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THE TOURISM DESTINATION COMPETITIVENESS: USING THE PROMETHEE GAIA MODEL

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Abstract

The focus of this research's attention is how to rank the competitiveness of West Sumatra tourist destinations by using aspects of 3A2P, which tourist destinations have advantages and what design policies should be done. Research was conducted on nine main destinations. The study uses the promethee ranking method, sensitivity analysis and GAIA plane analysis. The results showed that the competitiveness of West Sumatra tourist destinations is determined by the aspects of promotion and accessibility aspects, but the aspects of amenity and attractiveness have not yet been successfully addressed, so that promotions carried out in general have made return visits low and many problems have disrupted the beauty, comfort, safety and even environmental damage, due to the promotion of tourism that has not been accompanied by the provision of amenities in the tourist destination. There are three tourist destination areas that have advantages in 3A2P aspects in West Sumatra namely Padang City, Bukittinggi City and Sawahlunto City. Factors causing its superiority are mainly on promotion and accessibility factors, but in the aspect of security and attractiveness almost all tourist destinations still experience a number of shortcomings of some of the criteria. The policy of increasing the main competitiveness of tourism in West Sumatra can be done most urgently (necessary conditions) is to improve the crystalline amenities and aspects of attractiveness. While the aspects of promotion and accessibility can be a second alternative (sufficient condition).

Jel Classification:

D78, P51, Z32.

Keyword: Competitiveness of Tourist Destinations, Promethee ranking, GAIA Plane

INTRODUCTION

Increasing competitiveness of tourist destinations has played an important role in increasing the number of tourist visits to tourist destinations in developing countries in recent years, (Chang, 2010; Cakmak, 2012; Sanchez, 2014; Lopez, 2018; Ozan, 2008). If a tourist destination has not been seen as a destination that has advantages in comfort, attractiveness and accessibility, then the number of tourist visits to tourist destinations is still low. The competitiveness of tourist destinations is strongly influenced by infrastructure factors, economic conditions, safety, health and safety, competitive prices, government policies, environmental sustainability, training and tourism service skills, and natural and cultural attractions (Assaf, 2012; Crouch, 2008; Ozan, 2008; Lopes, 2018; Dwyer, 2000, Chim, 2018).

The competitiveness of tourist destinations also plays an important role in developing tourism promotion in West Sumatra, because it is believed that tourism is the main source of regional income and increased employment opportunities (Kumar, 2016). If a tourist destination is not seen as a destination that has a prominent appeal by tourists, then of course this destination is not an option to be visited by tourists, both foreign and domestic tourists (Lopes, 2018). Therefore, ranking tourist destinations is a very important effort in developing destination areas, especially how tourist destinations can survive in the face of a decrease in the number of tourist arrivals from foreign countries and a decrease in environmental services due to disruption and pressure of environmental capacity (resilience objectives) (Sheppard, 2016; Assaf, 2012) in West Sumatra.

The important problem so far is how to determine a number of

indicators of the competitiveness of tourist destinations that are appropriate and accurate, so that the strengths and weaknesses of the destination over time can be overcome (Pike, 2016; Chim, 2018; Claveria, 2016). Various studies have been carried out to develop a number of indicators of the competitiveness of these tourist destinations by including planning factors for destination development, tourism destination management factors, tourism attractions and resources, and tourism supporting infrastructure (Crouch, 2008; Crouch, 2011; Mendola, 2016; Dwyer, 2000). The research questions discussed in this study are: how is the competitiveness of West Sumatra tourist destinations in terms of amenities, attractions, accessibility and promotion and economic growth (3A2P)? Which tourist destinations have advantages in the 3A2P aspect in West Sumatra? What policy steps can be taken to improve the competitiveness of tourism in West Sumatra province?

METHOD

The Promethee method (Preference Ranking Organization Method for Enrichment Evaluation) is part of the alternative "the multi criteria decision Aid (MCDA) from operational research (Lopes, 2018). There are 2 groups of methods for the MCDA approach, namely: 1). Multi criteria utility function, 2). The outranking method. The Promethee method used is included in representing the out-ranking method. Ou ranking method is to compare the alternatives of each criterion to be selected (Sanchez, 2014; Zhang, 2010; Lopes, 2018; Shakya, 2009; Gupta, 2012).

