socialize it as a community cultural product to the generations below.

Therefore, according to Dadan's 2020 research, strategic efforts that can be made to preserve traditional children's games are to make them tourism assets. The important thing that can be done in this effort is first to carry out an inventory and documentation of the various existing traditional children's games. This inventory and documentation are carried out as a development and database stage in determining the development priority scale. Arya, 2015, in his research on traditional games, said that the issue of regeneration is a critical point to pay attention to to maintain the continuity of traditional games in Denpasar. Effort and attention are needed to regenerate and preserve traditional Balinese game artists. One effort can be made to integrate traditional Balinese games into local content by holding traditional game festivals that attract the attention of local communities and even tourists to participate.

LITERATURE REVIEW

John Nelson Warfield developed a participant-group technique known as Interpretive Structural Modeling (ISM) in the early 1970s, during which he devised an algorithm for creating directed graphs, or digraphs (Warfield, 2003). American systems scientist Warfield (November 21, 1925 – November 17, 2009) taught at George Mason University and oversaw the Institute for Advanced Study in the Integrative Sciences (IASIS). He also served as

president of the Systems, Man, and Cybernetics Society (Warfield, 2003a and 2003b). Warfield introduced his concepts in a 1974 paper by the Battelle Memorial Institute. He then expanded on them in his book *Societal Systems: Planning, Policy, and Complexity*. His book *The Mathematics of Structure* (Warfield, 2003c) contains a mathematical section.

However, Porter et al. (1980) contend that the ISM technique has some drawbacks, including the fact that it is simplistic, weak, and only finds static relationships—rather than dynamic ones. It is also qualitative rather than quantitative. Of course, ISM fanatic decision-makers never agreed with that criticism. ISM is used to structure the elements of a complex problem, say various strategic objectives of an organization or a program plan consisting of several elements, starting from elements of the social sector affected to the institutions involved in implementing the program. By using ISM, it can be understood how the various elements are interrelated and, therefore, can help organizations structure organizational goals meaningfully. Structuring helps organizations solve problems by breaking them down into minor elements with a bottom-up approach. The relationships between elements are stored in a matrix framework and then converted into a digraph with the help of computer software by Thakkar et al., 2005, 2008a and 2008b.

Systematic analysis of program planning is important so that its implementation is practical and useful for meeting community needs, now and in the future. A program plan is split into nine components for this reason, as explained by Hill and Warfield (1972) in the following ways: (1) Affected social sectors Second, program needs; Third, major constraints; Fourth, possible changes (alterables that could be changed); Fifth, program objectives (objectives of the program); Sixth, objective metrics to assess every goal; Seventh, activities required for the action plan; Eighth, activity metrics to assess the outcomes attained from every

action; and Ninth, organizations engaged in carrying out the program (agencies participating in program execution). Every element is further broken down into some sufficient sub-elements. The study of program planning links provides an in-depth comprehension of the concerns surrounding the several components taken into account, the function of the institutions, and the grasp of the problem. It creates a comprehensive strategy that results in acceptable (better and acceptable solutions). However, the methodology's effectiveness still needs to be developed due to consideration of the hierarchical relationship between various sub-elements of an element by Hawthorne et al., 1975; Waller, 1980; and Saxena et al., 1992.

For a thorough grasp of the complicated issues faced, it is essential to comprehend hierarchy, driver power and reliance, and the classification of sub-components into different variable categories that describe the features of program elements. ISM offer the basis for this kind of analysis. The data gathered from this research is useful for developing company strategy plans and policy formulation by Saxena et al., 1992; and Sarkis, 1999.

Identifying the structure of a system is essential when decision-makers engage with the system effectively and make better decisions. structural models, such as intent structures (Warfield, 1972 and 1973b), delta charts (Warfield, 1971), interaction matrices and graphs (Warfield, 1973), and signal flow graphs.

It is known that in the decision science literature, three contemporary techniques are widely used in modelling and Multi-Criteria Decision Making (MCDM) (Chung et al., 2005; and Darmawan, 2013), namely (a) ISM, (b) AHP (Analytic Hierarchy Process), and (c) ANP (Analytic Network Process). Generally, problem-solving individuals or groups have difficulty dealing with complex issues or systems. The existence of some system elements and the interactions between these elements causes the

complexity of a problem or system. The articulation of the system structure is complicated by the existence of related elements, either directly or indirectly. Therefore, it is necessary to develop a methodology that can help identify the structure of a system. ISM is such a methodology (Raj et al., 2007).

