

RESEARCH ARTICLE

Prediction and Analysis of Ecotourism Visitors at Jendela Alam

Benny Budiawan Tjandrasa^{1*}, Lina Anatan², Novan Ardianto³

¹Faculty of Economic, Maranatha Christian University, Bandung, Indonesia

*corresponding author. Email: benny.tjandrasa@gmail.com

ABSTRACT

Tourism industry sector needs to receive more considerable attention due to its important role as source of economic growth in Indonesia. It is in line with government program to develop a collaboration model that involve government, entrepreneurs, communities, academics, and media. However, tourism industry usually faced high operational cost and decreasing number of visitors' tendency caused by the increasing competitive business competition. It attracts researchers' interest to conduct research in one of organization in tourism industry, Jendela Alam, that faces similar problems. The results of quantitative analysis show that the number of visitors tend to decrease even during holidays season. By considering the stakeholders and the main characteristics of visitors, this study recommends Jendela Alam to strengthen its business in the field of marketing product/service through marketing mix strategy.

Keywords: *decision making, ecotourism, forecasting, strategic management, time-series analysis, TOWS analysis.*

INTRODUCTION

In this digital disruption era, one of the industries that will survive is the tourism industry because tourism is a matter of experiencing, so if a country wants to survive in this era of disruption the attraction of tourism must continue to be developed in a sustainable manner. As a country with variety of flora, fauna, culture, and located in tropics, environmental tourism, Indonesia has enormous potential to be developed. On the other hand, mining exports are experiencing declining sales trend, especially coal and petroleum. This is due to the declining production of petroleum from Pertamina and the oil price which also tend to decrease in the long run. The decline in petroleum prices automatically hit the coal mining industry, since as a substitute product of petroleum,

coal's price is also tend to decline in world market. Therefore, mining sector is no longer a main resource to support Indonesian economic growth in the long run.

Sales of plantation products such as oil palm are experiencing a decline in various European countries due to environmental issues, whereas the Indonesian agriculture and livestock industry is not even enough to meet domestic needs so that it often has to import.

Indonesia's industrial sector also experiences increasingly high levels of competition both at the ASEAN level and the emergence of Vietnam and Thailand as new industrial countries, and also at the Asian level with the People's Republic of China as the primary world's industrial.

Of all industries in Indonesia, tourism industry can be one of the pillars of domestic economic growth for the long term, as said by Frechtling (2012) that the twenty-first century of world economy will be driven by tourism industry. With cultural diversity, distinctive taste of food and rich in spices, beautiful coral reefs in various places, famous relics of ancient temples, world-famous Bali islands, and especially the natural beauty of Indonesia, it is not too optimistic if the Indonesian tourism industry might compete at the international level. For this reason, the Ministry of Tourism has set out to build ten new tourism areas in addition to Bali which are already well-known to various countries.

West Java Province with its soil fertility and natural beauty also has great potential to develop tourism industry. In addition to the tourism industry managed by the government, there are also tourism industries managed by private sectors such as Floating Market, Kampung Gajah, and Jendela Alam in the Lembang, one of area in Bandung. However, not all of those tourism organizations still survive, for example Kampung Gajah which is no longer operable. Indeed, the biggest challenge of managing tourism industry in Indonesia in general and West Java in particular is the operational costs and the number of visitors.

Jendela Alam, which has been engaged in the natural tourism industry since 2009, also experienced similar problem, such as the uncertainty of visitors number which automatically resulted in uncertainty in organization amount of revenue. Due to this reason, Jendela Alam collaborates with academics to find solutions for their problems faced. This form of collaboration can be seen as an application of Pentahelix Model launched by the Minister of Tourism Dr. Ir. Arief Yahya, M.Sc. Pentahelix Model is a model of cooperation involving government, employers, communities, academics, and the

media (Suherlan et al, 2019). From the central government's point of view, the existence of Jendela Alam supports environmental preservation and also West Java tourism industry development. From the community's point of view, the existence of Jendela Alam provides opportunities for collaboration with local entrepreneurs such as chicken and animal food traders, fertilizer traders, and also provides employment opportunities for people around the area. Jendela Alam is also active in collaborating with media to promote its place as well as occasionally becoming the location for film shooting. From academics point of view, Jendela Alam provides opportunities to conduct research for lecturers and students.