The Promethee method is to encourage the arrangement of preference functions by describing the difference in preference between alternative pairs of choices that will be

made with each criterion. This preference function is the numerical difference between alternative pairs of choices that will be made to describe the difference in preferences from the point of view of the decision maker. This preference function (Phi value) has a value between 1 and 0. A greater value of the preference function means that the preference difference becomes larger, when the value is 0, it is not as follows:

$$P_j(a,b) = G_j[f_j(a) - f_j(b)] \quad (1)$$

$$0 \leq P_j(a,b) \leq 1 \quad (2)$$

dimana :

P_j = Preference function alternatif a dan b

G_j = non decreasing function dari observasi alternatif a dan b

f_a = Preference alternatif a

f_b = Preference alternatif b

Based on the preference function, then the preference index is obtained in determining the order (ranking) in decision making. There are two ways of ranking: First Promethee partial ranking: means that all actions do not have to be compared, and ranking can include incomparability. The ranking is based on two preference flows (+) and (-). Promethee partial ranking is an intersection of two ranks. Thus action a, chosen over action b, in partial promethee ranking: if and only if a is chosen over b according to both preferences. The complete formula is as follows:

$$\pi_r(a,b) = \sum_{j=1}^k P_j(a,b)w_{rj} \quad (3)$$

$$\phi_r^+(a) = \sum_{x \in A} \pi_r(x,a) \quad (4)$$

$$\phi_r^-(a) = \sum_{x \in A} \pi_r(a,x) \quad (5)$$

$$\phi_r(a) = \phi_r^+(a) - \phi_r^-(a) \quad (6)$$

Second; Promethee II complete ranking: means that all actions are compared and ranked including those who are not incomparabilities. If the comparison is very difficult, the ranking results can be debated, especially with

conflicting criteria. Ranking is based on net preference flow. It combines two other preferences into a single score namely aP^nb if and only if $\phi(a) > \phi(b)$.

The Promethee method is often used to evaluate several possible decision-making decisions that often have conflicts of interest, identify the best decision, rank several possible decisions among the best, select items and classify items from a decision bundle, visualize decisions to make a difficult understanding of decision making. easily understood, reach consensus decisions when some decision makers have different views, make right / wrong decisions based on objective elements. There are three analytical tools that can be used in this promethee method. Besides promethee ranking, it is also possible to visualize geometric analysis interactive assistance (GAIA Plane). The GAIA plane graphically displays the relative positions of alternatives in terms of contributions to various criteria.

In this study, the promethee method was used to sort and rank the competitiveness of West Sumatra tourism destinations with cluster criteria consisting of attractiveness, amenities, accessibility, promotion and creative economy business actors (3A2P), while the action criteria to be tested for competitiveness consisted of nine The main destination areas that were sampled in this study were: Destinations in Padang City, Destinations in Bukittinggi City, Payakumbuh City Destinations, Sawahlunto City Destinations, Destinations in Solok district, Destinations in Tanah Datar district, Destinations in Fifty Cities district, Destinations in districts Pesisir Selatan, Destinations in Agam district.

The accessibility evaluation criteria in the tourism destination area consist of five criteria, namely: The distance to the main destination is

measured from the tourist entrance, namely Minangkabau Airport (BIM), the time duration (hours) is measured from the density of vehicles to the destination so it requires travel time to the destination. Road conditions are measured from the total paved roads (km) to the destination location. Proximity, which is a measure of the distance between destinations between the main tourism destination clusters, is in accordance with the West Sumatra RIPKP. Density is a density barrier to a destination measured by the carrying capacity of public transportation to the destination area.

The criteria for evaluating the Amenitas in the West Sumatra tourism destination area consist of nine criteria, namely: Entrance is the number of tourism entrances or the direction the tourists come from. The availability of toilets is measured by the number and type. Places of worship as measured by the number of mosques at the destination. Sign board or information board to provide directions and signs. Child friendly infrastructure is a playground for children, lactation, a sink for children, and bus facilities for children. Shopping center is a shopping place in the destination area. International francise. Tourism information center. Security in destination areas, star and non-star hotels.

