

## Research Article

# Relationship Model Based on the Value of Influence between Actors in Managing Tourism Villages

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## Abstract.

Lamajang Tourism Village has enormous potential in the tourism sector which is the capital of rural development. However, it is constrained by the lack of synergetic management amongst its stakeholders. To achieve sustainable development goals, it is important to determine how the actors involved in managing Lamajang Tourism Village are related. This research aims to map the strength of the relationship and the role of influential actors in the management of the Lamajang Tourism Village. The research method uses quantitative techniques with the help of MACTOR software. Questionnaires with the scoring method are used to collect data to measure the influence of the actors involved. The study results show that the Department of Culture and Tourism is the dominant actor, meaning it plays a significant role in cooperative and collaborative efforts to advance the Lamajang Tourism Village. PKK, Gapoktan, LMDH, and community leaders have weak influence and little dependence on other actors. This finding is useful in distributing roles and duties of actors that are more directed and do not overlap according to their legitimacy and power.

**Keywords:** MACTOR analysis, actors relationship, village tourism, actor analysis

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## 1. INTRODUCTION

The process of managing a tourism village involves various stakeholder actors. In an organizational context, stakeholders are individuals or community groups, or institutions that support each other because they have the same goals. Stakeholders involved in tourism village management activities are intertwined because they have relationships and are interrelated, both cooperative and conflict relations [1]. Effective and efficient cooperation between internal and external stakeholders is needed in the management of tourist villages. So that the common goals and benefits related to the process of designing development strategies, making ticket price policies, coordinating promotional and branding activities, increasing tourism awareness of managers, standardizing tourist facilities, and so on can be achieved [2].

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A tourist village is a village that has a unique cultural, natural, or historical attraction that is developed as a product and a tourist destination. Lamajang Tourism Village a culture- and eco-tourism-based tourism village is one of 10 tourism villages in Bandung Regency, which was formed in 2011. Lamajang Tourism Village has many tourism and cultural potentials such as Fajar Alam, Cikondang Traditional House, Batu Eon, Rafting Tourism, Cisada Windu Waterfall, Paseban, Prohibited Forest, Thousand Steps, Seed Nursery, Ornamental Fish Cultivation, and Water Reservoir, as well as several arts such as Tarawangsa, Karinding, Pecak Silat, Calung, Overtime Hajat Ceremony, Solokan Hajat, and Wuku Taun. However, this potential has not been managed optimally, and as a whole has not had a significant impact on the local community's economy. In addition, the management of tourism objects is still constrained, does not yet have competitiveness, and is underdeveloped so the status of Lamajang Village in 2023 is still categorized as a Pilot Tourism Village. Many factors become obstacles, including the lack of coordination between the tourism village management body and village institutions under the village government such as the Family Welfare Development Group (PKK) and Forest Village Community Institutions (LMDH) [3], in addition to the lack of real support from the village government regarding the funding budget for the development of the tourism sector in the Lamajang Tourism Village causing low enthusiasm for community involvement and a slow development process [4], another obstacle is related to the management of the Lamajang Tourism Village which is not sustainable because it always changes along with the change in village leadership. The Lamajang Tourism Village management institution was only reactivated towards the end of 2021 and is now developing a management system.

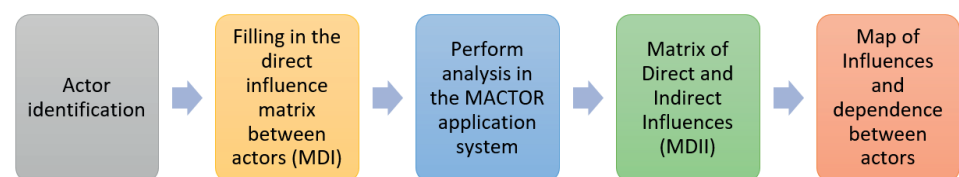
The potential of Lamajang Tourism Village must be managed optimally to provide economic, social, and environmental benefits for the local community. The collaboration of all stakeholders must be a priority to maintain cultural, social, and economic sustainability and increase the competitiveness and sustainability of the tourism industry [5]. The relationship between the roles of actors with one another will form a network known as the institutional model. Understanding the institutional model of a tourism village can help the manager of a tourism village make the necessary changes to improve its performance and quality in developing a sustainable tourism village [6].

