Ecovillage Market Segmentation Based on Sustainability Tourism Concept at Panji Village

Nyoman Dini Andiani1*, Ni Ketut Arismayanti2, A. A. Ngr Yudha Marthin Mahardika1, Gede Putra Nugraha1

1 Universitas Pendidikan Ganesha
2 Universitas Udayana

*Corresponding Author: dini.andiani@undiksha.ac.id
DOI: https://doi.org/10.24922/eot.v10i2.108774

Abstract
Tourism market segmentation needs to be known, as is the case with the development of Tourism Villages. The purpose of this research is to find potential market segmentation that can be targeted for Panji Tourism Village. Qualitative research methods through in-depth interviews were conducted. The data can be processed using the AHP analysis tool. The results show that market segmentation for the ecovillage concept in Panji Tourism Village is the family tourist market share, the main criteria is feasibility which means that the future prospects of developing tourist attractions developed in Panji Tourism Village are tourist activities that can be enjoyed by families, with current considerations looking at a market that has the potential to come for families because apart from easy access and the potential tourist attractions offered can be enjoyed by family members. The results of this study have implications for the readiness of the community to continue to innovate local products that can be enjoyed by tourists of all ages in one family. By continuing to pay attention to the various possible needs of tourists, especially the family tourist market, it is hoped that a sustainable visit will occur.

Keywords: tourism; village; market segment.

INTRODUCTION

Background
Tourist destinations in Buleleng Regency are spread over several villages. Currently, Buleleng Regency has 75 villages as tourist villages as stated in the Decree of the Buleleng Regent of Bali Province Number 430/239/HK/2022 and is spread over 6 sub-districts. One of the villages that has become a concern of the Regional Government, especially the Buleleng Regency Tourism Office, is Panji Village, which is located in Sukasada District. Panji Village is a village that has the potential for nature tourism and historical tourism and is expected to be able to represent Buleleng Regency in the national competition event, namely the Tourism Village Award in 2022 (Summary of the initial interview with the Head of the Buleleng Tourism Office, January 2022). Through the Tourism Awareness Group which is owned by Panji Village, it is hoped that the maximum management of village potential is expected to make Panji Village able to attract tourists to visit this
The Tourism Awareness Group has been formed based on Decree No. 18/Dispar/2018 by the Buleleng Regency Tourism Office, strengthening the smallest institutional tasks at the village level related to tourism to continue to strive to be able to develop its tourist attraction. Tourist Attractions in Panji Village promise potential for tourism development in Buleleng Regency (Andiani, 2021). To realize competitive tourism development, Panji Village needs a tourism village development model that is different from other tourist villages. Based on the results of interviews with the Head of Panji Village and the Head of the Tourism Office, the development of tourism in Panji Village will lead to the development of Panji Village as an Ecovillage. The development of village tourism potential as an Ecovillage of course requires the identification of village potential and determining the segmentation of the Ecovillage. Market segmentation is one way that is needed before carrying out marketing activities [1]. The use of AHP (Analytical Hierarchy Process) analysis technique can be used to determine the ecovillage for Panji Village. [2] Determining the priority of the tourist market which will later be predicted to become loyal tourists visiting Panji Village requires the right selection based on the agreement of experts.

The importance of the study of market segmentation in Panji Village, which tries to carry out ecovillage-based tourism activities, is to get a clear picture of the types of tourists who are expected to continue to be loyal tourists in the Panji tourist village. The development of Panji Village as an ecovillage is because, in addition to the potential for supporting natural tourism, it is also because through the development of the ecovillage it is hoped that the people in Panji Village will try to integrate environmental sustainability with social aspects. The results of previous studies related to the potential of the Panji tourism village have become a concern and are said to be able to support the existence of the community in innovating, especially with the existence of tourism awareness groups [3] [4]. A well-developed potential will have an impact on the success of Ecovillage and will have an impact on the success of the Panji village community in preserving the environment of their village. Preservation of the natural environment will be able to encourage the realization of sustainable tourism.

LITERATURE REVIEW

Previous recent research studies that are relevant to this research are taken from several previous research results. Several previous studies containing new theories, concepts, or approaches that are related to this research, are used as a reference in parsing the results of research related to determining the concept of ecovillage market segmentation in Panji Village.

