

# Information And Communication Technology Support In Moderate The Influence Of Community Participation On Thk-Based Ecotourism Development In The Munggu Badung Tourism Village

Anak Agung Sri Purnami<sup>1</sup>, Anak Agung Ayu Erna Trisnadewi<sup>2</sup>, I Gusti Lanang Putra<sup>3</sup>

<sup>123</sup>Faculty of Economics and Business, Warmadewa University Denpasar, Bali-Indonesia



**Abstract** – One of the sectors developed by the government to improve community welfare is the tourism sector. Tourism development which involves the government, tourism business actors and local communities, has the aim of developing quality tourism products with the Ecotourism concept. One of the villages developed with the Ecotourism concept is Munggu Badung Village.K. The problems that occur in Munggu Village related to the development of THK-based Ecotourism are community participation and less than optimal economic impacts as well as not optimal use of ICT in increasing the effectiveness and efficiency of managing tourism organizations and increasing Internet-based promotions. This research aims to find the relationship between the Community Participation variable and Tri Hita Karana (THK)-based Ecotourism Development, moderated by the Information and Communication Technology (ICT) Support variable. Primary data collection uses a survey method with a questionnaire instrument. The sampling technique used snawball sampling with a sample size of 100 people. Primary data was analyzed in three stages, namely, first, carrying out descriptive analysis, to provide a general description of the data, second, carrying out associative analysis, with the aim of explaining the relationship between variables, third, hypothesis testing, to answer the problem using quantitative analysis with Structural Equation Modeling (SEM) with the help of the SmartPLS program. 3.0. The research results show that Community Participation and Information and Communication Technology (ICT) Support play a positive role in improving Tri Hita-based Ecotourism Development and Information and Communication Technology (ICT) Support has not been able to strengthen the relationship between Community Participation and Tri Hita-based Ecotourism Development.

**Keywords** – Community Participation, ICT Support, THK Ecotourism Development.

## INTRODUCTION

One of the sectors developed by the government to improve community welfare is the tourism sector. The tourism sector is also able to promote economic activities, including employment opportunities, community income, regional income, and state foreign exchange earnings can increase through efforts to develop various national tourism potentials. Development in the tourism sector is a breakthrough to increase regional and state income. The tourism sector will be equalized in position with other sectors, in an effort to increase state income, tourism can be called the tourism industry sector

Bali's economic structure by looking at competitive advantages in the tourism sector with natural beauty, art, culture and customs as the leading sector which has unique characteristics. The tourism sector causes the tertiary sector of the economy to become more dominant compared to the primary and secondary sectors. The tourism sector makes the largest contribution to economic growth in Bali Province, apart from the agricultural sector and Micro, Small and Medium Enterprises (MSMEs). The tourism sector is developing rapidly in Bali, able to encourage economic growth through the movement of tourists and community involvement in efforts to improve socio-economic life(Astawa & Sudibia, 2021; Kusumawardani & Soelistyo, 2021)

Bali Province is one of the main tourist destinations in Indonesia. Political stability and security factors are the main considerations for foreign tourists coming to Indonesia and also to Bali. Its exotic natural factors, consisting of forests, seas and rivers as well as rich customs, cultural diversity as well as tourism potential which attracts tourists. With the increasing popularity of Bali, this is also accompanied by an increasing number of tourist visits coming to Bali via Ngurah Rai airport as presented in the following table and graph.(BPS Bali Province, 2021)

**Table1**Data on Tourist Arrivals to Bali Province for the 2016-2020 Period

Month	2016	2017	2018	2019	2020
(1)	(2)	(3)	(4)	(5)	(6)
	350 592	460 824	358 065	455 570	536 611
February	375 744	453 985	452 423	437 456	364 639
March	Januaryy 364 113	425 499	492 678	449 569	167 461
April	380 767	477 464	516 777	477 069	379
May	394 557	489 376	528 512	486 602	36
June	405 835	504 141	544 550	549 516	45
July	484 231	592 046	624 366	604 323	16
August	438 135	601 884	573 766	606 412	12
September	445 716	550 520	555 903	590 398	8
October	432 215	465 085	517 889	567 967	63
November	413 232	361 006	406 725	497 925	53
December	442 800	315 909	498 819	552 403	150
<b>Amount</b>	<b>4 927 937</b>	<b>5 697 739</b>	<b>6 070 473</b>	<b>6 275 210</b>	<b>1 069 473</b>

Based on the data in Table 1, it can be stated that the number of tourist visits to Bali Province increases every year as happened in 2016-2019. This is because the tourism potential in Bali is very strong, thus attracting tourist motivation to visit. This trend of increasing the number of tourist visits can be achieved and is influenced by several factors, including: the situation and conditions of Bali which are conducive and comfortable as a tourist destination for foreign tourists and foreign tourists; the increasing quality of facilities, accessibility available for tourists, a variety of cultures and new tourist destination objects that attract tourists, the development of shopping and culinary tourism which is the main tourist attraction, the variety of tourism attractions that tourists can enjoy as well as optimal tourism promotion and marketing(Bali Provincial Tourism Office, 2021).