Based on the discussions with the owner of Jendela Alam and also observations, it can be conclude that the main problem faced by this company is the placement of resources related to the number of visitors in the future, as well as what strategies should be done for the sustainability of the company's business. For this reason, the first step that will be carried out by the researcher is to develop the right forecasting model to be used for the placement of resources and the application of appropriate strategies in accordance with the forecasting level for the future.

MATERIAL AND METHODS

Literature Review

Understanding Eco-Tourism - Ecotourism, actually comes from the word eco-friendly tourism (Jayaraman et al, 2010), is a form of tourism to enjoy natural resources while inviting tourists to participate in preserving natural resources, culture and socio-economic inhabitants. (Ganjali, 2014). Since ecotourism does not consume natural resources and their habitat, these activities indirectly contribute to protect and to improve local residents economic condition (Gourabi & Rad, 2013).

The importance of eco-tourism for the development of a country - Many studies concluded that eco-tourism have significant contribution to the country development, including:

- Encouraging healthy development of economies (Kaynak & I. Rojas-Méndez, 2014)
- Protecting attractive natural resources (Okech, 2009)
- Supporting conservation programs (Hakim & Nakagoshi, 2014).
- Preserving biological resources and biodiversity (Lisova et al, 2017)
- Building an economy and education for indigenous people (Lawer et al, 2013)

Use of forecasting for eco-tourism - The current generation of tourists is very familiar with the use of technology, they also seek the uniqueness of local cultures in addition to variety of biodiversity, therefore good tourism planning is an important step in developing tourism destinations (Hakim et al, 2009). The first step in planning is to estimate the number of requests through demand forecasting. The increasing number of tourists visiting regions that have an impact on socio-economic development requires accurate forecasting techniques (Ayobami et al, 2012).

In order for ecotourism to support economic development, determining a good strategy is needed through precise forecasting. (Vidović, 2018). The same thing was concluded by Mirchova (2018), forecasting in strategic decisions is very important especially for tourism development policies of a country in the future.

The main prerequisite for using forecasting techniques to estimate future visitors is time-series data from the number of previous visitors (Dimitrov, 2012). Data on past visitors can be used to predict quantitative methods and qualitative methods, the forecasting results are useful for determining tourism-related strategies (Tarmudi et.al, 2014).

However, qualitative methods contains weaknesses regarding the varied data sizes that depend on the complexity of the study (Modrak & Bosun, 2014).

Forecasting method - There are various methods for forecasting, however the use of method is depends on the data available. In this study the available data is historical data on visitors arrival from time to time. For this reason, the forecasting method that is considered suitable is time-series analysis. According to Salvatore (2011) quantitative forecasting techniques using time-series analysis clarify trends, seasonal, cyclical, and irregular data patterns. For trend analysis in this study used least square method.

According to Salvatore (2011), the least square technique for estimating regression lines minimizes the number of squares of vertical deviations from data points to estimate the regression line, with the aim of finding the intercept value (with symbol a) and slope (with symbol b) on the function linear: $Y = a + bt$. Where Y represents the number of visitors predicted and t is the period of time, whereas to find the value of a and b can be used the following formula:

$$a = \bar{Y} - b \cdot \bar{t} \quad (1)$$

and

$$b = \frac{\sum tY - \frac{(\sum t)(\sum Y)}{n}}{\sum t^2 - \frac{(\sum t)^2}{n}} \quad (2)$$

TOWS analysis - TOWS analysis is a derivative of SWOT analysis model which shows the internal strengths and weaknesses of an organization and the opportunities or challenges faced by the organization (Mulder, 2017). TOWS matrix aims to develop strategic choices from external and internal analysis specifically related to business administration and marketing. The main distinguishes

between SWOT analysis and TOWS analysis is that SWOT analysis starts from internal analysis, organizational strengths and weaknesses, while TOWS analysis starts from external analysis, opportunities and challenges. Thus the organization is expected to have a clear information regarding environmental conditions and be able to prepare strategies that are formulated by considering the strengths and weaknesses of the organization.