There are several results of previous research related to the development of tourist villages [5] [6] [7]. Development eco-village aims to make the community aware of being able to manage the Citanduy watershed in order to maintain its sustainability [5]. The study of ecovillage [6] shows that to realize the village as an eco-village necessary to involve the community in protecting the environment, as well as utilizing mangrove forests as a natural tourist attraction. Both studies have similarities with this study related to eco-village but have different development goals because this study it focuses more on finding priority market segmentation that Panji Village can aim for when developing Panji Tourism Village based on village development with an eco-village concept.

Panji Village is not only rich in natural tourism potential but its historical potential can be developed as heroic tourism and the need for thematic tourism development [7]. The results of this study will be the basis for recording the tourism potential in Panji Village. However, a developer needs to always have an evaluation. As
mentioned by Pantiyasa, who in his study provided an evaluation of the Kaba Kaba village that the Kaba-Kaba tourism village was still classified as a pilot tourism village because the existing tourism potential had not been managed optimally, so the development stages of the development model and market segmentation needed to be studied further [8]. From all the results of these studies, it will be different from this research plan because previous research has not made an effort to identify the potential of villages as supporters of the eco-village, and also there is no study that specifically examines the segmentation of the eco-village.

This study uses several concepts, namely the concept of a tourist village, and eco-village. The concept referred to in this research is the technical terminology in this research, which arises from the title and problems. So, this concept will contain an explanation of the technical terms used in this study. The concept that is raised will provide clarity to the reader because this concept is not normative but more specific, which is an explanation of the basic components of the theory.

Draft Tourism village is an area that has a variety of local wisdom such as customs, culture, and natural potential which is managed as a tourist attraction in accordance with its capabilities, which is intended for the social and economic interests of the community. [9] The knowledge that is owned by the community and becomes the guide of people in carrying out their daily lives is called local wisdom. Tourists can find this in the tourist village. A tourist village is an area in the form of a rural environment that has a tourist attraction based on local wisdom such as customs, culture, and natural wealth that has uniqueness and authenticity in the form of a characteristic rural atmosphere. Rural areas that are managed as tourist villages usually have more than one or a combination of several tourist attractions, for example, a combination of agrotourism, cultural tourism, and ecotourism in one tourist village area. The concept of this tourist village is the basis for developing Panji Village as a tourist village that wants to develop its village in a sustainable manner by implementing the eco-village concept.

The development of the ecovillage was initiated by the development of the ecotourism concept in the 1960s, where what is meant is how the utilization of the natural and cultural potential of the community in Panji Village will not have a negative impact on the natural and surrounding environment if tourism activities are carried out in this village. The involvement of the community in managing the potential of their village, so as to be able to improve the village's economy because of their innovation and the community's ability to protect the environment is the core of what is called an ecovillage [10] [11].

Tourist destinations are closely related to the motivation of tourists visiting the area. Motivation can be in the form of intrinsic and extrinsic motivation. This intrinsic motivation is a factor from within tourists that makes a person motivated such as status while extrinsic motivation is compensation when a destination itself is motivated to visit a tourist village later. Many theories of motivation put forward by experts are intended to provide a description of what humans actually are and what humans will be like.

Humans have basic needs. He shows it in 5 (five) levels in the shape of a pyramid, people start pushing from the lowest level. The five levels of needs are known as Maslow's Hierarchy of Needs [12]. The study of tourist motivation has shifted from viewing motivation as a short process to looking at travel behavior, towards emphasizing how motivation affects one's psychological needs and long-term plans, by looking at intrinsic and extrinsic motives. With the driving factor, someone wants to go on a tour, but it is not clear which area to go to. Various pull factors possessed by a tourist destination will cause the person to choose a particular tourist destination to meet his needs and desires [13], [14].
Motivation becomes the main study if we want to know the expectations and factors that push and attract tourists to visit a tourist destination. The theory of motivation in the context of this research, it is important to use it to provide strength in parsing the results of research related to priority market segmentation in Panji Village.