Apart from contributions, the tourism sector also has positive and negative impacts. Positive impacts include expanding business opportunities and employment, stimulating economic growth and community income, supporting the pace of development of facilities and infrastructure, fostering indigenous culture (dance, music, handicrafts, ceremonies and traditional clothing). The negative impacts are 1) Strengthening the ideology of materialism; 2) Congestion and Crime; 3) Lifestyle Changes; 4) Exclusive Public Areas which damage the ecological system and environmental pollution. Another impact of tourism development on local communities is that tourism will improve welfare for communities that are ready and able to face the pace of tourism development, then tourism will be very beneficial or on the contrary, tourism will marginalize communities amidst tourism development in their area.(Swandi, 2017)

Based on Bali Province Regional Regulation Number 2 of 2012 concerning Bali Cultural Tourism. The concept of tourism development in Bali Province is Balinese tourism which is based on Balinese culture which is imbued with the teachings of

Hinduism and the Tri Hita Karana philosophy as the main potential by using tourism as a vehicle for its actualization, so that a dynamic reciprocal relationship between tourism and culture is realized, which creates both develop synergistically, harmoniously and sustainably to be able to provide prosperity to society, cultural and environmental sustainability. This is supported by opinion Raditya (2020) that the basis for regional development in Bali is Balinese culture which is imbued with Hinduism and the Tri Hita Karana (THK) concept to improve community welfare by balancing the goals of economic development, cultural preservation and the environment.

The rapid development of the tourism sector has had an impact on the balance of regional development in Bali. The government and tourism actors are encouraged to look for new paradigms in tourism development and management to reduce the negative impacts of tourism. In line with the new tourism paradigm, in the future there will be the issue of a shift in tourism activities from mass tourism towards special interest tourism activities. It has been indicated by many researchers that mass tourism has had a negative impact on the social culture of society and the environment. Mass tourism results in the modification and exploitation of Balinese culture, degradation of the natural environment, decline in biodiversity and critical land (Suryanti & Indrayasa, 2021).

Tourism development involving the government, tourism business actors and local communities, has the aim of developing quality tourism products (quality tourism). Ecotourism is one of the products of quality tourism which focuses on three main things, namely: the sustainability of nature or ecology, social culture and the economy of society, not only for the current generation but also for future generations (WTO, 2002). Conceptually, Ecotourism is an environment-based concept in tourism development and focuses on the importance of active participation of local communities through education and positive contributions to regional economic growth. Ecotourism focuses on the active role of communities in managing tourism activities in local (indigenous) areas.

One of the villages developed with the Ecotourism concept is Munggu Village which is located in Mengwi District, Badung Regency. Munggu Village is a village that has been designated since 2010 as a tourist village, highlighting the attraction of exotic culture and natural beauty with a strategic location, namely the main routes of Ubud-Tanah Lot and Denpasar-Tanah Lot. The Munggu tourist village has 6 potentials consisting of: 1. Cultural tourism with the Mekotek tradition. 2) Munggu Beach has a Tirta tourist attraction. 3). Rice Field Green Area. 4). Penet River. 5). Religious tourism (melukat) 6. Swing tourism. This potential is used as the main attraction in developing THK-based Ecotourism.

However, in its development there are several obstacles and problems faced by the Munggu tourist village, related to the development of THK-based ecotourism. Purwaningsih & Mahagangga, (2018) states that the obstacles to developing the Munggu tourist village can be divided into two parts, namely 1) Internal obstacles include unclear tourism products, lack of village funds and lack of supporting facilities, the existence of management organizations that are not yet optimal, and insufficient community participation in the tourism sector in their villages. 2) External obstacles include the absence of standardization for a tourist village from the government, thus making the direction of development and development of a tourist village, especially the Munggu Tourism Village, unclear or floating. There is a lack of government role in developing the Munggu Tourism Village, and the Munggu Tourism Village does not yet have a network, either a marketing network, development of a tourism product network, development of a tourism village care network, or development of a network related to assistance in developing tourism villages carried out in the Munggu Tourism Village.