Table 2. The element is based on Hill dan Warfield (1972)

Researcher	Element
Hill dan Warfield (1972)	1. Societal sectors affected
	2. Need of the program
	3. Major constraints
	4. Objectives of the program
	5. Activity measures to evaluate the results achieved from each activity
	6. Activities needed for the action plan
	7. Agencies involved in the execution of the program

Of the 9 (nine) elements of program planning analysis by Hill and Warfield, 4 (four) elements were taken to measure the condition of the existing elements in traditional game cultural tourism attractions, namely (1) Actors; (2) Need; (3) Constraints; and (4) Action Plan. Because the ISM methodology is interpretive, in this case, the expert group will decide whether and how the elements are related and structured based on the relationship between the driving (enabler/driver) and the driven (dependent) indicators. So these 4 (four) elements were submitted in the form of an ISM questionnaire to 5 (five) categories of experts representing the pentahelix, namely, (1) Government; (2) Academics; (3) Community; (4) Business; (5) Media.

MATERIALS & METHODS

Types of research

This type of research is Qualitative Descriptive research. Qualitative Descriptive Research is one type of research method that relies on data obtained by researchers from direct observation, interviews, questionnaires, focus groups, observations of research participants, recordings, documents and others.

The research was conducted using a descriptive qualitative method with the help of ISM to calculate and determine the results

of each element most influential in the development of traditional game cultural tourism attractions.

Research Design

The research design will be useful to all parties involved in the research process. The research design aims to analyze data to answer the research objectives. This study used a Descriptive research design.

Sample

Purposive sampling, a non-probability sampling technique, was employed in this investigation. Purposive sampling is one technique for determining samples through specific sources.

Informer/Resource Person

Is someone who has expertise and position (public officer) related to the object of research, namely research on traditional game cultural tourism attraction in the tourism villages of Durensari, Trenggalek, and Kampung Dolanan Borobudur, Magelang. The informants in this study came from direct interviews referred to as sources.

Data Collection Techniques

1. Observation
2. Interview
3. Filling out Questionnaires using the ISM method
4. Documentation

Analysis Methods

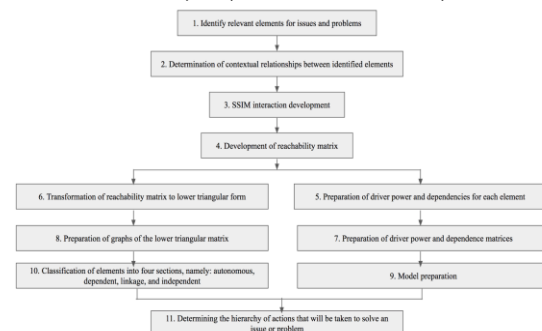
The ISM technique, a tried-and-true methodology for defining problems or concerns through correlations between particular variables, is used in this study's data analysis (Sage, 1977; Jharkharia and Shankar, 2005). This approach is used by many intellectual workers (knowledge work) to represent the inter-relationships between various elements related to this problem. First, the ISM approach determines which variables are pertinent to the problem or issue. Subordination relationships that are pertinent to the situation are then chosen. A

Structural Self-Interaction Matrix (SSIM) was created based on pairwise variable comparisons once the contextual relationship had been determined. After that, the SSIM is converted into a Reachability Matrix (RM) and its adherence to transitivity regulations is confirmed. A matrix model is produced upon the fulfilment of the transitivity requirements. Following the partitioning of the elements, the ISM structural model is extracted (Attri et al., 2013).

A program plan must be thoroughly examined for its implementation to be useful in addressing present and future community requirements. A program plan is split into nine components for this reason, as explained by Hill and Warfield (1972) in the following ways: These include (a) the social sectors impacted; (b) the program's needs; (c) major constraints; (d) potential changes (alterables that could be changed); (e) the program's objectives; (f) the objective metrics to assess every goal; (g) the tasks necessary to complete the action plan; (h) the activity metrics to assess the outcomes attained by every action; and (i) the agencies carrying out the program's implementation (agencies involved in program execution).

A thorough understanding of the complicated issues requires understanding hierarchy, driving power, dependence, and the classification of sub-components into different variable categories that indicate the qualities of program elements. This study is based on ISM; the data gathered from this research is useful for developing company strategy plans and policy formulation (Saxena et al., 1992; Sarkis, 1999).

Figure 1. ISM Model Preparation Methodology
Source: (ISM, Dwi Putra Darmawan)



RESULT AND DISCUSSION

Research Hierarchy

The following are the results of data processing using the ISM (Interpretive Structural Modeling) application, which is used as strategic planning material for a sustainable and quality traditional game cultural tourism attraction model.

The ISM approach is used to identify strategic planning for four study areas that are relevant to the model for creating high-quality, sustainable traditional gaming cultural tourism attractions, namely: (1) Element of Actor; (2) Elements of Needs; (3) Element of Constraints; (4) Element of Action Plans. These elements were taken and selected to be adjusted based on research by Hill and Warfield (1972) in terms of strategic planning that was being carried out. The sub-elements developed from each of the elements specified above were discussed with five traditional game culture tourism attraction managers and one traditional game culture expert. Discussing the elements with the five parties produced sub-elements for each element.