Through TOWS analysis, organizations might utilize internal strengths and weaknesses appropriately. Organizations also might study carefully in facing challenges and taking advantage of opportunities. TOWS analysis starts with analyzing external opportunities, continued with analyzing its strengths and challenges in other words it is associated with internal analysis. The strategy tactics developed include: S-O (Strengths-Opportunities); W-O (Weakness-Opportunities); S-T (Strengths-Threats); W-T (Weakness-Threats).

The next step is to determine the choice of strategies that the organization will implement:

1. S-O Strategy related to how the organization will utilize the power to take the opportunities obtained from the external.
2. S-T Strategy related to how organizations use power to avoid or reduce external challenges.
3. W-O Strategy related to how organizations take advantage of opportunities to overcome internal weaknesses.
4. W-T Strategy related to how organizations minimize weaknesses in facing threats or obstacles they face.

Methods

Research type and object - This research is an applied research, research conducted in

response to a phenomenon that occurs in the field to obtain information to solve the problem practically (Suliyanto, 2006). This research conducted at Jendela Alam Lembang that located in Jl. Sersan Bajuri km 4.5 Cihideung, Parongpong, West Bandung Regecy. Jendela Alam is a learning arena, an outbound place, and a recreation place for children and adults that presents a touch of nature and fresh air as tourist attraction.

Jendela Alam was founded in 2009 by a pediatrician. The pediatrician love for fauna made him keep many animals, ranging from dogs, rabbits, chickens to finally large-bodied livestock such as goats, cows and horses. In addition to fauna, the pediatrician also likes farming so that various plants are cultivated there, especially various medicinal plants. The location of Jendela Alam at Graha Puspa is very suitable for educational tours of farms and plants because it is closed enough to schools. To complement the attractions at Jendela Alam, the owner completes it with various playgrounds such as swimming pool, flying fox, and food stalls. Judging from the completeness and variety of products offered, this attraction should be well known to get more and more visitors. Educational tourism and ecotourism are the main theme offered by Jendela Alam to the community, this is done by introducing flora and fauna to children who live in Bandung that rarely or even have never seen a chicken coop, pony, cow and goat on a real farm.

Starting from a hobby and love of animals, this family finally succeeded in building Jendela Alam as a small place for some livestock and made a place for agrotourism. Jendela Alam also sells Arabian chicken eggs from its farms to various supermarkets, restaurants and stalls. Besides that, Jendela Alam also sells hydroponic vegetables from its own garden. Various facilities were provided to support the convenience for visitors, such as gazebo and bale bengong.

Today the company is managed by the founder's daughter, it is also an alternative tour for tourists who go to Lembang Bandung. During this time, Jendela Alam has opened a food stall, but to better complement the facilities as a place to relax, the owner plans to renovate it into a restaurant that has natural view with variety of beautiful plants.

To make long term decisions, companies need to know their threats, opportunities, weaknesses, and strength. Thus, TOWS analysis is used to consider whether a strategic plan is feasible or not to implement (Gürel & Tat, 2017).

Data collection technique - This study uses secondary and primary data. To obtain this data, the data collection methods used in this study include: 1) Observations, made during the field study process to see the condition of research object, 2) Literature Review, that is done by searching and collecting data based on references or literature relating to the problem discussed. In this study, literature review was conducted related to forecasting issues. 3) Quantitative data, obtained from company records regarding the number of visitors obtained by permission of the company owner. 4) Interview, conducted through two-way communication to get data from the owner of Jendela Alam Lembang to develop TOWS analysis.

Variables and operational definition - This study consists of two variables which is the number of visitors as a dependent variable and time period as an independent variable, the type of both variables are ratios.

Technique of data analysis - In this research, the owner considered to renovate and to expand the old restaurant interior to increase number of assets productivity by increasing the area of restaurant to attract consumers. However, there is no certain guarantee that after the renovation the restaurant revenue will be large enough to cover the investment. To answer the

questions, first of all this study estimates the number of visitors who will transact at the restaurant in the next few periods.

To estimate the number of visitors in the future, we conduct forecasting by using past sales data and the number of visitors data to see trends. To produce a more detailed forecast, the factors that cause a dramatically increasing or decreasing trend need to be traced. To estimate residual from the serial correlation of data measurement, this study used Durbin Watson statistic, while to predict the irregular influences on the increase (or decrease) of visitors, we used Monte Carlo simulation. Random number, RND (), available at Excel are used to simulate the increasing or decreasing number of visitors to Bandung. Those number are used to count the influence of irregular variable on number of visitors at Jendela Alam.

