# The Tukad Bindu Tourism Pricing Model as One of The Digital Destinations in Bali

*by* Ketut Bagiastuti

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*Abstract*—Tukad Bindu is one of the digital tourist destinations in Bali. Digital destination is a tourism product that is creative and packaged in a modern way using digital technology, to facilitate tourists in making a seamless customer experience in searching (looking for), ordering (book), and paying (paying) tourism services. With the emerging trend of sharing economy in the tourism sector. The purpose of this study was to determine the Tukad Bindu Tourism Price Determination Model as one of the digital tourism destinations in Bali. To measure the price determination of Tukad Bindu tourism using quantitative analysis with the Travel Cost Method (TCM) method, by asking visitors for willingness to pay after visiting Tukad Bindu tourist destinations. The results of this study are the determination of the price of visits to Tukad Bindu tourist destinations, which is fifteen thousand rupiahs per person.

*Keywords—digital tourism, destination, travel cost method, willingness to pay*

## I. INTRODUCTION

### A. Background

The Indonesian tourism sector must have a slogan or branding that reflects the potential of Indonesia. So in 2011 the term, "Wonderful Indonesia" was announced, which previously used the term "Ultimate in Diversity". Elements contained in the branding of "Wonderful Indonesia", namely: nature, culture, people, food, value for money. In 2017, The Telegraph once mentioned Indonesia as one of the 20 fastest-growing travel destinations in the world. This is inseparable from Wonderful Indonesia's achievements. Wonderful or Indonesian charm is the promise of Indonesian tourism to the world. The word "Wonderful" or "Enchantment" contains the promise that Indonesia is rich in amazement, from all humans and nature, which disturbs the heart and promises a pleasant new experience (Tourism Frame). Indonesia believes that the world will be a better place when everyone has the opportunity to enjoy "World of Wonderful". Determination of the Wonderful or Enchantment slogan of Indonesia is the main step in introducing Indonesia to the international world when competition in destination branding gets tighter. Especially if you see Indonesian tourism which is still inferior to other countries, especially neighboring countries such as Singapore, Malaysia and Thailand. The branding success of "World of Wonderful" is not only measured by the number of tourists or tourists visiting Indonesia. Moreover, the branding of "World of Wonderful" must be able to create 9 (nine) brand equity which includes: dimensions of performance, social image, value, trust, and identification that are maintained and brought to life by the

people in it. As an ongoing process, the branding of "Wonderful Indonesia" certainly requires the support of all parties (stakeholders). The government needs to build synergies and encourage the participation and active role of the general public, the private sector, investors, tourism industry players, mass media, and others. Motto of "Wonderful Indonesia" became a country branding boosted tourist arrivals to 7.7 million foreign tourists (foreign tourists) in 2011. The concept of Country Branding is an effort made to build and maintain the image of a country holistically. The formation of the image of a country both internally and externally is based on values and positive perceptions that are owned so as to get a position among other countries in the world. So that in 2016, Wonderful Indonesia received 56 awards from 22 different countries (Special Staff of the Indonesian Ministry of Religion for Communication and Media, Don Kardono).

All digital tourism events in the last three years have received positive results. The basic spirit used is then continued with the 'go digital' move. All media channels are utilized to instill awareness of Wonderful Indonesia and the Enchantment of Indonesia aggressively. One of them is the Digital Market Place platform on the marketing side called ITX (Indonesia Travel Exchange). This digital system is in line with other mottos, Look, Book and Pay. Where most tourism service providers must be prepared to transact online [1]. About 70% of kids now make cyberspace their stage (UNCTED) [2]. The platform used is social media and various other platforms that are accessed online. Some market pioneers always update and prepare tourism products that are increasingly creative, instagramable spots and ready to be viral in cyberspace. One of them is Tukad Bindu, and Tukad Bindu, one of the tourist destinations visited by the IMF Delegation in 2018 because Tukad Bindu is a digital and environmentally friendly tourist destination.

Technology is the whole means for providing goods or services. Technology in tourism continues to develop along with human needs requiring fast access. According to the United Nations Conference on Trade and Development (UNCTED) reviewing access to information technology can use various forms of media from mobile phones, internet channels, GPS (Global Positioning System) [3], digital cameras, digital radio and media players digital. The use of information technology facilitates communication in the tourism business. The information technology partners are for publication and communication; marketing potential areas; data management; tourism business operations; and as a management information system.