In the Actor Element, the actors involved in traditional game cultural tourism attraction activities who are also part of the Pentahelix Tourism Element are: (1) Ministry of Tourism and Creative Economy (government); (2) Ministry of Education and Culture Research and Technology (government); (3) Ministry of Youth and Sports (government); (4) Regional Tourism Office (government); (5) Regional Culture Service (government); (6) Regional Sports Service (government); (7) Village Head (government); (8) Pokdarwis (community); (9) Tour Guide (community); (10) Cultural Activists (community); (11) Tourist Attraction Manager (business); (12) Homestay accommodation (business); (13) Academics; (14) Local Media; (15) Travel Agent (business).

In the Needs Element, the needs recognized by managers of traditional game cultural attractions are (1) Game equipment that is inadequate in number and condition; (2)

Very little publicity or promotion of traditional games; (3) Funding support for care/maintenance of traditional gaming facilities; (4) Adequate location for carrying out traditional game activities; (5) Training for human resources managing traditional games; (6) Development of traditional game tour packages.

In the Elements of Constraints, the obstacles to the development and management of traditional game cultural tourism attractions that can be identified are: (1) Starting from limited basic materials for making tools for several traditional games; (2) Difficulty in the cadre formation of cultural activists; (3) Limited government facilitation; (4) Limited human resources who understand traditional games; (5) Limited promotion of traditional games; (6) Lack of support from tourism stakeholders.

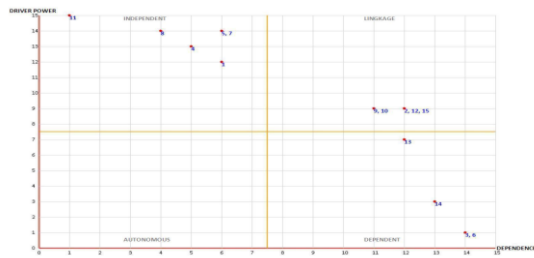
In the Action Elements or action plan, the reactions in the development and management of traditional game cultural tourism attractions that the managers can recognize are: (1) Holding a children's dolanan festival; (2) Carrying out promotions and publications; (3) Regularly holding cultural performances; (4) Networking and collaborating; (5) Conduct traditional game tourism education; (6) Making tour packages for school children.

Table 3. ISM Final Matrix Element Actor
Source: (ISM Application, processed in-house)

	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	DP	R	
A1	1	1	1	0	1	1	1	0	1	1	0	1	1	1	1	12	4	
A2	0	1	1	0	0	1	0	0	1	1	0	1	1	1	1	9	5	
A3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	8	
A4	1	1	1	1	1	1	1	0	1	1	0	1	1	1	1	13	3	
A5	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	14	2	
A6	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	8	
A7	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	14	2	
A8	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	14	2	
A9	0	1	1	0	0	1	0	0	1	1	0	1	1	1	1	9	5	
A10	0	1	1	0	0	1	0	0	1	1	0	1	1	1	1	9	5	
A11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15	1	
A12	0	1	1	0	0	1	0	0	1	1	0	1	1	1	1	1	9	5
A13	0	1	1	0	0	1	0	0	0	0	0	1	1	1	1	7	6	
A14	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	3	7	
A15	0	1	1	0	0	1	0	0	1	1	0	1	1	1	1	9	5	
D	6	12	14	5	6	14	6	4	11	11	12	12	13	12				
L	5	3	1	6	5	1	5	7	4	4	8	3	3	2	3			

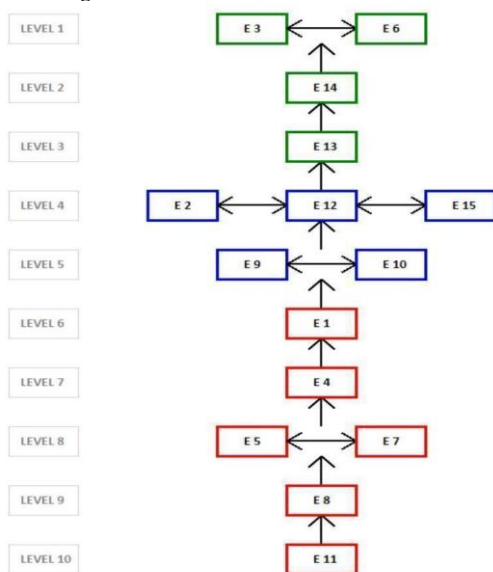
In the table above, the highest power driver or key element, an actor who plays a significant role in encouraging sustainable and quality traditional game cultural tourism attractions, is A11 = Traditional Game Attraction Manager. The next actor with the second highest encouragement is A5 = Regional Culture Service, A7 = Village Head, and A8 = Pokdarwis.

Figure 2. ISM Actor Element Graph



The following graph shows that the sub-elements of managing traditional game culture tourism attractions are in the independent sector, which has the highest driving force in creating sustainable and quality traditional game culture tourism attractions, in sequence, namely A11 = Tourist attraction manager, A8 = Pokdarwis, A5 = Dinas Regional Culture, A7 = Village Head, A4 = Regional Tourism Office, A1 = Ministry of Tourism and Creative Economy. Other actors in the Linkage quadrant are A9 = Tour Guide, A10 = Cultural Activist, A2 = Ministry of Education and Culture Research and Technology, A12 = Accommodation and Homestay, and A15 = Travel Agent. In the Dependent quadrant/sector, A13 = Academics, A14 = Local Media, A3 = Ministry of Youth and Sports, and A6 = Regional Sports Service. Meanwhile, in the Autonomous quadrant, there are no sub-elements involved.