The focus of this research is in the development of THK-based ecotourism, the economic impact and community participation are less than optimal. This has an impact on the level of community welfare which is not optimal. Referring to the goal of tourism development based on community participation, according to the International Council of Monuments and Sites (ICOMOS) in 1981, namely the Charter For The Conservation Of Places Of Cultural Significance, Burra, Australia, known as the Burra Charter, states that the community must be involved in tourism development. Previous research has succeeded in confirming the lack of community participation in ecotourism development. Sunarjaya et al., (2018) stated that the Munggu people did not participate enough in the development of their village. In addition, according to Kartimin et al., (2022) stated that Munggu community participation in the planning, implementation and monitoring stages was still minimal so that the economic benefits of improving community welfare in Munggu Village had not been achieved properly.

Based on the results of observations and interviews with several communities, operational management and management of

the Munggu DTW have not utilized information and communication technology optimally. This can be seen from the use of ICT with the existing internet network, which is only used for internal management such as exchanging information with staff in operational management and sometimes promoting tourism activities via social media such as Facebook, Instagram, WhatApps. Promotion and management of tourist destinations has not been integrated, so it still causes problems between local communities and tourist attraction managers in Munggu Village.

According to several studies, the role of ICT is very important in the tourism industry, among others, Information and Communication Technology (ICT), has an important role for the management of the tourism industry, especially increasing the competitiveness of organizations and destinations.(Manu & Fallo, 2019). ICT with Internet Networks allows all types of organizations to expand the value chain and promote their products through a combination of systems and partners(Husain et al., 2019)ICT has become the lifeblood of the travel industry, effective use of technology is fundamental for the tourism sector as it enters the 21st century, therefore the entire ICT System is spreading rapidly throughout the tourism industry and no player will escape its impact.(Dewi & Wulansari, (2020)States thatICT produces output. Information has a very important role in tourism planning because it can influence decision making on tourist destinations and planning purchases such as accommodation; transportation; activity; attractions; food; and others(Satya Wibowo et al., 2020)

Based on the problems above, it is necessary to consider the formulation of a Tri Hita Karana-based Ecotourism development policy with the support of ICT more effectively and efficiently, so that it can encourage economic growth, job creation, social and environmental sustainability and preserve subak as local wisdom which recently tends to experience degradation. The aim of this research is to analyze the role of information and communication technology support in moderating the influence of community participation on the development of ecotourism based on local wisdom values in the tourist village of Munggu Badung, Bali-Indonesia

## **I. LITERATURE REVIEW**

### **Society participation**

Community Participation In general, the concept of community participation in development is the participation of all members or representatives of the community to participate in making decisions in the development planning and management process, including deciding on planned activities to be implemented, the benefits to be obtained, and how to implement them. and evaluate the results of its implementation. Community participation is described as an opportunity for local communities to participate effectively in tourism activities(Manu & Fallo, 2019).

This means giving the community the opportunity and authority to actively manage existing resources, manage their own abilities, become subjects not objects in development, play an active role in making decisions and exercise control over activities that affect that place. According to(Kaharuddin et al., 2020)states that community participation is a process when the community, as individuals and social groups and organizations, take a role and influence the process of planning, implementing and monitoring policies that directly affect people's lives; while according to(Adnyana et al., 2020)states that participation is not only a free contribution of local energy, time and materials to support various development programs and projects but also an active involvement in every process. The active role in question is starting from planning, determining the design, implementation to monitoring and enjoying the results or what is known as "genuine participation" or in other words the community as tourism actors.(Kaharuddin et al., 2020; Wijaya & Tamami, 2020)

It was concluded that community participation is an opportunity for the community to manage existing resources by taking an active role in the development of a tourist destination. Participation is a form of empowerment of local communities which of course provides opportunities and possibilities for communities to participate and be involved in developing the potential that exists in the area where they live. For this reason, in this research what is meant by community participation is active community involvement in tourism development in a destination. This participation is a goal in the democratic process which means it comes from the community and is managed by the community, thus participation is a form of empowerment of local communities which of course provides opportunities and opportunities for the community to participate and be involved in developing the potential that exists in a destination.(Kaharuddin et al., 2020).