RESULTS AND DISCUSSIONS

In this research, the owner wants to know the estimated number of visitors in the future in order to make TOWS analysis. To answer the questions, first of all this study estimates the number of visitors who visit the park.

Data on the number of visitors collected was 129 weeks from December 2017 to June 2019. From the results of autocorrelation test on the data using the DW test the following results were obtained:

Model	R	R Square	Std. Error of the Estimate	Durbin-Watson
1	.058 ^a	.003	20669471	1.123

The Durbin-Watson table at the level of significance of 0.05 shows:

n	dL	du
100	1.654	1.694

This means that the null hypothesis there is no positive autocorrelation rejected, in other words there is an autocorrelation. Because there is an

autocorrelation, the equation used is growth model as follows:

$$S_t = S_0 \cdot (1 + g)^t$$

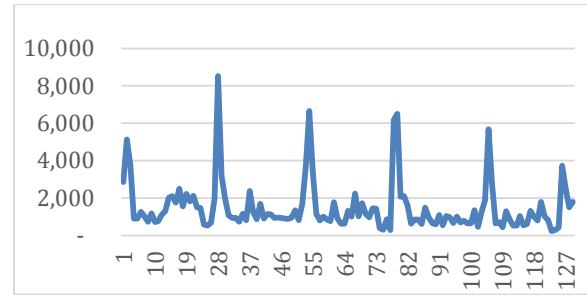
From the results of processing data obtained the equation:

$$S_t = 1543 \cdot 0.9954^t$$

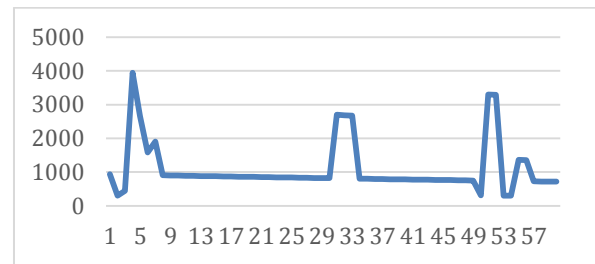
This forecasting also considers seasonal variation for the Iedul Fitri holiday, Christmas and new year holidays, school holidays, and school exam periods because of its influence on the number of visitors. To predict irregular influences on the increase (or decrease) in the number of tourists to an area of research using the Monte Carlo simulation. (All calculation data is included in the appendix).

Graphs of actual data and forecasting results show tourist arrivals which tend to decline even though during holidays there is a surge in the number of tourists.

Graph 1. The Number Of Tourists Who Have Visited Each Week



Graph 2. The Number Of Tourists Predicted Will Visit The Following Week



The results of quantitative analysis based on the graph actual of data and forecasting results show that there is a tendency to decrease in the number of visitors in Jendela Alam even during holidays. To determine the right strategic decision in dealing with these conditions, researchers try to identify stakeholders' needs that play an important role in the organization and the factors that influence the number of visitors using TOWS analysis.

Table 1. Internal Strengths and External Opportunities


	<p>External Opportunities (O)</p> <ol style="list-style-type: none"> 1. A healthy lifestyle 2. Urban farming trends 3. The issue of air pollution 4. School curriculum which requires children to learn about nature and the environment outside the classroom 5. Opportunities to work with the community of pre-school teachers, kindergartens, and elementary schools. 6. The development of information technology 7. Nature and the environment lifestyle 8. Trends in natural therapy / green therapy (ecotherapy) for children 9. Regional institutions that can provide benefits to Jendela Alam (Vegetable Research Center, Department of Agriculture)
	<p>SO (Aggressive Strategy)</p> <p>Strategies to use STRENGTHS to maximize OPPORTUNITIES</p> <p>Opportunities no: 1,2,7 meet Strenghts no: 1,2,3,12 Opportunities no: 3,4,5,8 meet Strenghts no: 4,5,6,7,8,9,11,13,14,15</p> <p>Opportunities no: 6 meet Strenghts no: 11,14</p> <p>Opportunities no: 9 meet Strenghts no: 9,10,12,15</p>
<p>Internal Strengths (S)</p> <ol style="list-style-type: none"> 1. Educational-based tourism concept / Educational agrotourism concept 2. Interact with animals activities 3. Jendela Alam has cool, clean and fresh air. 4. Park are safe from crime 5. Clean environment 6. The concept of education in the form of direct practice in the field. 7. The price of admission is affordable 8. Smoke free enviroentment 9. The concept of farming is to plant and harvest crops directly 10. Vegetables and fruit in Jendela Alam are quite varied 11. Facilitator who accompanies visitors for certain activities. 12. Provides healthy food (food ingredients directly from the garden) 13. Relatively complete activities (animals, plants, environment, playground, outbound) 14 The educational concept used by Jendela Alam is valuables for regular visitors and groups to study in the open air 15. Location of Jendela Alam is relatively close to tourist facilities and infrastructure 	