Figure 3. ISM Structure Element of Actor



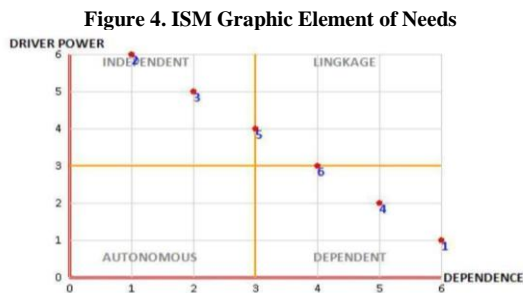
The results of the actor structure show that E11 = Traditional game tourism attraction manager is at the highest level, namely level 10, which means that this actor is needed to implement traditional game cultural tourism attractions. At level 9, there is E8 = Pokdarwis, where actors who can help encourage the implementation of traditional game cultural tourism attractions are elements of strengthening Pokdarwis and their collaboration with tourist attraction managers. At level 8, 2 actors are simultaneously needed, namely E5 = Regional Cultural Service and E7 = Village Head; these are jointly needed at level 8 to work together in facilitation and policy. The actor at the next level is E4 = Regional Tourism Office; this regional tourism office is needed at level 7 to collaborate in facilitation and policy in realizing traditional game cultural tourism attractions. At level 6, there is E1 = Ministry of Tourism and Creative Economy, and cooperation is needed in terms of facilitation and policy to create traditional game cultural tourism attractions.

Table 4. ISM Final Matrix Elements of Needs
Source: (ISM Application, processed in-house)

NO	A1	A2	A3	A4	A5	A6	DP	R
A1	1	0	0	0	0	0	1	6
A2	1	1	1	1	1	1	6	1
A3	1	0	1	1	1	1	5	2
A4	1	0	0	1	0	0	2	5
A5	1	0	0	1	1	1	4	3
A6	1	0	0	1	0	1	3	4
D	6	1	2	5	3	4		
L	1	6	5	2	4	3		

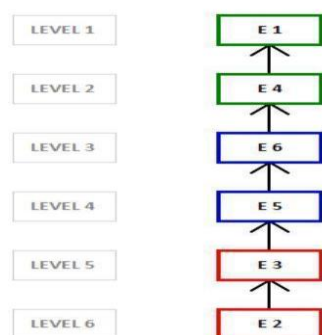
In the table above, the highest power driver or critical element, which is a need that play a vital part in encouraging the running of sustainable and quality traditional game cultural tourism attractions, A2 = Publication or promotion of traditional games is very lacking. The following need with the second highest drive is A3 = Funding support for maintenance/maintenance of traditional gaming facilities. The third encouragement is A5 = Training for human resources managing traditional games. Fourth push A6 = Development of traditional game tour packages. Fifth encouragement A4 = Adequate location for carrying out traditional

game activities. The final push is A1 = Game equipment that is inadequate in quantity and condition.



The following graph shows that the sub-elements of managing traditional game cultural tourism attractions are in the independent sector, which has the highest driving force in creating sustainable and quality traditional game cultural tourism attractions, in sequence, namely A2 = Publication or promotion of traditional games is very lacking, A3 = Funding support for care/maintenance of traditional gaming facilities. Other needs in the Linkage quadrant are A5 = Training for human resources managing traditional games, A6 = Development of traditional game tourism packages. In the Dependent quadrant/sector, namely A4 = Adequate location for carrying out traditional gaming activities, A1 = Inadequate gaming equipment in quantity and condition. Meanwhile, in the Autonomous quadrant, there are no sub-elements involved.

Figure 5. Structure Element of Needs



The results of the Needs structure show that A2 = Publication or promotion of traditional

games, which is very lacking, is at the highest level, namely level 6, which means that this need is needed to implement cultural tourism attractions for traditional games. At level 5, there is A3 = Funding support for the care/maintenance of traditional gaming facilities. At level 4, there is A5 = Training for human resources managing traditional games. The need at level 3 is A6 = Development of traditional game tour packages. At level 2, there is A4 = Adequate location for carrying out traditional game activities. And at level 1, namely A1 = Game equipment that is inadequate in quantity and condition.