METHODS

This study was designed as qualitative research, in general in presenting the results of data analysis which is more widely used as a formal technique, namely the presentation in the form of words or sentences. Observations and interviews with experts in searching for priority market segmentation have been carried out for a period of 4 months, from April to August 2022. Observations related to the flow of tourist arrivals to Panji Village as a Tourism Village have been observed for 2 years from 2021 to 2022, and in-depth interviews using instruments in the form of structured questions and answers were only carried out for 4 months from April to August 2022 which were given to observers of Panji Village tourism development.

Experts consisting of 5 tourism stakeholders are considered very important to be able to formulate priority market segmentation which will later be able to support the determination of tourists who have the potential to enjoy tourism potential in Panji Village. Qualitative and interpretive descriptive analysis techniques were used to describe the results of the AHP analysis. The AHP analysis technique is an analytical tool used in decision-making. AHP is used in decisions for multi-criteria, and prioritization of strategies that actors have in conflict situations [2]. The AHP model uses human perception which will be considered an ‘expert’ as its main input.

RESULTS AND DISCUSSION

Panji Tourism Village based on Eco Village Concept

The potential of Panji Village as a tourist village makes Panji Village a better-known village destination, the visitors as a tourist coming even during the covid pandemic. The location is not too far from the city center of Singaraja, with a vehicle of approximately 15 minutes, you have to reach a tourist attraction such as the Bhuana Kerta Monument. Panji Village as a tourist village was established in March 2022 through the decision of the Buleleng Regent No 430/239/HK/2022. The Tourism Village Competition has indirectly been able to arouse the creativity of each village to carry out various product innovation developments. Panji Village as one of the villages in Sukasada District is designed to participate in national-level competitions and take part in the Indonesian Tourism Village Award competition in 2022 requires the attention of all tourism stakeholders in Buleleng Regency.

As a tourist village that adheres to the ecovillage with a variety of tourism potential, it shows that the community and village government are trying to build a tourist village atmosphere that provides sustainability of life in various aspects of nature and culture. Panji Village is currently building a very strong collaboration in its internal environment first, so the products offered by the village are typical of Panji Village. The community has built a sense of love that it is village products that must be consumed because it will be related to the economic cycle in the village. As stated by the Head of Panji Village who said that:

“.... This eco-village actually started from the spiritual values of Panji Village, which build good governance and agriculture. Here, the community consumes locally owned products, then the community is invited to understand the economic cycle, by forming a group
based on a fun community (sekaa demen) that brings a good hospitality product, so when they are sekaa demen (a group formed on the basis of shared joy) so that's what I call tourism itself, so how can a group be welcoming visitors, clients, so that the result is a customer return or the return of the customer to Panji Village…”
(Made Mangku Ariawan, August 2022)

What is conveyed can be understood when traveling in Panji Village because of the potential that is well utilized and processed by the community. The physical potential that has become a tourist attraction in Panji Village will provide support for tourism development. He also said that this eco-village concept was felt to continue to provide sustainability to the development of tourism potential in Panji Village. According to him, the eco-village can also be interpreted by what it does, namely by developing the economy through green agriculture, such as mina padi, organic rice, red ginger, and superior agricultural-based products for the community. Meanwhile, tourism activities such as village potential-based programs by making tour packages such as short trekking, long trekking, and full-day trekking. The potential is packaged from upstream to downstream, namely from the Puncak Landep forest to the weighing temple. Optimization of tourism products that can be introduced in a tour package as shown in Figure 1.

**Figure 1.** Thematic Panji Village Tour Package (Source: Andiani, 2022)

The Priority Market Segmentation Panji Ecovillage Tourism Village

A lively visit to Panji Village was initiated by the use of bathing centers at several points that offer clean and natural river water in Panji Village. Domestic tourist visits are increasing when people in urban areas are getting bored with the Covid situation, which makes people unable to visit crowded places such as shopping centers and other areas. Panji tourist village which offers a natural atmosphere and a good place to get fresh air makes this village more and more chosen. Supported by easy access and not far from the center of Singaraja City, Panji Village gets a lot of tourist visits in the midst of people who are much eager to find a beautiful place and blend with nature.