The criteria for attraction in the main tourism destination areas of West Sumatra, which consist of eight criteria, namely: Number of tourist objects, Management of tourist objects, Activities in tourist objects, Events at tourist objects, scheduled festivals at tourist objects, Destination atmosphere, Number of tour guides, Number of event organizers at a tourist attraction.

The criteria for tourism promotion in the main tourism destination areas of West Sumatra

consist of 4 criteria, namely: online promotion, offline promotion. The criteria for micro and medium enterprises in the main tourism destination areas of West Sumatra consist of two criteria, namely: economic growth, per capita income measured at the current price in 2018. The portion of the tourism sub-sector to the APBD Number of MSME business actors.

RESULT AND DISCUSSION

Ranking of West Sumatra's Main Tourist Destination Competitiveness

Based on the logic of ordering and ranking in the promethee ranking analysis, the results of the promethee ranking analysis can be presented in Figure 5.1 below, showing the results of the promethee ranking analysis, on the left side is the ranking of actions with positive net flow ($\phi +$), and on the right side is ranking of the net floe negative ($\phi -$) action. The straight line in the middle is a measure of the action taken from the values of $\phi +$ and $\phi -$. When this line is higher than the other options, and the line connecting $\phi +$ and $\phi -$ crosses the line in the middle column is red, then the two actions cannot be compared or cannot be selected as the best course of action, or in this case, the two tourist destinations it cannot be ranked in the best order.

Based on the provisions in the partial promethee ranking analysis, the 3A2P elements of tourist destinations in the cities of Padang, Bukittinggi and Sawahlunto have the highest ranking, while other tourist destinations of 3A2P elements cannot be compared to each other. This means that the criteria that make up the 3A2P elements in this tourist destination have a net flow or a $\phi +$ score and a ϕ score higher than the other six main destinations in West Sumatra.

Figure 1a. and 1b. Promethee Ranking of Tourist Destination Competitiveness West Sumatra

In Figure 1.b. shows promethee complete ranking based on net flow phi, the upper half is green according to phi + or a positive score for tourist destination 3A2P criteria, and the lower half is red with a negative phi score for the 3A2P criteria. So it can be said that the ranking options with the most positive criteria are tourist destinations in the cities of Padang, Bukittinggi and Sawahlunto. While the 3A2P criteria for tourist destinations in the district of fifty cities, Agam district, Payakumbuh City, Solok and Tanah Datar districts do not yet have the advantage or the best ranking in managing tourist destinations with the 3A2P criteria.

In Figure 1.a is the result of analysis using the promethee diamond. It is a combination of two alternative promethee I and rank II. It is a 4 square space corresponding to preferences (Phi +) and (Phi -), where each action is represented by a dot. The plane 4 which has a slope of 45o provides the vertical dimension of the Phi net flow. Phi (+) increases from left to top (top corner) and Phi (-) score increases from left to bottom corner. If there are lines that intersect or overlap, the criteria are incomparable (incomprability). The advantage of promethee diamond is that it is easy to visualize the proximity of Phi (+) and Phi (-) globally.

Figure 2. Promethee Diamond and Promethee Network

Tourist destinations located in Padang City have the advantage of the 3A2P criteria, followed by tourist destinations located in Bukittinggi, and followed by tourist destinations in Sawahlunto. In this Promethee Diamond, it can be seen that tourist destinations located in five strategic tourist destinations in West Sumatra have in fact the criteria cannot be compared, because there are lines that overlap, meaning that the criteria are incomparable. To overcome the weakness of this promethee diamond, then proceed to use the promethee network, which provides an alternative display of the promethee I ranking. In the promethee network, actions are represented by nodes, while preference is represented by arrows. Nodes are placed in relative positions relative to

the promethee diamond, so that the proximity between the flow values is clearly visible. The advantage of Promethee Network over Promethee Diamond is that the overlapping actions can clearly flow the value. So that destinations in Payakumbuh City with tourist destinations located in Fifty Cities district can easily be seen in the ranking order, that Payakumbuh is better than Fifty cities in providing its 3A2P criteria.