Therefore, it is important to understand the role of each actor in tourism development. This article discusses the results of research on the analysis of the characteristics and behavior of the actors involved in managing the Lamajang Tourism Village. This research aims to identify the strength of the relationship between actors and to identify the roles of actors who have the most influence in making decisions on policy making. In this

paper, the MACTOR method is used to map the strength of relationships and the role of influential actors in the management of the Lamajang Tourism Village. This technique provides a useful tool for Lamajang Tourism Village management to map the distribution of roles and duties so that they are more focused and do not overlap according to their legitimacy and power.

## 2. METHOD

The research method uses quantitative methods. The use of a questionnaire with a scoring technique uses a scale of 0 (no effect) to 4 (very high influence on the existence of actors), as a medium for obtaining analytical input data so that each actor's assessment of the other actors involved can be identified. In addition, data collection to support analysis and discussion was obtained through interviews to obtain a descriptive picture of the roles and characteristics of the Lamajang Tourism Village stakeholders in relation to other stakeholders. Data analysis used the Mactor method (Matrix of Alliances and Conflicts Tactics, Objectives, and Recommendations) to identify the strengths, relationships, and patterns of stakeholder actor alliances [7][8]. In this study, the MACTOR application is used to map the strength of relationships and the roles of influential actors in the management of the Lamajang Tourism Village. The stages of conducting the research can be seen in Figure 1.



**Figure 1:** MACTOR Analysis Scheme.

The stages of conducting the research are as follows: 1. Actor identification (key informants); 2. Filling in the direct influence matrix between actors (MDI matrix); 3. Perform analysis in the MACTOR application system; 4. Matrix of Direct and Indirect Influences (MDII); 5. Map of Influences and dependence between actors.

The first step in conducting an actor analysis is to identify key informants by developing an initial list of potential and relevant participants [9]. The sample data is determined by the purposive sampling technique. Respondents involved were 13 actors as key informants, determined based on the following criteria: 1) are actors who understand issues regarding the conditions of Lamajang Village; 2) the actor has authority in managing the Lamajang Tourism Village; 3) knowing that there is a relationship between

actors in their working area; 4) have easy access to obtain data and communication; 5) have the ease of interacting with other actors; 6) at least serving as the head of the agency sector or chairman of a community group or village head who has served for at least 6 years. According to these criteria, the 13 actor respondents consist of internal actors and external actors. Formal actors within Lamajang Village include the village head, BPD, PKK, and BUMDes, while informal actors within the village include Gapoktan, LPMD, PDW, LAD, Karang Taruna, LMDH, and Tomas. The village’s external actors are the Camat and the Department of Culture and Tourism. A more detailed list of actors involved as respondents is presented in Table 1.

TABLE 1: Actors in The Management of Lamajang Tourism Village.

No	Actors	
1	Disbudpar	Departement of Culture and Tourism of Bandung Regency
2	Kades	Head of Lamajang Village
3	Camat	Pangalengan Sub District
4	BPD	Village Consultative Body
5	LPMD	Village Community Empowerment Institution
6	BUMDes	“Tirta Abadi” Lamajang Village-Owned Enterprise
7	PDW	Lamajang Tourism Village Management
8	PKK	Familiy Welfare Development
9	Gapoktan	Farmer Group Association
10	Karang Taruna	Youth Organization
11	LAD	Cikondang Customary Institution
12	LMDH	Forest Village Community Institution
13	Tomas	Community Leader

### 3. RESULTS AND DISCUSSION

Stakeholders involved in the management or development of tourist villages need to synergize and work together to improve the quality of tourism village management and the welfare of village communities [10]. Active and inclusive stakeholder engagement is believed to have a positive impact on sustainable tourism, support local participation, and promote empowerment [11]. Based on the results of observations and interviews, it was found that the respondents supported the Lamajang Tourism Village potential development program, although not all actors were involved. Implementation of governance is currently still constrained in terms of synergy and cooperation between

the actors involved. Mentoring activities for the development of tourist villages in Bandung Regency are carried out by the Department of Culture and Tourism which has tried to establish relationships with various stakeholders such as academics and other agencies in the relevant government environment. The Department of Culture and Tourism collaborates with academics through community service activities and lecturer research in the form of assisting in the development of tourist villages that have an impact on the local community's economy such as socialization activities on homestay standards, empowering MSMEs, and training on diversification of creative economic products. Meanwhile, the sub-district government is trying to involve institutions such as youth organizations, LAD, and arts associations according to their respective duties and functions. The village head involves the BPD and LPMD in physical development activities such as building roads and supporting amenities for tourism activities. Then for economic development, the village head collaborates with BUMDes regarding the management of homestays and souvenirs. Table 2 provides an explanation of the roles of each actor in managing the Lamajang Tourism Village.