The visit of domestic tourists who came gave new enthusiasm for the tourism conscious groups in this village, many new tourist spots were introduced. The Head of Pokdarwis said that;

“… From the beginning, the Temuku Paras bath was opened, as the beginning of the revival of nature tourism in Panji Village. The Tubing program in Panji Village, which utilizes river water in Panji Village, finally provides public awareness that the natural potential of the village can be utilized to attract tourists to visit. This was followed by the development of community innovation in the field of making various processed food products which could eventually become one of the icons of Deas Panji food processing such as Red Ginger…” (Nyoman Abdee Negara, 2022)

Ecovillage in its application develops the agricultural economy through green agriculture, such as organic rice, red ginger, and superior agricultural-based products for the community and for tourism activities, namely ecovillage more towards village-based programs, short trekking, long trekking and full-day trekking from upstream to downstream from the peak of Landep forest to the weighing
temple, a turtle conservation place which is famous for the existence of a water source called Tirta Sudamala in the middle of the sea and this turtle conservation attracts tourists, in the morning enjoying dolphin watch which is the only ecovillage activity in Denbukit Earth. is in the holy pennant.

This eco-village is actually based on the spiritual values of the Panji village, which built good governance and agriculture in the first place. The two communities consume locally owned products, the third is related to their understanding that it is related to the economic cycle, the way to raise awareness is to form a group based on a fun community (sekaa demen) that brings a good hospitality product, so when they are sekaa demen (an association of happy and charming people), that is an asset of tourism itself, so how can a group welcome visitors, clients, etc., so that the result is a customer return or the return of the customer to the Panji village, so explained the tourism driver in Panji Village.

In Panji Village, there are 6 groups that organize existing tourist attractions. It was explained that tourism assets are the people themselves, who are able to move all forms of tourism activities with innovations made and also local wisdom that becomes an attractive attraction. All stakeholder involvement in the village also synergizes with the customary government and village offices, as can be seen from some of the products offered in Panji Village for tourism development.

Determination of Criteria and Priority Market Segmentation for Ecovillage Panji

Village Panji Village as a tourist village began to be known during the covid 19 era. Community activities that are aware of the potential for natural tourism bring a new color to economic growth in Panji Village. Panji Village has a variety of natural tourism potential which is very important. Marketing activities are one of the main things that must be done by the management of tourist destinations. Therefore, it is necessary to manage tourism products and services that are tailored to market needs. Market segmentation requires analysis, the determination of market segmentation only looks quantitatively [17]. This opinion seems to give hope that sustainability analysis is needed that is not only numerical but also needs reasons related to the target market. To find out these basic needs, market segmentation is carried out which can be more focused on the reasons why the segments obtained are the main segmentation. Getting the right tourism market is the goal of a market segmentation analysis.

To determine the segmentation of the Panji Village Ecovillage tourism market. Therefore, research is needed, so that tourism village products based on the ecovillage concept are needed what will be offered will be in accordance with market expectations and present quality tourists or loyal to the destinations offered. Determination of market segments or target markets will provide convenience in the marketing process and in the sales process. To determine the priority market segmentation, it is tried to present several market segments that are considered frequent visits. There are several types of market segments that must be considered in segmenting the market, so in-depth research is needed to determine the right market segment because there are several segments that must be considered.

An analytical tool is needed in this research to determine priority market segmentation. This analysis is needed so that the target market will be more specific. Determination of priority market segmentation to determine the type of priority tourists who will later visit Panji Village, by using an analytical tool in the form of the Analytic Hierarchy Process (AHP). AHP is used as a technique or method in making and making decisions for complex, unstructured, and multi-attribute problems by ranking the existing decision alternatives and then choosing the best with the criteria determined through a numerical value with
the entire series of weightings at each stage meeting the criteria (consistency ratio) [18].

Determination of priority market segmentation of Panji Tourism Village in terms of aspects or criteria that support the selection of market segmentation. Determination of criteria and market segmentation requires various considerations so that the determination of segmentation or target market is clear while some of the considerations needed are considerations from experts who are adapted to the empirical conditions of the Panji Village Ecovillage tourism potential, and also based on the concept of village tourism and the concept of market segmentation. Making a questionnaire as an instrument in collecting data on the weighting value of each stakeholder for the next stage of pairwise comparison or pairwise comparison in the AHP. Stages of pairwise comparison (pairwise comparison) by giving weighting based on the level of preference of stakeholders. The stakeholders who are made experts in this study were 5 experts consisting of 1 person from the academic element, 1 person from the government element, 1 person from the community element, 1 person from the mass media, and 1 person from the entrepreneur element. Interviews were conducted to explore the criteria and priority market segmentation that can be used as a basis for compiling the AHP questionnaire.