The ranking order of tourism destinations based on the 3A2P criteria is determined by the positive value of the indicators compiled in terms of attractiveness, amenities and accessibility to a tourist destination that is the research target. The coefficient value of each ranking can be shown by the promethee flow table, which is a

ranking of the action based on the complete promethee II ranking, where the ϕ^+ and ϕ^- and ϕ scores are

displayed, the results can be seen below:

Table 1. Promethee Flow Table of West Sumatra's Main Tourist Destinations

Rank	Action	ϕ	ϕ^+	ϕ^-
1	Padang	0.3492	0.5119	0.1627
2	Bukittinggi	0.2976	0.4960	0.1984
3	Sawahlunto	0.1389	0.3889	0.2500
4	Payakumbuh	-0.0516	0.3056	0.3571
5	Pariaman	-0.0754	0.2698	0.3452
6	Lima Puluh Kota	-0.0873	0.2976	0.3849
7	Pessel	-0.1230	0.2540	0.3770
8	Solok	-0.1270	0.2738	0.4008
9	Tanah Datar	-0.1349	0.2619	0.3968
10	Agam	-0.1865	0.2063	0.3929

In table 1, the above shows that the rankings in developing tourist destinations with the highest 3A2P criteria are obtained by Kota Padang, Kota Bukittinggi, and Kota Sawahlunto, which can be seen that the positive ϕ value for Padang city is 0.3492, Bukittinggi city is 0.2976 and Sawahluto City of 0.1376. The lowest net flow ϕ value is obtained by tourist destinations in Agam district of -0.1865 and Tanah Datar reaching -0.1349. This means that the ranking order will be determined by the difference between the ϕ^+ value and the ϕ value which is the value of the estimated destination 3A2P criteria, the greater the ϕ value compared to the ϕ^+ value, the lower the ranking and vice versa.

Sensitivity of Main Travel Destinations by 3A2P Aspects

The sensitivity of developing tourist destinations according to the 3A2P aspect can be expressed using the promethee rainbow method, action profile and visual stability interval.

These three analytical tools can determine which aspects and criteria of each tourist destination have the largest portion of increasing total destination competitiveness.

The promethee rainbow analysis with gambling provides information that the excellence of a tourist destination is determined by which criteria from the 3A2P aspect give the most and greatest ϕ^+ value, if all 3A2P criteria are on ϕ^+ then this tourist destination ranks first. On the other hand, if the 3A2P has a lot of ϕ^- value - which is more docile, then it can be ascertained that this destination is in the lowest ranking order. The thicker the color of the bar graph chart, indicating that this criterion is more dominant in giving a portion of the competitiveness of tourist destinations to a higher ranking order. So with this promethee ranking it can be seen that every tourist destination has no superiority in which aspects of the 3A2P criteria.

Figure 3. Promethee Rainbow 3A2P Criteria for Travel Destinations

In Figure 3. above shows the results of the promethee rainbow analysis of the 3A2P criteria of the main tourist destinations studied, the city of Padang, Kota Bukittinggi and Kota Sawahlunto which were in the highest ranking previously, were contributed by the positive preference index (ϕ), the pink amenity criteria, and the index. preference (ϕ) positive criteria of attraction and accessibility. In contrast to the 3A2P criteria of Bukittingi City, the dominant preference index (ϕ) is precisely the attractiveness and accessibility aspects and the accessibility aspects occupying the lowest preference index. The dominant preference index in the City of Sawahlunto is precisely the aspects of promotion and amenities. The benefits

of this promethee rainbow analysis are very pronounced for the policy implications of which aspects can be improved in increasing tourist preference choices in visiting this tourist destination.

Tourism destinations in Agam district and tourist destinations in Tanah Datar district occupy the lowest preference index in this analysis, mainly due to aspects of amenities and attractions that are still lacking in attracting and providing services for tourist visits to these tourist destination locations. All tourist destinations that have the lowest ranking turn out to have weaknesses in the aspects of amenities and tourist attractions in their tourist destination areas.