### **1.1 Trihita Karana Based Ecotourism Development**

The principle of Ecotourism development is to maintain a harmonious relationship between three components, namely ecological sustainability, improving the local community's economy and preserving nature and culture. By fulfilling the three principles of Ecotourism development, it guarantees ecologically friendly development from community-based development. This is in line with the aim of THK, namely achieving happiness in life through a process of harmony and togetherness.(Astara et al., 2019)

THK's goals are greatly influenced by its environment. The environment, or often referred to as the living environment, is all objects and conditions, including humans and their behavior, which exist in the space where humans exist, and influence the life and welfare of humans and other living things.(Dewa et al., 2015). According to Law no. 32 of 2009 concerning Environmental Management, that the definition of the environment is the unity of space with all objects, forces, conditions and living creatures, including humans, and their behavior, which influence the continuity of life and welfare of humans and other living creatures.

From the description above, it can be stated that the environment is basically a reciprocal relationship between humans and the objects and creatures around them which influence each other for the sake of the continuity of life and welfare of these living creatures. The environment is not only the physical environment, but can also be the human (social) environment and even the spiritual environment. Specifically regarding the spiritual environment, it seems that this can happen, because humans will also have spiritual character and activities. Therefore, the environment can include the physical environment, social environment, and spiritual environment. This is in accordance with the three components in the Tri Hita Karana philosophy, namely Parhyangan, which is related to the spiritual environment, Pawongan which is related to the social environment, and Pabelasan which is related to the physical environment.(Budiarta, 2018; Runa, 2012; Wiwin, 2021)

### **1.2 ICT Support for the Tourism Industry**

Information and Communication Technology (ICT) includes two aspects, namely Information Technology and Communication Technology. Information Technology includes everything related to processes, use as a tool, manipulation and management of information. Communication Technology includes everything related to the use of tools to process and transfer data from one device to another. Information and Communication Technology is technology used to access, collect, manipulate and present information with the support of computer hardware, software, internet and telecommunications networks.

Information and Communication Technology (ICT), has an important role for tourism industry management, especially increasing the competitiveness of tourism organizations and destinations. ICT is a major determinant of organizational competitiveness and various technological developments are driving changes in tourism management. Successful implementation of ICT requires innovative management to constantly review developments and adopt appropriate technological solutions to maximize organizational competitiveness. Likewise with other economic activities, tourism is influenced by the re-engineering business processes experienced due to the technological revolution(Dewi & Wulansari, 2020; Husain et al., 2019; Satya Wibowo et al., 2020)

ICT has become the lifeblood of the travel industry, effective use of technology is fundamental for the tourism sector as it enters the 21st century, therefore the entire ICT System is spreading rapidly throughout the tourism industry and no player will escape its impact(Manu & Fallo, 2019)ICT has undoubtedly become one of the most important elements of the tourism industry as in several other economic activities such as the development, processing, application and communication of information-based information as essential for operational activities at any time. The rapid development of tourism supply and demand makes ICT an important partner for the industry, especially for marketing, distribution, promotion and industrial coordination. Re-engineering of tourism product distribution processes, where the paradigm shift fundamentally changes towards best practices and introduces new players(Bagandini; & Arsawati, 2022; Wuryandari, 2018).

Physically unlike durable goods, intangible tourism services cannot be physically displayed in the sales process before purchasing a tourism product. Tourism products are purchased before their use and far from the place of consumption. Therefore, in the market, tourism products rely almost exclusively on representations and descriptions, by travel companies and other intermediaries, namely information in print and audio-visual form, for their ability to attract consumers. Timely and accurate information, relevant to consumer needs, is the key to successful satisfaction of tourism demand. Experienced travelers are

empowered by information systems to increase efficiency and create custom products independently that satisfy Travelers' needs. Thus ICT has a significant impact on the travel industry, because this system as a whole regulates business activities, values or norms of behavior and ways of educating a competent workforce in the field of ICT (Dewi & Wulansari, 2020)

This system provides the tourism industry with the opportunity to expand its business across geographic, marketing and operational domains. The massive development of the internet has led to the emergence of a number of new business players originating from the tourism market. The tourism sector can increase economic growth and influence the growth of the service sector, especially those related to food, beverages, accommodation, transportation, entertainment, shopping and small and medium industries. This industry involves industrial sectors, such as travel agents, tour operators, transportation service providers, hotels, restaurants, tourist attraction managers, souvenir sellers, and other service providers that can attract and serve tourists. (Satya Wibowo et al., 2020)

### **1.3 Tourism Economic Theory**

Tourism Economic Development (*Tourism Economic Development-TED*) is a concept that emphasizes empowering communities to better understand values and the assets they possess, such as culture, customs, culinary variety, lifestyle (Budi Hermawan, 2021). In context tourism development, communities independently mobilize These assets and values are the main attraction for tourists' travel experiences. Through the TED concept, every individual in the community is directed to become part of the tourism economic chain, for this reason individuals are given the knowledge and skills to develop *small business* with a variety of products (goods and services) that are suitable to be offered to the market.