Refers to the concept of market segmentation. So, the criteria used to determine the priority of market segmentation in Panji Village Ecovillage are distribution and promotion, stability, competitiveness, and feasibility. The following are several tourist market segments that can be selected as priority target markets, which have been successfully formulated based on concepts, empirical conditions in the field, and interview results, namely: vacation time so that they really want to enjoy their vacation somewhere they want. An educational Tourist is a tourist who travels for educational purposes, for example for study or comparative study at a school or university. A millennial Tourist is a tourist who is able to master digital and aims to find good places. A backpacker is a type of tourist who carries out tourism activities with limited funds. Therefore, these tourists usually use local standard facilities. The hallmark of this tour is carrying a backpack on his back.

The four target markets are seen from the type of tourists, namely the market segmentation for family tourists, educational tourists, millennials, and backpackers. The four tourists will later be analyzed and selected as a priority market segmentation to market Panji Village Ecovillage products. The criteria that have been agreed upon and used in determining priority market segmentation are distribution and promotion, stability, competitiveness, and feasibility.

Chart 1. The pairwise comparison stage between the criteria against the goal

In Chart 1, we can observe the pairwise comparison stage between the criteria against the goal (goal: market segmentation priority). To simplify the discussion, all elements are explained into hierarchical groups. The description of each hierarchical group in chart 1 is as follows.

a. Hierarchy 1: Research Objectives

The first hierarchy contains goals, namely the problems that are sought to solve through the AHP model. The problem to be solved in this research is to formulate priority market segmentation for Ecovillage Panji Village.

b. Hierarchy 2: Criteria

The second hierarchy in this study is a criterion that is considered stakeholders
in determining priority market segmentation for the Ecovillage of Panji Village. This criterion is based on the concept of market segmentation (Lupiyoadi, 2001), which states that several criteria are needed in determining market segmentation [19]. The criteria are described in Table 1.

### Table 1. Market Segmentation Criteria

<table>
<thead>
<tr>
<th>No.</th>
<th>Kriteria</th>
<th>Definisi</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Distribution and promotion</td>
<td>Marketing activities that seek to facilitate the delivery of goods from producers to consumers.</td>
</tr>
<tr>
<td>2</td>
<td>Stability</td>
<td>Segmentation carried out must be achievable and stable.</td>
</tr>
<tr>
<td>3</td>
<td>Competitiveness</td>
<td>Consisting of competition in each destination</td>
</tr>
<tr>
<td>4</td>
<td>Feasibility</td>
<td>Segmentation must be served optimally, especially by producers.</td>
</tr>
</tbody>
</table>

Source: Kotler (2008)

c. Hierarchy 3: Alternative

The third hierarchy is the priority market segmentation alternative which will be chosen to determine the first hierarchy (research objective). The determination of this alternative strategy is influenced by the personal considerations and understanding of each stakeholder as described previously. The priority market segmentation alternatives are as follows [18].

1. Family tourist
2. Educational tourist
3. Millennial tourist
4. Backpacker tourist

Determination of criteria and market segmentation development priorities are obtained based on interviews that have been conducted with 5 (five) experts consisting of the government, private, community, media, and academic sectors and supported by the market segmentation concept from Kotler (2015) that in the selection of market segmentation it is necessary to pay attention to several criteria [18].

### Priority Criteria in Determining Priority Market Segmentation

The initial stage in the Analytical Hierarchy Process (AHP) method is to perform pairwise comparisons by giving weighting based on the importance of each criterion, while the results of this comparison are described in Figure 2 below.