TABLE 2: The Role of Actors in The Management of Lamajang Tourism Village.

No	Actors	Role
1.	Departement of Culture and Tourism of Bandung Regency (Disbudpar)	Formulator of policies in establishing Tourism Villages. Providing coaching and training facilities. Providing training and motivation to Tourism Village managers. Organizing monitoring and evaluation for the Lamajang Tourism Village.
2.	Head of Lamajang Village (Kades)	Encouraging the implementation of tourism programs. Supporting the implementation of rituals such as Wukuh Tahun events and Solokan Hajat. Identify and manage supporting facilities and infrastructure such as road access to support visitor comfort. Manage land permits.
3.	Pangalengan Sub District (Camat)	Supervisor of policy implementation. Conducting interventions: coaching, facilitating assistant staff, motivating and educating community empowerment.
4.	Village Consultative Body (BPD)	Supervise the Village Head's performance. Capture community aspirations in establishing policies regarding tourism villages or other matters which are channeled through village meetings and musdus and poured into RKPDes (Village Government Work Plans).
5.	Village Community Empowerment Institution (LPMD)	Currently, the LPMD has not been much involved in the management of the Lamajang Tourism Village in particular.
6.	"Tirta Abadi" Lamajang Village-Owned Enterprise (BUMDes)	Focus on all matters related to business and the economy, play a role in assisting tourism village managers, namely developing potential that can be explored in Batu Eon Tourism.
7.	Lamajang Tourism Village Management (PDW)	Encouraging public awareness of Tourism Villages and involvement in the implementation of Sapta Pesona. As a partner of the central government and village government, realizing and developing the Lamajang Tourism Village. Make plans for the development and management of a sustainable Lamajang Tourism Village and improve the quality of tourism products with the help of technical support and training.

TABLE 2: Continued.

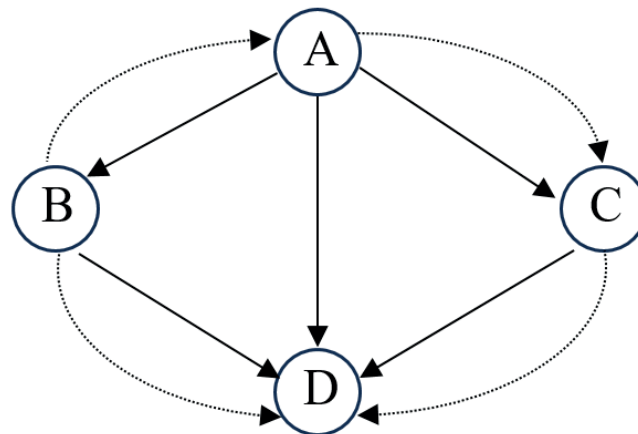
No	Actors	Role
8.	Family Welfare Development (PKK)	The main role of the PKK is currently carrying out routine activities such as catering, regeneration and posyandu. For tourism villages, the PKK has not been particularly involved in the management of Lamajang Tourism Village at this time. Only occasionally participating in selling MSME products in the form of food production, depending on existing orders.
9.	Farmer Group Association (Gapoktan)	Currently Gapoktan has no involvement in Lamajang Tourism Village activities. In the previous year, Gapoktan managed agricultural land which was used as a tourism educational medium coordinated by the tourism village manager and the village government.
10.	Youth Organization (Karta)	Participating in activities held at the Cikondang Traditional House and Wisata Fajar Alam, such as organizing tarawangsa and karinding arts events, the solokan hajat tradition, and wukuh tahun. Participate in training activities, meetings, or workshops held by the Disbudpar or tourism village managers.
11.	Cikondang Customary Institution (LAD)	The role of traditional institutions is to socialize to the public and visitors that activities in the Cikondang Traditional Village are not considered polytheists or deviations, but are related to custom and religion. Preserving Cikondang Indigenous culture by maintaining traditions and wisdom by ensuring that nothing undermines existing local wisdom and introduces local traditions to tourists.
12.	Forest Village Community Institution (LMDH)	LMDH is currently less involved in Desa Wisata Lamajang. LMDH has an important role in managing natural resources such as forest, water, and land which are the main assets of Lamajang Tourism Village. So good and sustainable management of natural resources is very important.
13.	Community Leader (Tomas)	Playing a role in the management of the Lamajang Tourism Village by motivating the local community to be involved and play an active role. Provide input to tourism village managers and the government such as recommendations for improving infrastructure and service quality.