TED as a concept takes into account and prioritizes the socio-cultural, environmental and political sustainability of communities (Cemporaningsih et al., 2020), (Kantar, and Svrznjak, 2017). Tourism economic development focuses on developing human and institutional capacity, culture, environment and cross-sector economic development that supports sustainable tourism activities. TED recommends a process of integration, collaboration, strategies and tools (*tools*) community empowerment in economic development, development and marketing of local resources and community culture (Budi Hermawan, 2021; Cemporaningsih et al., 2020). This means that the mobilization of tourism development is initiated by the community, carried out by the community and for the community starting from the planning, coordinating, implementing, controlling and evaluating the economic, social, cultural and environmental benefits in an effort to create jobs and provide a stimulus for economic growth in the village. The principle of application is that stakeholder cooperation will determine the sustainability of local economic development (Kusuma et al., 2021).

## **II. RESEARCH METHODS**

### **2.1. Research Scope**

The scope of this research is to examine community participation in the development of THK-based ecotourism with ICT support as a moderator. The research location is in Munggu Village, one of the tourist villages in Badung Regency. The sample size was determined using the suggestion approach (Hair et al., 2013; JHair et al., 2014) that for using PLS-SEM it is recommended that it be above 100-200. The sampling technique uses a snowball sampling technique through an approach to the members of each banjar.

### **2.2. Operational Definition and Measurement Instruments**

Tri Hita Karana based Ecotourism variables are reflected by indicators of Ecological Sustainability, Cultural Sustainability, Local Community Economic Improvement, Human Relations with the Environment, Human Relations with Humans and Human Relations (Suryanti & Indrayasa, 2021)

Community participation variables, namely tourism planning initiatives, dedication to implementing tourism activities, collaboration in evaluating tourism management, with the following definition:

- (1) Tourism planning initiative (X2.1) is a creative power or ability to produce something new.
- (2) Dedication to implementing tourism activities (X2.2) is a sacrifice of energy, thoughts and time for the success of a business that has noble goals.



(3) Collaboration in evaluating tourism management (X2.3) is an effort carried out by several people or groups to achieve common goals (Holdar and Zakharchenko, 2020)

Information and Communication Technology (ICT) support is technology used to access, collect, manipulate and present information with the support of computer hardware devices, software, internet and telecommunications networks. ICT variables with indicators: Availability of Telecommunication Networks, Use of Mobile Phones, Availability of Internet Access and Use of Computer Applications with the following definitions. (UNESCO, 2003)

1. Telecommunications Network Availability (Z1.1) is the availability of telecommunications equipment and its equipment used in carrying out telecommunications activities
2. Use of a Mobile Phone (Z1.2) is an electronic telecommunications device that has the same basic capabilities as a conventional telephone, but can be carried anywhere.
3. Availability of Internet Access (Z1.3) is the availability of a global communications network that uses electronic media, which is interconnected using the global system standard Transmission Control Protocol / Internet Protocol Suite (TCP/IP) as an information packet exchange protocol.
4. Use of Computer Applications (Z1.4) is the availability of computer hardware and software to process data into information

### **2.3. Hypothesis testing**

To test the hypothesis proposed in the research, the PLS-SEM approach was used with the help of SmartPLS V.3.2.9 software. The main reason for using PLS-SEM is because this research uses a questionnaire instrument where the variables used are multivariate and latent in nature, in this case social capital, entrepreneurial leadership, innovation capability and SME performance. The data testing process uses the PLS-SEM approach with the help of SmartPLS V.3 software, namely there are three estimation categories, namely 1) through outer model testing, 2) inner model testing and 3) data interpretation. Descriptive analysis was used to determine the description of the perceptions of each SME manager regarding the application of social capital, entrepreneurial leadership and SME performance.