Table 5. ISM Final Matrix Elements of Constraints
Source: (ISM Application, processed in-house)

NO	A1	A2	A3	A4	A5	A6	DP	R
A1	1	0	0	0	0	0	1	6
A2	1	1	0	0	0	0	2	5
A3	1	1	1	1	1	1	6	1
A4	1	1	0	1	1	0	4	3
A5	1	1	0	0	1	0	3	4
A6	1	1	0	1	1	1	5	2
D	6	5	1	3	4	2		
L	1	2	6	4	3	5		

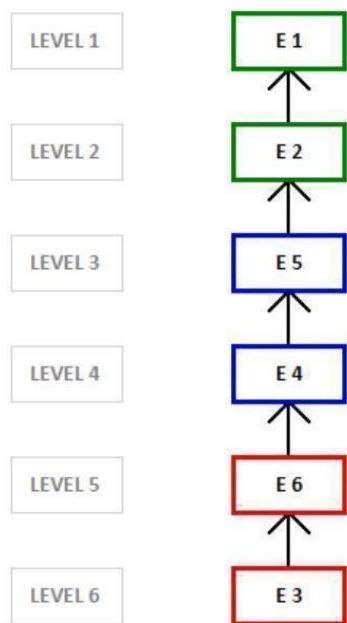
In the table above, the highest power driver or critical element, an obstacle that play a vital part in encouraging the running of sustainable and quality traditional game cultural tourism attractions, is A3 = Limited government facilitation. The next obstacle with the second highest motivation is A6 = Lack of stakeholder support. The third push is A4 = Limited human resources who understand traditional games. Fourth push A5 = Limited promotion of traditional games. Fifth push A2 = Difficulty in the cadre formation of cultural activists. And the final push is A1 = Limited basic materials for making traditional games.\

Figure 6. ISM Graphic Element of Constraint



The following graph shows that the sub-elements of obstacles to traditional game culture tourism attractions are in the independent sector, which has the highest driving force in creating sustainable and quality traditional game culture tourism attractions, in sequence, namely A3 = Limited government facilitation, A6 = Lack of stakeholder support. Other needs in the Linkage quadrant are A4 = limited human resources who understand traditional games, and A5 = limited promotion of traditional games. In the Dependent quadrant/sector, namely A2 = Difficulty in the cadre of cultural activists, A1 = Limited basic materials for making traditional games. Meanwhile, in the Autonomous quadrant, there are no sub-elements involved.

Figure 7. ISM Structure Element of Constraint



The results of the Constraint structure show that E3 = Limited government facilitation is at the highest level, namely level 6, which means that this constraint is the main obstacle. At level 5, there is E6 = Lack of support from tourism stakeholders. At level 4, there is E4 = Limited human resources who understand traditional games. The need at level 3 is E5 = Limited promotion of traditional games. At level 2, there is E2 =

Difficulty in the cadre of cultural activists. At level 1, E1 = Started to be limited in basic materials for making tools for several traditional games.

Table 6. ISM Final Matrix Elements of Action Plan
Source: (ISM Application, processed in-house)

NO	A1	A2	A3	A4	A5	A6	DP	R
A1	1	1	1	0	1	1	5	2
A2	0	1	1	0	0	0	2	3
A3	0	1	1	0	0	0	2	3
A4	1	1	1	1	1	1	6	1
A5	1	1	1	0	1	1	5	2
A6	1	1	1	0	1	1	5	2
D	4	6	6	1	4	4		
L	2	1	1	3	2	2		

In the table above, the highest power driver or critical element, a reaction that plays a significant role in encouraging the running of sustainable and quality traditional game cultural tourism attractions, is A4 = Networking and collaborating. The following reaction that has the second highest motivation is A5 = Carrying out traditional game tourism education, A6 = Making tour packages for school children, and A1 = Holding a children's play festival. The third encouragement is A2 = Carry out promotions and publications, and A3 = Regularly hold cultural performances.

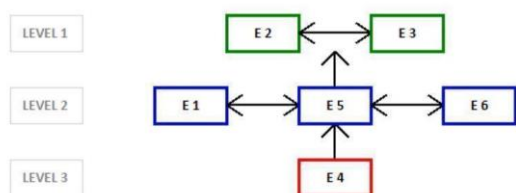
Figure 8. ISM Graphic Element of Action Plan



The following graph shows that the sub-elements of the Action Plan for traditional game cultural tourism attractions are in the independent sector, which has the highest driving force in creating sustainable and quality traditional game cultural tourist attractions in sequence, namely A4 = Networking and collaborating. Other reactions in the Linkage quadrant are A1 = Holding a children's play festival, A5 =

Carrying out traditional game tourism education, and A6 = Making tour packages for school children. In the Dependent quadrant/sector, A2 = Carry out promotions and publications, A3 = Regularly hold cultural performances. Meanwhile, in the Autonomous quadrant, there are no sub-elements involved.

Figure 9. ISM Structure Element of Action Plan



The results of the Action Plan structure show that E4 = Networking and collaborating is at the highest level, namely level 3. At level 2, there are three sub-elements, namely E1 = Holding a children's play festival, E5 = Carrying out traditional game tourism education, and E6 = Making tour packages for students. At level 1, there are two sub-elements, namely E2 = Promotion and Publication, and E3 = Regularly holding cultural performances.