The results of processing the questionnaire produced an initial matrix from Mactor's analysis in the form of a Matrix Direct Influence (MDI) which can be seen in Table 3. The MDI matrix is the input for the overall Mactor analysis, which describes the influence of actors on other actors. Stakeholders in the first column are assessed for their level of influence on the actors in the first row, and so on. Filling in numbers or scores in the MDI matrix is carried out according to Godet's rule, where the influence of one actor on another is calculated based on a score from 0-4 with the following provisions: a score of zero (no effect), 1 (affects operational procedures), 2 (affects work), 3 (affecting the actor's mission), and 4 (affecting the actor's existence) [12].

The next step in the Mactor software then processes the MDI data (Table 3) into various features which are graphical representations that help interpret the relationship between actors. In principle, the MACTOR technique is described based on three main inputs in the form of a matrix, describing the "influence relationship" between one actor and another [13]. The influence model is shown in Figure 2.

TABLE 3: The Actor's Direct Influence Matrix on The Actor (MDI).

MDI	Disbudpar	Camat	Kades	BPD	LPMD	BUMDes	PDW	Gapoktan	PKK	Karta	LAD	Tomas	LMDH
Disbudpar	0	4	4	1	2	1	4	1	1	2	2	1	3
Camat	2	0	3	2	2	2	2	2	3	2	3	2	2
Kades	3	4	0	4	4	4	3	3	3	3	3	3	3
BPD	0	2	4	0	3	3	3	2	2	2	2	2	1
LPMD	0	2	4	3	0	3	2	0	2	0	2	1	1
BUMDes	2	1	3	2	2	0	3	0	1	1	1	1	0
PDW	4	2	1	2	2	3	0	2	0	2	2	2	3
Gapoktan	0	3	1	2	1	1	2	0	1	0	0	1	1
PKK	0	3	4	4	3	0	0	0	0	4	0	2	0
Karta	1	1	2	2	0	2	3	0	3	0	3	0	2
LAD	3	3	4	3	3	0	2	0	0	2	0	1	1
Tomas	0	0	2	2	2	1	1	0	3	2	2	0	1
LMDH	0	1	2	2	2	0	1	1	0	1	0	1	0



**Figure 2:** Interactor Influence Model.

The influence of actor A on actor D is the sum of the direct influences from A to D or indirectly through B and C. Mactor works based on a structural analysis approach [12]. The results of the MACTOR analysis calculate the direct and indirect effects on relations between actors, based on the results of input data from the MDI matrix. This matrix is known as the MDII matrix (Matrix of Direct and Indirect Influence) which is presented in Table 4.

The MDII matrix in Table 4 shows the value of indicator  $li$  (right column at the end) showing the direct and indirect net effect, while the  $Di$  indicator (in the last row) shows the degree of direct and indirect net dependency influence. In the case of the Lamajang Tourism Village, the village head is more influential ( $I = 243$ ), and very dependent ( $D = 221$ ). This is in accordance with the facts on the ground, because the village head is the main player who has the ability to make decisions, has access to related agencies such as the Departement of Culture and Tourism, can build partnerships with other institutions to be involved in managing tourism villages, plays a role in determining the budget, and have the ability to deal with the interests of the village community. The village head also has a high dependence on the management of the Lamajang Tourism Village because he does not have the knowledge and skills to run a Tourism Village, so he relies on other parties such as the Departement of Culture and Tourism, has a high dependence on the district or provincial government regarding budget issues, as well as support from various other parties in running programs. The more effective an actor is, the greater his influence on other actors. Apart from the village head, other actors who have considerable influence include the Departement of Culture and Tourism, sub-district head, BPD, and LAD.