Figure 4. Action Profile 3A2P Tourism Destinations in Padang City

Figure 4 above provides information that all aspects of the 3A2P preference criteria index value for Padang city tourism destinations are positive, in addition to the strongest aspects of economic growth, also accompanied by better accessibility, amenities and promotion. The attractiveness aspect, although positive, is still not too dominant in the tourist destinations of Padang City. Aspects of

attractions. Tourist destinations in the city of Padang that need to be improved are tourist activities at tourism objects, tour events at tourist sites, festivals that are held at tourist sites, including event organizers who manage tourist attraction events and what is no less important is an increase in atmosphere destinations that match the theme of developing a tourist destination.

Figure 5. Action Profile 3A2P Tourism Destinations in the City of Bukittinggi

Figure 5. above shows that the advantages of tourist destinations in the City of Bukittinggi are in the aspects of economic growth, attractiveness and amenities as well as promotions, while what is still not too dominant is the aspect of tourism accessibility such as the time duration used to this tourist destination from the entrance gate of tourists who are still too long, the density to a destination with a very large carrying capacity.

Efforts to improve the competitiveness of tourist destinations in the City of Bukittinggi can be done by improving and increasing accessibility to these tourist destinations, especially the time duration to the location from the entrance gate, the problem of transportation capacity and very congested vehicle lanes, which have reduced the comfort of tourists to the City of Bukittinggi. . The government of Bukittinggi city can plan to use a flyover at the knot of the traffic jam in the city of Bukittinggi from the tourist entrance, especially from the direction of Padang, at the Padang Luar intersection, one fly over to the city center should be built. In addition, to increase the movement of tourists between destinations, it is necessary to build a cable car which saves space, but

the movement of tourists between major destinations is faster and more efficient.

In Figure 6. below shows that the aspects of economic growth and promotion have become better in developing tourist destinations in Payakumbuh City, but 3 other aspects, namely amenities, accessibility and attractiveness are still lacking, in other words the 3A aspect for developing tourist destinations in Payakumbuh City is still less competitive than with tourist destinations in other cities.

The criteria for amenities with a number of indicators such as child friendly infrastructure, places of worship, international franchise, tourism information center (TIC) and security tourism in destination areas still need to be addressed in the tourist destinations of Payakumbuh City. The tourist destination which is the target of this research is the gastro tourism of Payakumbuh, whose amenities have not been able to provide the best service to tourists who come to visit. In addition, the lack of attractiveness in tourist destinations in Payakumbuh City makes this destination low in competitiveness with other tourist destinations in West Sumatra.

Figure 6 Action Profile 3A2P Payakumbuh City Tourism Destinations

In the aspect of tourism promotion through online media promotion and print and electronic media, tourist destinations in

Payakumbuh City already have positive opportunities to be able to compete with other tourist destinations in West Sumatra.

Figure 7. Action Profile 3A2P Sawahlunto City Tourism Destination

Figure 7 above shows that the advantages of 3A2P aspects of tourist destinations in Sawahlunto City are mainly in economic growth, promotion, amenities, and accessibility, while in terms of attractiveness it is not better than other destinations in West Sumatra. Promotional aspects with

promotional criteria through online and offline have all been carried out by the Sawahlunto city government, even because it has been designated by Unesco as a world heritage for a former colonial mining heritage, so that it is easily recognized among foreign and domestic tourists. . However, the

aspects of accessibility and attractiveness in each tourist location

have not been able to compete with other destinations in West Sumatra.

Figure 8. 3A2P Action Profile and Destination Interval Visual Stability Solok Regency Tourism

The competitiveness of tourist destinations in Solok district is in the eighth rank of the main tourist destinations sampled in this study, the preference index (phi +) is in two aspects, namely accessibility and promotion, while the other three aspects have a preference index (phi-) which is still lacking, namely amenities, attraction and economic growth. However, if a sensitivity analysis is carried out on the 3A2P aspects in developing the competitiveness of destinations in the future, the tourism destinations in Solok regency are actually very sensitive to changes in the aspects of accessibility and attractions, so it can be said that the stability level of tourist destinations in Solok district is in the aspects of accessibility and promotion, as stated in seen in the weight stability analysis as shown in Figure 5.8 to the right in the image above.