DISCUSSION

For any element, the independent quadrant with the strongest driving force is (1) the Actor Element is the Attraction Manager; (2) Elements of Need are Publication and Promotion; (3) Constraint Elements are Limited Government Facilitation; (4) Elements of the Action Plan are Networking and Collaboration.

Based on the research results using ISM (Interpretive Structural Modeling), the Actor with the highest driving force is the Attraction Manager. This follows research by Novanda et al., 2019 on the level of role involvement between actors as key players in the tourist attraction manager/developer/private sector and the tourism department. Also, in research by Rayi et al., 2016, attraction managers are the actors who play a dominant role in

development, where all initiatives come from the manager, and the manager plays a role in procuring tourist packages and implementing development. According to research by Oktavilia et al., 2023, tourism managers, tourism business actors, and MSME players are the actors with the most influence and dependence in the post-pandemic development strategy for the Borobudur Area tourist town.

Regarding the needs element, the highest driving force is publicity and promotion. According to Kartika et al. (2023), the study's findings suggest that strategies should be developed to map tourism based on potential, improve branding through digital promotions, improve intersectoral collaboration in the administration of tourism villages and offer human resource training in areas like tour guide and destination management. The most profitable industry in Ghorepani, according to research by Baral et al., 2022, is tourism, and advancing this sector's promotion can help raise the village's overall social and economic standing. This discovery may have wider ramifications than just the case study; it implies that tourism can significantly improve the nation's socioeconomic standing if it takes centre stage in other comparable mountainous communities. Also, in research by Susila et al., 2021, the priority strategies based on QSPM (Quantitative Strategic Planning Matrix) analysis were: 1st rank is Promotion, 2nd is Community Participation, 3rd is Tourist Destination Planning, and the 4th is Human Resource Development.

Limited government facilitation is the main motivating factor in the constraint element. According to Mahardika et al. (2021), accessibility, amenities, infrastructure, marketing, a lack of institutions, and human resources are among the development restrictions on the Timpag Tourism Village Tabanan Regency. According to Madalena et al. (2021), there are dangers and limitations in the form of less skilled human resources who have not engaged fully, a lack of public facilities and assistance, and a lack of

promotional initiatives. According to Juniasa et al. (2022), inadequate roads, restrooms, parking and other supporting facilities are among the infrastructural issues that must be addressed.

On the elements of the Action Plan, the highest driving forces are Networking and Collaboration. According to Dewi et al. (2023), there are still gaps in the collaborative governance dynamics used in Badung Regency to establish sustainable tourism villages based on local knowledge. This disparity results from statistics showing that the government continues to play a prominent role and from delays in converting current policies into regional action plans. This disparity is evident from the collaboration's success indicators, which are based on institutional agreements and are defined by vague common pledges that don't go into great detail to support each stakeholder's performance goals. According to Saputra 2020, the Yogyakarta community-based tourism village development cooperation's collaborative process does not function in concert with one another and does not fully execute the concepts of collaboration. According to Rachman et al. (2022), it is the responsibility of the local and regional governments to initiate collaboration with other stakeholders while acknowledging their participation in their projects.

CONCLUSION

The research findings indicate that the following are needed to develop traditional game cultural tourism attractions in the villages of Durensari Trenggalek and the Kampung Dolanan Borobudur Magelang:

1. Element of Actor, the most important actor in this element is the Manager of Traditional Game Cultural Tourism Attractions
2. Element of Need is the need for Publication and Promotion of Traditional Game Cultural Tourism Attractions, so this tourism attraction can be known as a

tourism product that has advantages and benefits for tourists

3. Elements of Constraints, the main obstacle is the limited support and facilitation from regional and central governments
4. Elements of the action plan require cooperation and collaboration between stakeholders in traditional game tourism attractions

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REFERENCES

1. Attri R, Dev N and Sharma V (2013), Interpretive Structural Modeling (ISM) approach: an overview, *Research Journal of Management Sciences*, vol. 2 no. 2, pp.3-8.
2. Baral, R., & Rijal, D. P. (2022). Visitors' impacts on remote destinations: An evaluation of a Nepalese mountainous village with intense tourism activity. *Heliyon*, 8(8). <https://doi.org/10.1016/j.heliyon.2022.e10395>
3. Caruana, A., & Vassallo, R. (2003). Children's perception of their influence over purchases: The role of parental communication patterns. *Journal of Consumer Marketing*, 20(1), 55–66. <https://doi.org/10.1108/07363760310456955>
4. Chung S, Lee A and Pearn W (2005), Analytic network process (ANP) approach for product mix planning in semiconductor fabricator, *International Journal of Production Economics*, vol. 96 iss. 4, pp. 15-36.
5. Darmawan D P (2013), *Decision science: 21 model pengambilan keputusan manajerial*, Liberty, Yogyakarta.
6. Dewi, N. L. Y., Supriyono, B., Wijaya, A. F., & Rochmah, S. (2023). Local Wisdom-Based Sustainable Tourism Village Development Collaboration in Badung Regency. *International Journal of Science and Society*, 5(3), 134–143. <https://doi.org/10.54783/ijssoc.v5i3.724>