The sources of power of influence of actors are determined by the ownership of material resources, social positions, and the actors' knowledge of the future of a system [14].



TABLE 4: Direct and Indirect Influence (MDII).

MDII	Disbudpar	Camat	Kades	BPD	LPMD	BUMDes	PDW	Gapoktan	PKK	Karta	LAD	Tomas	LMDH	Di
Disbudpar	13	20	21	21	19	17	20	10	15	16	17	15	18	209
Camat	13	22	25	26	24	16	21	11	17	20	19	17	16	225
Kades	14	25	31	28	26	20	25	11	19	20	20	17	18	243
BPD	13	19	23	24	21	19	21	10	15	17	16	16	15	205
LPMD	11	16	19	19	19	15	17	10	11	16	13	15	11	173
BUMDes	11	15	15	15	15	14	16	9	12	14	15	13	14	164
PDW	12	18	23	20	18	15	22	9	14	15	16	13	16	189
Gapoktan	6	12	12	12	12	10	11	8	10	11	11	12	9	128
PKK	6	12	18	17	14	15	14	7	15	13	15	10	10	151
Karta	12	16	17	18	18	11	14	9	10	15	12	13	11	161
LAD	11	18	21	19	18	18	19	11	14	15	17	13	16	193
Tomas	7	15	16	16	14	10	13	6	12	14	12	11	9	144
LMDH	5	10	11	11	10	11	11	7	10	8	10	9	9	113
<b>Di</b>	<b>121</b>	<b>196</b>	<b>221</b>	<b>222</b>	<b>209</b>	<b>177</b>	<b>202</b>	<b>110</b>	<b>159</b>	<b>179</b>	<b>176</b>	<b>163</b>	<b>163</b>	<b>2.298</b>

Based on their strength, actors are positioned in the actor's influence and dependency map and are divided into dominant actors (high influence), dependence actors (high dependency), Autonomous actors (low influence and dependency), and relay actors (high influence and dependency) [12]. The map of the influence and dependence of stakeholders in the Lamajang Tourism Village is shown in Figure 3.

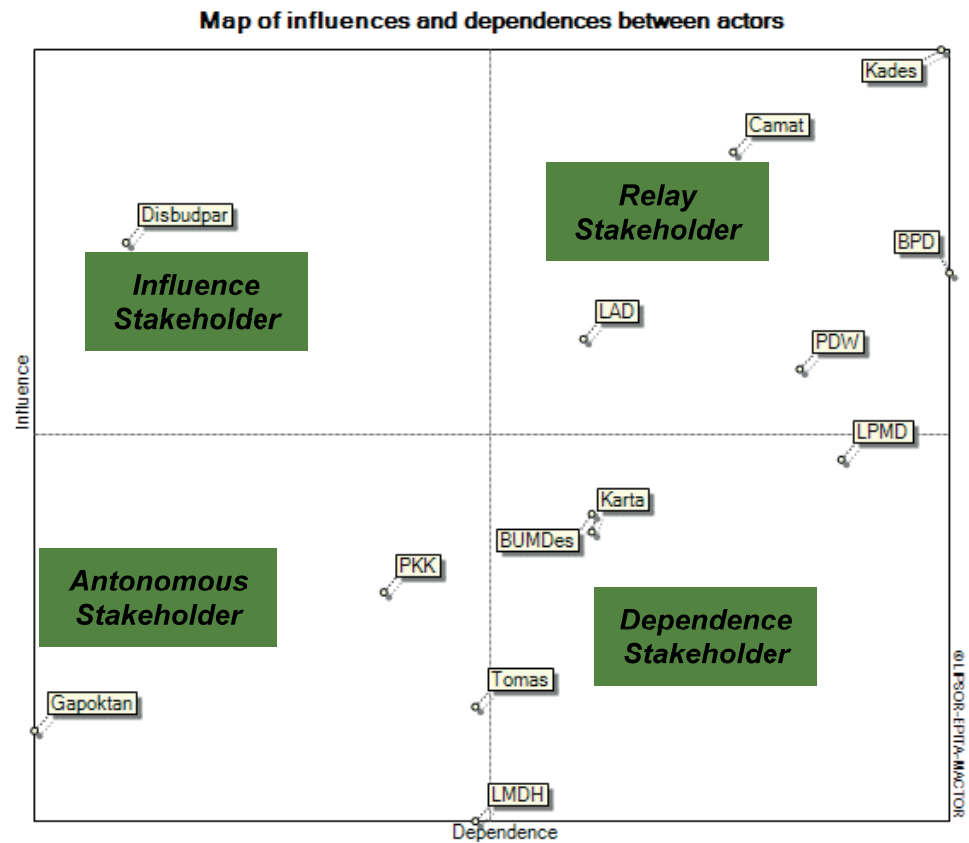


Figure 3: Mapping Influence and Dependence Between Actors.