Table 2. Internal Strengths and External Threats

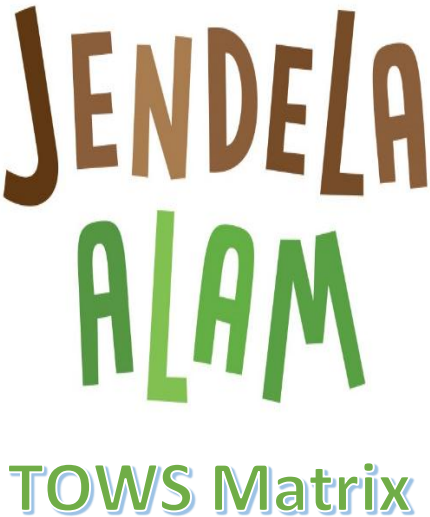
	<p>External Threats (T)</p> <ol style="list-style-type: none"> 1. Similar competitors (education) with low prices 2. The number of tourist destinations in Lembang and surrounding areas 3. Competitors who also focus on outing school children 4. Favorite or private public schools with low budget 5. The Jendela Alam is perceived as a cheap place for sightseeing and outing 6. Natural disaster of the Tangkuban Parahu crater 7. Access to Jendela Alam other than through Jl. Sersan Bajuri is not generally known 8. Land is still leased 9. Similar competitors have extensive facilities and areas 10. New competitors imitate the concept of gardening and animal husbandry education agro-tourism. 11. Competitors with other places (places to eat, shopping centers, and hotels) with the concept of feeding animals (animal feeding).
	<p>ST (Diversification Strategy) Strategies to use STRENGTHS to minimize THREATS</p> <p>Threats no: 1,2,9,10,11 meet Strengths no: 1,2,3,12</p> <p>Threats no: 3,4,5 meet Strengths no: 4,5,6,7,8,9,11,13,14,15</p> <p>Threats no: 6 meet Strengths no: 11</p> <p>Threats no: 7 meet Strengths no:15</p> <p>Threats no: 8 meet Strengths no:15</p>
<p>Internal Strengths (S)</p> <ol style="list-style-type: none"> 1. Educational-based tourism concept / Educational agrotourism concept 2. Interact with animals activities 3. Jendela Alam has cool, clean and fresh air. 4. Park are safe from crime 5. Clean environment 6. The concept of education in the form of direct practice in the field. 7. The price of admission is affordable 8. Smoke free environment 9. The concept of farming is to plant and harvest crops directly 10. Vegetables and fruit in Jendela Alam are quite varied 11. Facilitator who accompanies visitors for certain activities. 12. Provides processed healthy food (food ingredients directly from the garden) 13. Relatively complete activities (animals, plants, environment, playground, outbound) 14 The educational concept used by Jendela Alam Alam is valuables for regular visitors and groups to study in the open air 15. Location of Jendela Alam is relatively close to tourist facilities and infrastructure 	