The competitiveness of Tanah Datar district tourism destinations is

ranked fifth below Pariaman city and above Payakumbuh city with a preference index (phi +) only in the amenity aspect, while the preference index (phi-) is in the accessibility and promotion aspects. However, the sensitivity analysis on the 3A2P aspect shows that the amenity criteria really determine the increase in the positive preference index (phi +). This means that in order to increase the competitiveness of tourist destinations in Tanah Datar district, improving the amenities aspect is the policy that is most capable of increasing the competitiveness of tourist destinations in Tanah Datar district, which is able to increase its competitiveness among other tourist destinations in districts and cities in West Sumatra. Even though the accessibility and promotion aspects are still lacking, when the amenities aspects are improved, the competitiveness of tourist destinations increases significantly faster

**Figure 9. 3A2P Action Profile and Destination Interval Visual Stability
Tanah Datar Regency Tourism**

In Figure 5.9. above, when the weight of the amenities aspect is increased by more than 50% of the current condition, the preference index which represents the competitiveness of

tourist destinations in Tanah Datar district can increase significantly (see Figure 5.9 on the right), Tanah Datar district ranks three after the city of Padang and Bukittinggi.

**Figure 10. 3A2P Action Profile and Destination Interval Visual Stability
Tourism District 50 Cities**

The ranking of tourist destinations in the district of 50 cities is in the order of nine of the ten destinations that are the samples of this study. The positive preference index (ϕ^+) reached 0.3049 but the negative preference index (ϕ^-) was much larger, reaching 0.5137. So that the total preference index (ϕ) is -0.2088. The positive preference index is only found

in the aspect of attractiveness, while the aspects of accessibility, amenity, promotion and economic growth still do not have better competitiveness. This means that to increase the competitiveness of tourist destinations in 50 cities, increasing attractiveness can increase the competitiveness of tourist destinations.

**Figure 11. 3A2P Action Profile and Destination Interval Visual Stability
Pesisir Selatan district tourism**

The ranking of tourist destinations with 3A2P criteria, Pesisir Selatan district is in seventh place under Agam and above Tanah Datar, with a positive preference index (ϕ^+) of 0.1935 and a large negative preference index (ϕ^-) of 0.3412, so that the preference index the total reached -0.1477. The lack of preference index is the aspect of amenities, attraction, accessibility and economic growth. The criteria for amenities that are still lacking are the number of tourist entrances, the number of toilets in tourist destinations and their accessories, sign boards, international franchise, security officers, and tourist information centers.

Based on the sensitivity analysis using the walking weight visual prometee analysis, the aspect that is

very sensitive to increasing the competitiveness of tourist destinations in Pesisir Selatan district is the promotion aspect, but at the same time other aspects still have a preference index that is still lacking that must be addressed. That is, so far I have been more competitive with the tourism destinations in Pesisir Selatan regency, which have benefited more from the promotional aspects as the findings of Lenggogeni (2017) and Ansofino et al (2019) [21] which explained that the impact of the promotional aspects of the Mandeh area has caused a decrease in carrying capacity in providing needs tourist food is booming when the aspects of amenities, attractiveness and accessibility are not ready, but the promotion has been carried out indirectly by netizens.

**Figure 12. 3A2P Action Profile and Destination Interval Visual Stability
Agam district tourism**

The competitiveness of tourism destinations in Agam regency is in eighth place among destinations that are measured for their competitiveness using the 3A2P aspect. All aspects of the 3A2P tourist destinations in Agam district that were sampled still had a total preference index (ϕ) of -0.1791 with a positive preference index ($\phi +$) of 0.2940 and a negative preference index ($\phi -$) of 0.4730, so the preference index ($\phi -$) is greater than the positive preference index, which has resulted in lower competitiveness compared to other tourist destinations in West Sumatra.