The actor from the Department of Culture and Tourism of Bandung Regency in Quadrant I is the actor who is most dominant in determining policy and is influential in the development of the Lamajang Tourism Village, because the power to influence other actors is high while the dependency is low. Disbudpar demonstrates capacity in managing district tourist attractions, carrying out district tourism strategic area management activities, carrying out district tourism destination management activities, implementing basic-level tourism and creative economy human resource capacity building, and developing the capacity of creative economy actors. Actors who fall into Quadrant II are called relay actors because their power of influence is high but their dependence is also high, including the Head of Lamajang Village, Pangalengan Sub District, Village Consultative Body, Cikondang Customary Institution, and Lamajang Tourism Village Management. As is the fact on the ground that these actors need a support system from other actors.

Relay actors are anticipated to play a role in executing decisions in the field because they are able to drive the development of the potential of the Lamajang Tourism Village and determine its success according to their respective responsibilities and capacities.

Quadrant III is the Dependence Stakeholder. “Tirta Abadi” Lamajang Village-Owned Enterprise, Youth Organization, and Village Community Empowerment Institution are actors who are heavily influenced and dependent on other actors. It is hoped that “Tirta Abadi” Lamajang Village-Owned Enterprise can be involved in managing tourist destinations, tourist information, managing homestays, involving the community and strengthening the branding of the Lamajang Tourism Village. The Youth Organization is expected to be able to assist the village government and PDW, for example as tour guides, participating in organizing tourism activities. So to fulfill its role Youth Organization can take part in training held by the Department of Culture and Tourism. Actors in Quadrant IV, namely Family Welfare Development, Farmer Group Association, Forest Village Community Institution, and Community Leader are called Autonomous Stakeholders. These actors have weak influence and little dependence on other actors. The distribution of influence and dependency categories between actors based on Figure 3 is presented in Table 5.

TABLE 5: Distribution of Influence and Dependency Categories Between Actors.

Kuadran I Influence Stakeholder	Kuadran II Relay Stakeholder	Kuadran III Dependence Stakeholder	Kuadran IV Autonomous Stakeholder
Departement of Culture and Tourism	Head of Lamajang Village	Village Community Empowerment Institution	Community Leader
	Pangalengan Sub District	“Tirta Abadi” Lamajang Village-Owned Enterprise	Forest Village Community Institution
	Village Consultative Body	Youth Organization	Familiy Welfare Development
	Cikondang Customary Institution		Farmer Group Association
	Lamajang Tourism Village Management		

## 4. CONCLUSION

The MACTOR software application in this study has mapped the strength of the relationship between actors and identified the roles of actors who have the most influence in making decisions and determining development policies in the Lamajang Tourism

Village. There are 13 actors that have been mapped, so that the division of roles and duties of actors can be more directed and not overlapping according to their powers. The findings of this study indicate a huge possibility for developing the potential of the Lamajang Tourism Village in a participatory manner by involving all actors. The results of the study show that the Department of Culture and Tourism is the dominant actor, meaning that it must optimize its capacity in implementing tourism village development programs, especially the Lamajang Tourism Village. As an external actor, the Department of Culture and Tourism is expected to be able to build solid collaboration and cooperation with other internal actors in Quadrant II. This relationship acts as a bridge between the local government and other internal actors. The five relay actors in Quadrant II such as the Head of Lamajang Village, Pangalengan Sub District, Village Consultative Body, Cikondang Customary Institution, and Lamajang Tourism Village Management are the determinants of the successful operationalization of the development of the Lamajang Tourism Village. Relay actors must be more careful in making decisions and synergize with various elements of society in Quadrants III and IV so that they actively participate in helping organize tourism development in the Lamajang Tourism Village.

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