Table 3. Internal Weaknesses and External Opportunities



	<p align="center">External Opportunities (O)</p>
	<ol style="list-style-type: none"> 1. A healthy lifestyle 2. Urban farming trends 3. The issue of air pollution 4. School curriculum which requires children to learn about nature and the environment outside the classroom 5. Opportunities to work with the community of pre-school teachers, kindergartens, and elementary schools. 6. The development of information technology 7. Nature and the environment lifestyle 8. Trends in natural therapy / green therapy (ecotherapy) for children 9. Regional institutions that can provide benefits to Jendela Alam (Vegetable Research Center, Department of Agriculture)
<p align="center">Internal Weaknesses (W)</p>	<p align="center">WO (Turn Around Strategy)</p>
<ol style="list-style-type: none"> 1. There is no appropriate marketing and sales strategy 2. There is no market mapping and the target market is not specific 3. The guide (facilitator) has not been trained regularly, has not been selected properly and correctly 4. High maintenance costs 5. The name of Jendela Alam is not yet known 6. Limited car and motorcycle parking area 7. Capacity of visitors in 1 day is limited 8. In the rainy season Outdoor activities stop 9. Grooming of facilitators 10. Inadequate trash bins 11. High volume of waste results 12. Limited temporary landfills 13. HR potential is not optimal 14. Playground area looks unkempt (faded) 15. employee motivation is still low / low awareness 16. Groundwater is not good 17. Prone of earthquake 18. CCTV has not been monitored and is not comprehensive 19. Labor turnover is high 20. Weak enforcement of rules / controls 21. Communication and respect between employees / superiors is low 22. New employee orientation training is not well developed. 23. Not enough signage inside the area 24. During weekday, not all facilities are opened. 25. Still relies on freelance for facilitators / waiters / operators (limited availability) 	<p align="center">Strategy to minimize WEAKNESSES to take advantage of OPPORTUNITIES</p> <p>Opportunities no: 1,2,7 againts Weaknesses no: 1,2,4,5,24,25</p> <p>Opportunities no: 3 againts Weaknesses no:10,11,12</p> <p>Opportunities no: 4,5,8 againts Weaknesses no: 3,6,7,8,9,13,14,15,19,20,21,22,23</p> <p>Opportunities no: 6 againts Weaknesses no: 18</p> <p>Opportunities no: 6 againts Weaknesses no: 18</p> <p>Opportunities no: 9 againts Weaknesses no:16,17</p>

Table 4. Internal Weaknesses and External Threats

	<p style="text-align: center;">External Threats (T)</p> <ol style="list-style-type: none"> 1. Similar competitors (education) with low prices 2. The number of tourist destinations in Lembang and surrounding areas 3. Competitors who also focus on outing school children 4. Favorite or private public schools with low budget
	<ol style="list-style-type: none"> 5. The Jendela Alam is perceived as a cheap place for sightseeing and outing 6. Natural disaster of the Tangkuban Parahu crater 7. Access to Jendela Alam other than through Jl. Sersan Bajuri is not generally known 8. Land is still leased 9. Similar competitors have extensive facilities and areas 10. New competitors imitate the concept of gardening and animal husbandry education agro-tourism. 11. Competitors with other places (places to eat, shopping centers, and hotels) with the concept of feeding animals (animal feeding).
<p style="text-align: center;">Internal Weaknesses (W)</p>	<p style="text-align: center;">WT (Defensive Strategy) Strategy to minimize WEAKNESSES to avoid THREATS</p>
<ol style="list-style-type: none"> 1. There is no appropriate marketing and sales strategy 2. There is no market mapping and the target market is not specific 3. The guide (facilitator) has not been trained, has not been selected properly and correctly 4. High maintenance costs 5. The name of Jendela Alam is not yet known 6. Limited car and motorcycle parking area 7. Capacity of visitors in 1 day is limited 8. In the rainy season Outdoor activities stop 9. Guide appearance (grooming) 10. Inadequate trash bins 11. High volume of waste results 12. Limited temporary landfills 13. HR potential is not optimal 14. Playground area looks unkempt (faded) 15. employee motivation is still low / low awareness 16. Groundwater is not good 17. The ground shifts 18. CCTV has not been monitored and is not comprehensive 19. Labor turnover is high 20. Weak enforcement of rules / controls 21. Communication and respect between employees / superiors is low 22. New employee orientation training is lacking 23. Sigange has not been many directions 24. When weekday not all rides are opened 25. Still relies on freelance for facilitators / waiters / operators (limited availability) 	<p>Threats no: 1,2,9,10,11 meet Weaknesses no: 1,2,4,5,24,25</p> <p>Threats no: 3,4,5 meet Weaknesses no: 3,6,7,8,9,13,14,15,18,19,20,21,22,23</p> <p>Threats no: 6,7,8 meet Weaknesses no: 16,17</p>