In the following, an analysis of geometric analysis interactive assistance (GAIA) is also carried out which aims to see the opportunities for ranking tourist destinations from a two-dimensional view of the preference index in ranking tourist destinations in West Sumatra [19]. There are 3 pieces of information that appear in the GAIA Plane: Action: represented by points,

criteria: represented by axes (U and V), weight: the weight of the criteria represented by the decision axis. The criteria are represented by an axis image from the center of the GAIA Plane, with the following properties: Criteria are expressed equal preferences are represented by axes in the same direction, criteria are said to be conflicting (opposite) their preferences are represented by opposite axes, the length of the criteria axis represents their relative differentiating strength the longer the axis, the greater the discrimination criterion. Quadrant differences show conflicts between criteria, whereas criteria in the same quadrant show the same preference. The position of the action in relation to the criteria axis indicates how good action is formed on different criteria.

GAIA analysis results can be displayed in a visual graph as shown in Figure 5.13, the best action in increasing the competitiveness of West Sumatra tourist destinations is where it

appears that Sawahlunto City, Padang City and Payakumbuh City, the aspects of promotion and accessibility are good, but need to be improved. are aspects of attraction and amenities. Meanwhile, the aspects of amenities and tourist destination attractiveness in Bukittinggi and Pariaman are good enough, what needs to be improved is promotion and accessibility. On the other hand, tourist destinations in the district of Solok,

Pesisir Selatan, Tanah Datar, Agam and Fifty Cities still need to improve their 3A2P aspects, so that their competitiveness will be better in the future. The following is also an analysis of geometric analysis interactive assistance (GAIA) which aims to see the opportunities for ranking tourist destinations from a two-dimensional view of the preference index in ranking tourist destinations in West Sumatra.

Figure 13. GAIA Visual Analysis West Sumatra Tourist Destinations

Figure 5.13 above the results of the GAIA analysis shows that the 3A2P criteria that are most able to increase the competitiveness of tourist destinations are increased accessibility and promotion. Because these criteria are located in the U and V quadrants, these criteria should be given priority in

increasing the competitiveness of tourist destinations, in addition to increasing attractions and amenities. The priority of increasing the competitiveness of tourist destinations on promotion and accessibility criteria has a trade off with the criteria for increasing amenities and attractiveness.

Figure 14: Selection of the most appropriate action according to the criteria

Determination of the most appropriate action based on the selected criteria can be done by making a diagonal line on each criterion [4], [6], [7]. In Figure 5.14, the attraction criteria create a diagonal line from the lower right quadrant to the upper left quadrant, so that each action on the tourist destination closest to this diagonal line indicates that the action of a tourist destination on that criterion is better than that of a tourist destination that has a dotted line. break that is further from the diagonal line. Tourist destinations in Bukittinggi City, Sawahlunto City and Payakumbuh City and Agam Regency are tourist destinations that have advantages in terms of attractiveness or criteria. On the other hand, Padang, 50 Cities and Tanah Datar are regions with less competitive tourist destinations.

CONCLUSION

Based on the subject matter and discussion that has been carried out, several conclusions can be made as follows: The competitiveness of West Sumatra tourist destinations is determined by aspects of promotion and

aspects of accessibility, but the aspects of amenities and attractiveness have not been managed yet, so that the promotion carried out in general has made return visits low and causes many problems of disruption of beauty, comfort, safety and even environmental damage. , because tourism promotions have not been accompanied by the provision of amenities in tourist destination areas. There are three tourist destination areas that have advantages in the 3A2P aspect in West Sumatra, namely Padang City, Bukittinggi City and Sawahlunto City. The factors that cause excellence are mainly in the promotion and accessibility factors, but in terms of amenities and attractiveness, almost all tourist destinations still experience a number of shortcomings from some of the criteria.

The design of policies to improve the competitiveness of the main tourism in West Sumatra, which can be done with the most urgent (necessary condition) is to improve the criteria of amenities; such as clean toilets, places of worship, hygienic and standardized shopping centers, tourist and safety information in the destination area. The

aspects of attraction, such as regular events, festivals, and art and cultural activities in the main tourist destination areas have been the trigger for tourist arrivals. Meanwhile, the aspects of promotion and accessibility can be a second alternative (sufficient condition) after amenities and attractions.

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