![Figure 2. Priority of Criteria](Source: Results of Data Analysis, 2022)

Based on Figure 2, the eigenvalues vector or the order of priority criteria for the research objectives, namely determining the priority market segmentation of Panji Tourism Village, the main criteria priority obtained with the eigenvector, namely the Feasibility criterion of 0.498, then followed by the Stability criterion of 0.276, the Distribution & Promotion criteria of 0.124, and the Competitiveness criterion of 0.102. Value Consistency Ratio on the weighting criteria is 0.01. This value states that the level of consistency of the results of pairwise comparisons between criteria is acceptable and considered consistent because it has met the requirements of the Consistency Ratio, which is less than or equal to 0.1 (satty, 1993). This shows that the Feasibility criteria are the main priority criteria in determining priority market segmentation in Panji Tourism Village because Panji Village is easy and possible to visit because of its proximity to the city of Singaraja.
Priority Market Segmentation Judging from Priority Feasibility Criteria

Based on criteria Feasibility shows that family tourist market segmentation is the main market segmentation priority with Consistency Ratio (CR) = 0.04 (CR < 0.1). This shows that the comparison of preferences is consistent. The results of the AHP analysis based on the Feasibility can be seen in Figure 3.

Market Segmentation Priority from Competitiveness Criteria

Market segmentation educational tourist is a top priority with Consistency Ratio (CR) = 0.02 (CR < 0.1). This shows that the comparison of preferences is consistent. The results of the AHP analysis based on the competitiveness criteria can be seen in Figure 4.

Market Segmentation Priority from Distribution & Promotion Criteria

Priority based on distribution & promotion criteria shows that backpackers are the main market segmentation priority with Consistency Ratio (CR) = 0.00432 (CR < 0.1). This shows that the comparison of preferences is consistent. The results of the AHP analysis based on distribution & promotion criteria can be seen in Figure 5.

Market Segmentation Priority from Stability Criteria

Priority based on stability criteria shows that family tourist is the main priority with Consistency Ratio (CR) = 0.02 (CR < 0.1). This shows that the comparison of preferences is consistent. The results of the AHP analysis based on the stability criteria can be seen in Figure 6.

Results of Determination of Market Segmentation Priority

From all stages of the Analytic Hierarchy Process that have been carried out, the results obtained regarding the purpose of this research are, determining the priority of market segmentation for Panji Eco Village Tourism Village. The results of the Analytic Hierarchy Process are described in Figure 7.
Based on Figure 7, the strategic priority with the highest eigenvector value is the family tourist market segmentation of 0.368, then the backpacker is 0.289, the educational tourist is 0.178, and the last is the millennial tourist at 0.164. Consistency Ratio value in pairwise comparisons as a whole is 0.02. This value states that the overall pairwise comparison assessment process that has been carried out is acceptable and considered consistent because it has met the requirements for the Consistency Ratio value, which is less than or equal to 0.1 (Saaty, 1993).

Tourists who come to a destination before must have heard information related to the tourist destination they are going to, especially in the current digital era. Information is very accessible [20] [21]. Because there are several things that will be considered by potential tourists. The distance traveled and access to the tourist village will get the attention of potential tourists. The management of the tourist village must of course pay attention to this, and Panji Village as a tourist village that tries to hold the eco-village concept, until now still continues to innovate to make products that utilize local people's harvests, from food products to handicraft. The ecovillage concept is closely related to the development of ecotourism involving local communities.

Local communities have the opportunity to become direct actors in all forms of providing services for tourists, both services and other processed products. Priority market segmentation which is focused on obtaining the family tourist segment is based on the understanding by experts that so far, through observing the phenomenon of the development of tourist visits to Panji Village, the tourist market who comes with family. While other markets such as educational tourists, millennial tourists, and backpacker tourists. [22] still must be considered in the provision of tourism needs, so that later other market segments will continue to provide a sustainable level of visitation.

CONCLUSION

From the results of the study, it has been shown that family tourism is a market segment that can later be sustainable if it is supported by the ability of the tourism destination manager to meet the various possible expectations and needs of the tourist market who come from families. Market segmentation studies will have implications for increasing the understanding of tourist village management to focus more on the intended tourist-target. So that it will have an impact on increasing the consistency of Panji Tourism Village management to be able to continue to innovate, and create attractions that provide economic sustainability, as well as the social welfare of the community and the natural environment of the village. This research still has limitations, in the future other researchers can examine the influence of tourist arrivals on economic, social, and environmental sustainability in Panji Village.

REFERENCES