CDM (Competing Destination Model). This is the process of retrieving data travelers from various online sources, profiling them and defining their segmentation. Furthermore, travelers are used as targeted markets and answer their needs with appropriate advertising campaigns. In short, the whole chain of traveler decision-making processes from looking for information (Look), Ordering (Book) and Paying (Pay) is done on one CDM platform in an integrated (end-to-end) manner. This movement rests on Creative Values and Commercial Values [4].

*B.    Problem Formulation*

Based on the things described in the background, problems can be formulated, namely: How about the Tukad Bindu tourism pricing model as one of the digital destinations in Bali? What is the size of the Tukad Bindu tourism price as a Digital tourist destination seen from the Travel Cost Method? How much is the influence of the Digital World on the Level of Visit to Tukad Bindu?

*C.    Research Objectives*

The purpose of this study is to find out the tourism pricing model and the ability of visitors to pay by using the Travel Cost Method (TCM), the influence of the use of the digital world on the level of tourist visits to Tukad Bindu. While the benefits obtained from this research are the standard fees imposed on visitors at Tukad Bindu.

*D.    Research Outputs*

The main outputs of this study are product in the form of a tourism pricing model includes the willingness to pay after seeing a destination and the influence of the use of the digital world on the level of tourist visits to Tukad Bindu, and publications in national-scale scientific journals or proceedings, where the planned scientific papers from this research will be published in the Bali State Polytechnic Sosum journal or proceedings of the National Polytechnic Seminar & Research Meeting (SENTRINOV) throughout Indonesia.

*E.    Practical Contributions*

The results of this analysis will be in the form of a model that can be used as a reference for similar researchers and as an evaluation material and reference for developing tourism objects in Bali in terms of policy making, management, conservation and optimization.

## II. LITERATURE REVIEW

*A.  Understanding Tourism*

Understanding Tourism according to Law Number 10 of 2009: 1. Tourism is a travel activity carried out by a person or group of people by visiting certain places for recreational purposes, personal development or studying the uniqueness of tourist attractions that are visited in the interim period. (Article 1 paragraph 1) 2. Tourism is a variety of tourism activities and is supported by various facilities and services provided by the community, businessmen, government and the Regional Government. (Article 1 paragraph 3) Tourism is an activity of changing the temporary residence of a person, outside his daily residence for any reason other than

conducting activities that can generate wages or salaries. In addition, tourism is an activity, service and product of the tourism industry that is able to create a travel experience for tourists. Tourism is a very complex phenomenon of the movement of people, goods and services.

*B.  Economic Value of Natural Resources and The Environment*

According to [5] basically the concept of the economic value of natural resources and the environment is divided into two, namely the value on the basis of use (instrumental value) and the values contained therein (intrinsic value). Values on the basis of usage illustrate the existence of natural and environmental resources that are used to meet needs, while the values contained in natural and environmental resources are values inherent in natural and environmental resources [6]. Economic value is defined as the measurement of the maximum amount a person wants to sacrifice goods and services to obtain other goods and services. Formally, this concept is referred to as a person's willingness to pay for goods and services produced by natural resources and the environment. Using these measurements, the ecological value of ecosystems can be translated into economic language by measuring the language of economics by measuring the monetary value of goods and services [7].

*C.  Demand Theory*

Demand is the number of goods consumers want to buy and they are able to buy it. According to Sadono the request of someone or something society to something is determined by many factors. Among these factors the most important are: Price of the item itself; Prices of other items that are closely related to the item; Household income and the average income of the community; The pattern of income distribution in the community. Community taste. Total population. Predict the situation in the future [8].

*D.  Travel Cost Method*

The travel cost method assumes that travel costs reflect the price of a recreational place. According to Fauzi [7] the method of travel costs is used to analyze the demand for outdoor recreation such as fishing, hunting, hiking and others. In principle, this method examines the costs incurred by everyone to these recreational places. The method of travel costs can be used to measure benefits and costs resulting from: Changes in access fees (entrance ticket) for a recreation area; Addition of new recreation areas; Changes in the quality of the recreational environment; Closure of recreational areas. Basically, the TCM working principle is quite simple, for example we want to know the value of attractive natural resources for recreation (e.g. mountains) that are located within a certain radius. The basic purpose of TCM is to know the value of use (use value) of natural resources [8-9]. In determining the demand function for visits to tourist attractions, the TCM individual approach uses econometric techniques such as simple regression (OLS). The hypothesis that is built is that tourist visits to tourist attractions will be strongly influenced by travel costs and assumed to be negatively correlated so that the slope of the demand curve is obtained.