7. Dadan, S., & Widodo, B. (2020). Revitalization and Conservation of Traditional Children's Games as a Tourism Development Strategy Based on Local Wisdom in Banyumas Regency. *Gulawentah: Jurnal Studi Sosial*, 5(2), 107. <https://doi.org/10.25273/gulawentah.v5i2.6853>
8. Febrianty, C. A., & Nugrahanta, G. A. (2021). Traditional games and their contribution to the respectful character in children. *Jpsd*, 7(2), 157–171.
9. Fransisca, Y., & Kurniawan Purnomo, A. (2019). Factors affecting the purchasing decision of the Millennial Muslim Generation: A review of personality destination, brand attractiveness, and brand awareness. *Mbia*, 18(2), 1–20.
10. Hawthorne R W and Sage A P (1975), "On applications of interpretive structural modeling to higher education program planning", *Socio-Economic-Planning-Sciences* vol.9, pp 31-43.
11. Hill J D and Warfield J N (1972), "Unified Program Planning", *IEEE Transactions on Systems, Man, and Cybernetics*, vol. 2 no. 5, pp. 610-621.
12. Husein MR, M. (2021). Luntarnya Permainan Tradisional. *Aceh Anthropological Journal*, 5(1), 1. <https://doi.org/10.29103/aaj.v5i1.4568>
13. Ida Bagus Mahardika A. P., Ida Bagus Gde Pujaastawa, I Wayan Suwena (2021). Village Development Towards a Tourism Village in Timpag Village, Tabanan Regency. *Journal of arts and humanities* 3(5). <http://theartsjournal.org/index.php/site/article/view/478/270>]
14. Irmansyah, J., Lumintuarso, R., Sugiyanto, F. X., & Sukoco, P. (2020). Children's social skills through traditional sport games in primary schools. *Cakrawala Pendidikan*, 39(1), 39–53. <https://doi.org/10.21831/cp.v39i1.28210>
15. Iswinarti, & Suminar, D. R. (2019). Improving children's problem-solving skills through javanese traditional games. *Cakrawala Pendidikan*, 38(3), 578–589. <https://doi.org/10.21831/cp.v38i3.25331>
16. Iswinarti - *Model of Increasing Children's Moral Development Through Traditional Games*. 2020. *Bildung*.
17. J. N. Warfield, "The Mathematics of Structure," AJAR, Publishing Company, 2003.
18. Jharkharia S and Shankar R (2005), "IT-Enablement of supply chains: understanding the barriers", *Journal of Enterprise Information Management*, vol. 18 no. 1, pp.11-27.
19. Juniasa, I. D. N., Umbas, R., Sugiantiningsih, A. A. P., Merta, I. N., Yunita, I. M., & Mertaningrum, N. L. P. E. (2022). Potential, Constraints and Farmers' Expectations of Subak Anggabaya as Agrotourism. *Jurnal Ilmiah Dinamika Sosial*, 6(2), 207–215. <https://doi.org/10.38043/jids.v6i2.3603>
20. Kartika, T., & Muchtar, A. (2023). Strategi Pengembangan Desa Wisata. *Jurnal Ekonomi Dan Bisnis*, 2(1), 20–25. <https://doi.org/10.57151/jeko.v2i1.154>
21. Kurniawati. (2023). Actors' Interaction in Developing Village Tourism: A Case of Borobudur Tourism. *International Journal of Integrative Sciences*, 2(11), 1799–1812. <https://doi.org/10.55927/ijis.v2i11.6938>
22. Mcneal, J. U., & ji, M. F. (2003). Children's visual memory of packaging. *Journal of Consumer Marketing*, 20(5), 400–427. <https://doi.org/10.1108/07363760310489652>
23. Muslimin, T. P., & Rahim, A. (2021). Ethnomathematics of Makassar Children's Traditional Games as a Media for Learning Geometry for Elementary Students.
24. Muslihin, H. Y., Respati, R., Shobihi, I., & Shafira, S. A. (2021). Kajian Historis dan Identifikasi Kepunahan Permainan Tradisional. *Sosial Budaya*, 18(1), 36. <https://doi.org/10.24014/sb.v18i1.11787>
25. Porter A L, Rossinni F, Carpenter S R, Roper A T, Larson R W, and Tiller J S (1980), *A guidebook for technology assessment and impact analysis*, North Holland, New York.
26. Rai Madalena, A., Herindyah Kartika Yuni, L., Wayan Mekarini, N., & Tinggi Pariwisata Triatma Jaya Badung halloiniagnes, S. (2021). Strategy for Development of Pinge Village as a Tourist Village in Marga District, Tabanan Regency, Bali. *Journal of Tourism and Interdisciplinary Studies (JoTIS)*, 1(2), 143.
27. Rizal, E., Lies Siti Khadijah, U., Sri Rejeki, D., M Hadian, S., & Khairul Anwar, R. (2019). *Traditional Game As The*