Based on the results of interviews with the owner and TOWS analysis, it can be identified three stakeholders who play an important role for the organization include commissioners, employees, customers / visitors. Commissioners have an important role in establishing the vision and mission for the company and are responsible for conveying and instilling understanding of the vision and mission to employees. Employees have a very important role, especially in the field of tourism services to provide maximum service. The main responsibilities of Jendela Alam employees are serving visitors, raising animals, maintaining facilities and infrastructure, caring for plants. Visitors are also stakeholders who play important role for Jendela Alam since without visitor satisfaction the Jendela Alam will not be able to survive in the existing competition. Based on the interview, it can be identified the characteristics of visitors to Jendela Alam especially based on gender. The majority of visitors who carry out educational tourism activities at Jendela Alam are students, teachers, and parents of students who accompany students during the activities and are usually dominated by their mothers.

By considering the interests of related parties and the characteristics of visitors to Jendela Alam, innovation in the field of marketing is needed to overcome the problem of decreasing tendency of the number of visitors, particularly in relation to product, pricing, distribution and promotion strategy. Marketing strategy is needed due to its importance as one of the supporting strategies to overall development of the company's business to achieve the mission and vision company.

Regarding the product strategy, Jendela Alam is a tourist attraction which provides and utilizes land as education tourism and nature recreation, it became the power of the company to be able to provide value

added through knowledge to the visitors. For this reason, the company must further enhance its benefits to visitors such as increasing the number of tour packages that can be involved visitors to interact with the employee in the activities offered. Another thing that needs to get important attention is the arrangement of the location to be more attractive, improved the facilities needed by visitors to increase visitor satisfaction. For example the relocation of the restaurant near the entrance so that it is easily accessible and the provision of free internet facilities for visitors who may only act as a companion in activities and not directly involved in educational tourism activities undertaken.

Regarding the pricing strategy, pricing policy is very important to determine the level of visitors since price is one of factors determining whether visitors are willing to make their visits based on their availability funds. One strategy that can be taken is through giving discounts for visitors who have high frequency of visits, for example school children, teachers, and their families who have a continuous program of visits to Jendela Alam. In addition, special event pricing also needs to improve the number of visitors and to attract more visitors.

Related to the distribution strategy, with the location of Jendela Alam that surrounded by the hills and have fresh air, the company is expected to provide additional tourist attractions both in form of education or science and recreation that is easily accessible to eliminate boredom during activities. Regarding the distribution strategy, Jendela Alam needs to consider the increasing activities to provide information to the public such as through mass media, advertisements or even banners along the road to the location needs to be done to support the promotion strategies that have been carried out such as direct offers to schools and other

educational institutions.

Related to the people, process and physical evidence strategy, it is necessary to standardize the training of employees to ensure quality service so as to increase employee attention to interiors, building equipment, including lighting systems, and spatial planning that are continuously being improved. This will attract the attention of visitors and can influence their interest to revisit.

CONCLUSION

The high operational cost and the decreasing tendency regarding the number of visitors has been the main problems faced by tourism industry that caused by the increasing competitive business competition, the same problem is encountered by Jendela Alam. The results of quantitative analysis based on the graph actual of data and forecasting results show that there is a tendency to decrease in the number of visitors in Jendela Alam even during holidays. By considering the stakeholders and the main characteristics of visitors, this study recommends the company to strengthen its business in the field of marketing product/service, one of the marketing strategies implemented is marketing mix strategy. Marketing mix strategy can be implemented through product, pricing, distribution, promotion, people, process and physical evidence strategy as previously discuss.

From the TOWS analysis some suggestions can be proposed such as:

- The arrangement of the location to be more attractive, improved the facilities needed by visitors to increase visitor satisfaction. For example, the relocation of the restaurant near the entrance.
- Provide free internet facilities for visitors who may only act as a companion in activities and not directly involved in educational tourism activities undertaken.
- Giving discounts for visitors who have

high frequency of visits, for example school children, teachers, and their families who have a continuous program of visits to Jendela Alam.

- Special event pricing also needs to improve the number of visitors and to attract more visitors.

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