*E. Contingent Valuation Methods (MVC)*

Survey technique methods to ask residents about the value or price they give to commodities that do not have a market such as environmental goods, if the market is really available or if there are other payment methods such as taxation. In principle, this method has the ability to be applied in assessing the benefits of providing environmental goods to a wide range of environmental problems and is also able to determine the choice of price estimates in conditions of uncertainty.

*1) Some important factors in MVC studies*

*a) Determination of population and object assessed.* The first step that must be considered is to determine the population or who will be asked to give the value of environmental goods and the object to be studied. The population that will give value to the changes in the environment under study can consist of potential users in the future or those who want environmental changes to occur (non-users). So in this MVC, the population studied must be clearly defined, then a satisfying and representative sampling strategy is determined.The object under study must be clearly defined to describe the policy issues that will be examined or reviewed. Describe in detail about resources or changes in the quality of the environment to be assessed. Not only verbal descriptions are needed but also photos, graphics and maps / maps are added.

*b) Design and form of questionnaire.* The design and form of the questionnaire is one of the important factors in determining the accuracy and objectivity of the data obtained in determining the form of economic transactions and environmental policies. A list of questions must be designed so that it can provide satisfactory results where the transaction is carried out properly. A correct transaction is a transaction that occurs where people have complete information so that they can determine their best interests, so the value of the transaction that occurs is truly valid and can be trusted and describes the actual value of kumb.

*2) Questioning Method*
Alternatives that can be taken in asking questions to respondents are as follows:

*a) Bidding Method (MTM):* This method was introduced by Sandy and Prasad [10], and developed into a popular method. The form of implementation of this method is to ask the respondent whether he wants to pay a certain amount of money which is submitted as the starting point, if yes, then the value of money is raised to the agreed level, and vice versa.

*b) Open question method (MPT):* This method is done by asking the respondent directly what is the maximum amount of money to be paid for changes in the environment. The advantage of this method is that respondents do not need instructions so that they can influence the value given to environmental changes.

*c) Payment Card Method (MKP):* This method was introduced by Mitchell and Carson [11] to overcome the starting point bias of the bargaining method. This method offers the respondent a card consisting of a kumb value in which he can choose the maximum value corresponding to his preference.

*F. Evaluation of Environmental Economics*

Environmental economics is related to production, exchange and consumption of goods and services. Environmental Economics is used to achieve integration of the environment into economic activities [12].

Pearce and Tuner [13], identifies the relationship of environmental values with policies and ethics in society as the environment has a basic value relationship which seems to underline the policies and ethics adopted in the individual value via preferences, public freference value which find expression via social; and functional physical ecosystem value [14]. Basically the environment recognizes three basic value relationships that appear to underlie policies and ethics in society, namely: Individual Choice Values; Value of public choice that can reveal social norms; Physical value of ecosystem. Can be described the composition of economic values provided by the environment [15].

III. RESEARCH METHODS

This chapter will discuss the location and object of research, types and sources of data, data analysis and system design proposed in this study.

*A. Research Place and Time*

The location of this study is located Tukad Bindu Kesiman Denpasar Timur. The research will be conducted for eight months starting from April to November 2019.

*B. Research Objects*

The object under study is the ability of visitors to pay contributions to Tukad Bindu as a Digital Travel Destination. Observations will be made on the costs of entering a tourist destination, and then planning will be carried out using MVC.

*C. Data Sources and Research Stages*

*1) Data source:* Primary data is data obtained directly from tourists. Secondary data, namely data obtained in agencies related to research.

*2) Stages of Research.*

*a)* Look at the initial data to the research site e.g. look at the tophography of the research site.

*b)* Preparation of questionnaires (make a list of questions based on the variable value of direct use.

*c)* Research will be conducted by observation and survey in data collection.

*d)* Compile assessment techniques using the Travel Cost Method (use value).

*e)* Contingent Valuation Methods are used to calculate values without use (non-use value) as well as qualitative descriptive methods to describe information in the research site.