- Communication Media In Delivering Message About How To Resolve The Disaster*. 203(Iclick 2018), 166–170. <https://doi.org/10.2991/iclick-18.2019.34>
28. Restu Rayi A B, Danang Arif Darmawan. (2023). The Role of Actors in the Development of the Dome House Tourism Village (Study of the Role of the Sumberharjo Village Government, Community and Managers in the Development of the Dome House Tourism Village in Sengir Hamlet, Sumberharjo Village, Prambanan, Sleman, Yogyakarta). *Universitas Gadjah Mada, 2023 | Diunduh dari <http://etd.repository.ugm.ac.id/>. 1, 97–102*
 29. Rais Rachman, K., Edwardlis, O., Rahmanita, M., & Heny, H. R. (2022). The Role of Tourism Supply Chain Stakeholders in Tourism Development in Sedari Village. *Tourism Scientific Journal*, 7(1), 1–14. <https://doi.org/10.32659/tsj.v7i1.140>
 30. Raj T, Shankar R and Suhaib M (2007), An ISM approach for modelling the enablers of a flexible manufacturing system: the case for India, *International Journal of Production Research*, vol. 46 no. 24, pp. 1-30.
 31. Sarkis J (1999), “A methodological framework for evaluating environmentally conscious manufacturing programs”, *Computer Industrial Engineering*, vol. 36, pp. 793-810.
 32. Sage A P (1977), *Interpretive structural modelling: methodology for large-scale systems*, McGraw-Hill, New York, pp. 91-164.
 33. Saxena, J. P., & Vrat, P. (1992). Hierarchy and Classification of Program Plan Elements Using Interpretive Structural Modeling: A Case Study of Energy Conservation in the Indian Cement Industry. In *Systems Practice* (Vol. 5, Issue 6).
 34. Saputra, D. (2020). Governance of Community-Based Tourism Village Development Collaboration. *GOVERNMENT: Jurnal Ilmu Pemerintahan*, 13, 85–97. <https://doi.org/10.31947/jgov.v13i2.10741>
 35. Shanty Oktavilia, Indah Fajarini Sri Wahyuningrum, Sri Utami, Sri Hestiningsih Widiyanti, Wiwin Widiastuti, & Herlina
 36. Yusuf F Novanda, Lena Satlita. (2019). Role of Actors in Managing Goa Jlamprong as a Village Attraction of Mojo Tourism in Ngeposari Semanu Gunungkidul. *Journal of Public Policy and Administration Research*, Vol 4 No 1 (2019), <https://journal.student.uny.ac.id/index.php/joppar/article/view/19294>
 37. Susila, I. P., Sumantra, I. K., Sudiana, A. A., & Pandawani, N. P. (2021). Tourism Village Development Strategy Based On Local Resources In Ayunan Village, Abiansemal District, Badung Regency. *International Journal of Research -GRANTHAALAYAH*, 9(2), 108–119. <https://doi.org/10.29121/granthaalayah.v9i2.2021.3432>
 38. Trajkovik, V., Malinovski, T., Vasileva-Stojanovska, T., & Vasileva, M. (2018). Traditional games in elementary school: Relationships of student’s personality traits, motivation and experience with learning outcomes. *PLoS ONE*, 13(8), 1–15. <https://doi.org/10.1371/journal.pone.0202172>
 39. Thakkar J, Arun K and Deshmukh S G (2008a), “Evaluation of buyer-supplier relationships using integrated mathematical approach of Interpretive Structural Modelling (ISM) and graph theoretic matrix: the case study of Indian automotive SMEs”, *Journal of Manufacturing Technology Management*, vol. 19 no.1, pp. 92-124.
 40. Thakkar J, Arun K and Deshmukh S G (2008b), “Interpretive Structural Modelling (ISM) of IT enablers for Indian manufacturing SMEs”, *Information Management and Computer Security*, vol. 16 iss. 2, pp. 113-136.
 41. Thakkar J, Deshmukh S G, Gupta A D and Shankar R (2005), “Selection of Third-Party Logistics (3PL): a hybrid approach using Interpretive Structural Modeling (ISM) and Analytic Network Process (ANP)”, *Supply Chain Forum: An International Journal*, vol. 6 no. 1, pp. 32-46.
 42. Waller R I (1980), “Contextual relations and mathematical relations in interpretive structural modeling”, *IEEE Transactions on Systems, Man, and Cybernetics*, vol. 10 no. 3, pp. 143-145.
 43. Warfield J N (1971), “The DELTA chart—a method for R&D project portrayal”, *IEEE Transactions on Engineering Management*, pp. 132-139 (Correction, May 1972, p. 74).

44. Warfield J N (1972), "Intent structures", IEEE Transactions on Systems, Men and Cybernetics, vol. 3 no. 2, pp. 133-140.
45. Warfield J N (1973d), "An assault on complexity", Battelle Monograph, 3, Battelle Memorial Institute, Columbus, Ohio.

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