*D. Data collection methods*

We collect the data using questionnaire, personal interviews, direct observation at Tukad Bindu, and literature study.

*E. Retrieval Techniques and Sample Size*

Given the uncertain number of tourists visiting the Tukad Bindu destination, the sampling is carried out by accidental sampling and purposes sampling. In accidental sampling, whoever happens to be a tourist and is found to be asked for their opinion about Willingness to Pay (WTP). In purposive sampling, a sampling with a specific purpose, especially for people who are used as informants such as the village head and the community around the tourist area. Based on the number of members of the population (tourists) that are uncertain, the sample size in this study refers to the Kountur formula.

*F. Data Analysis Techniques*

Assessment of tourist destinations in Bindu Tukad can be carried out based on the function of the area itself, including direct use value (use value) such as recreation and the value of indirect use (non-use value) such as the aesthetics of Tukad Bindu tourism area and ecosystem management efforts in the area.

*1) Economic Value:* Tukad Bindu Tourism Destinations include the value of recreation benefits (Use Value) and the value of the existence of regional aesthetics (non use value).

*a)* Direct use value (measured value) is measured by the TCM travel cost method, socioeconomic characteristics (income, employment and education), and tourist demographics (religion, age, gender, marital status, family size and place of origin). The benefits of the total value of recreation (use value) from the travel cost approach (TCM) in Tukad Bindu will refer to the formula Grandstaff and Dixon [16].

*b)* Value without use (non use value) is value without use is measured by the contingent evaluation method, by digging data from respondents individually asking for willingness to pay. This method will calculate the willingness to pay per traveler per visit. The benefits of the value of the destination ecosystem of Tukad Bindu (non use value) will refer to the formula Grandstaff and Dixon [13].

*c)* Total Economic Value (total economic value) The total economic value of the Tukad Bindu destination is the accumulation of use value and non-use.

*2) Multiple Regression Methods*: To find out the factors that influence the cost of travel to and from travelers to tourist destinations used multiple linear regression approaches.

## IV. RESULTS

*A. Frequency of Visit*

The three locations that get relatively high frequency of visits from foreign and domestic tourists are as follows:

*1) Use value*: The number of tourist visits in 2019 and the cost of round trip tourists (TC) are used in calculating the value of direct use (use value). The value of direct use of Tukad Bindu has enormous value, so that it can be used as a guideline in managing and preserving nature so that the development of digital tourism that is environmentally sustainable can be achieved.

*2) Non-Use Value:* The total value of benefits without use depends on the willingness of tourists to pay according to what is offered and the frequency and number of visits during the year. This picks request curve with the contingent valuation method based on the frequency of the nominal value of willingness to pay at Tukad Bindu.

*3) Total Economic Value*: The total economic value of Tukad Bindu as a tourist attraction in Bali will be influenced by the condition and function of the tourist destination, so that its value can decrease and vice versa. In other words, the tourism destination must be preserved so that it can be sustainable. Management and Conservation Efforts in Tukad Bindu. Due to The Tukad Bindu is one of the tourist destinations in Bali, its existence must be maintained and preserved. In addition, the role of the community and the tourism industry must maintain the survival of flora and fauna, especially mangroves, coral reefs and coastal beaches. Because the three components are tourism destinations in Tukad Bindu. Even in *perarem* (customary law) especially in Tukad Bindu it says "No logging in mangroves", "no fishing bombs should be used in catching fish in the river" and "prohibited from littering along the river flow", and if all restrictions are violated will be subject to fines . In managing the Tukad Bindu area, the community is very concerned and maintains the aesthetics of the ecosystem, so that nature and the environment remain sustainable. Environmental management in the form of preventing and controlling pollution both on land and at sea is carried out by the community and the tourism industry while the attention of the government is still lacking.

## V. CONCLUSION

Looking at the graph of tourist visits to Tukad Bindu continues to increase, local governments should have improved tourism supporting infrastructure, for example: improving road facilities, sewers, public toilets, stops and landfills. Whereas the Regional Regulation that must be made is the Perda for making groundwater wells, garbage disposal, solid and liquid waste disposal and retribution into Tukad Bindu. If this has been made and implemented then, to achieve sustainable development and tourism based on Tri Hita Karana will be achieved.

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