## **III. RESULTS, DISCUSSION, CONCLUSIONS AND SUGGESTIONS**

### **3.1. Respondent Demographics**

Based on the results of a survey of 130 Munggu Village residents as respondents, it shows that the average age of respondents is dominated by 40 - 49 years. The education level of most respondents was a general secondary school education level. It can be justified that the level of education possessed by respondents is sufficient as a potential human resource in developing Ecotourism. Judging from the respondents' quite varied jobs, society can be said to be heterogeneous in terms of employment. Most of the respondents work as farmers, 60 people or 46.15 percent and private employees, 43 people or 33.08 percent. This means that types of work related to agriculture and private employees are the respondents' choice because Munggu Village is a natural tourist attraction based on the natural beauty of mountains and terraced rice fields, which is a source of work for respondents in the agricultural sector and private employees engaged in tourism.

### **3.2. Structural Equation Model Analysis**

Model evaluation in Partial Least Squares (PLS) consists of two stages, namely evaluation of the Measurement Model (Outer Model) and the Structural Model stage (Inner Model). The full research model for ICT Support in THK-Based Ecotourism Development in Munggu Village is shown in Figure 4 below.

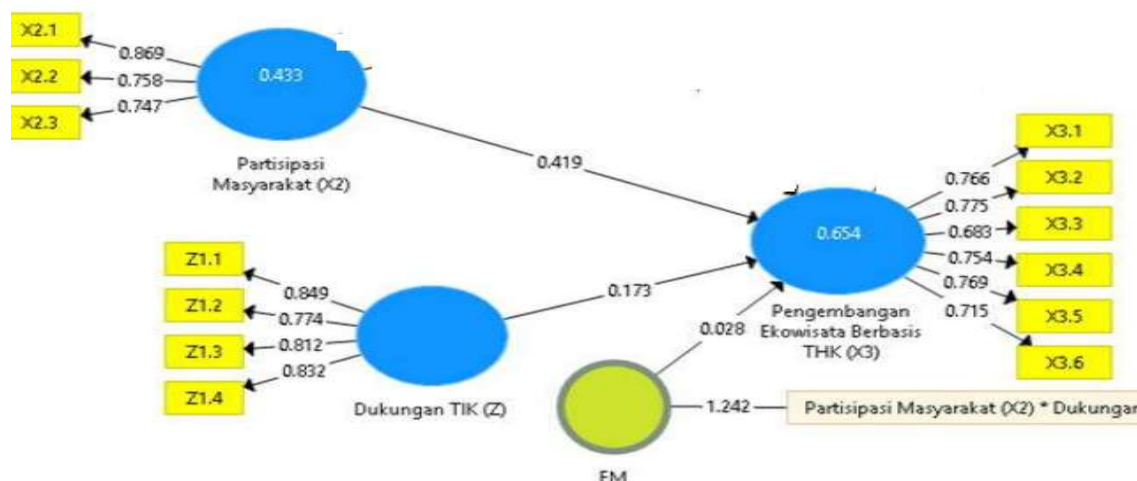


Figure 1. Full research model

### 3.2.1. Evaluation of the Measurement Model (Outer Model).

A measurement model is a model that shows the relationship between latent variables (constructs) and their indicators. Testing the measurement model is intended to show that the indicators used to construct latent variables in a research model are appropriate and correct. Measurement of variables with reflective indicators is carried out in three testing steps, namely. (1) Convergent Validity Testing; (2) Discriminant Validity Testing; and (3) Reliability Testing (Reliability Validity).

#### 1) Convergent Validity Testing

The loading factor values are presented in Table 2. Based on Table 2, it shows that all indicators that reflect the three constructs, namely the construct of Community Participation, THK-based Ecotourism Development and ICT Support have a loading factor greater than 0.5. Thus, all indicators of the five variables are valid. .

Table 2 Outer Loading Indicator for Model Construct

Indicator Variables	Construct/Latent Variables			Note.
	Society participation	Ecotourism	Technology Support	
X1.1	<b>0.869</b>			Valid
X1.2	<b>0.758</b>			Valid
X1.3	<b>0.747</b>			Valid
Y.1		<b>0.766</b>		Valid
Y.2		<b>0.775</b>		Valid
Y.3		<b>0.683</b>		Valid
Y.4		<b>0.754</b>		Valid
Y.5		<b>0.769</b>		Valid
Y.6		<b>0.715</b>		Valid
M.1			<b>0.849</b>	Valid
M.2			<b>0.774</b>	Valid
M.3			<b>0.812</b>	Valid
M.4			<b>0.832</b>	Valid



*Second*;Ghozali (2021) recommends using Average Variance Extracted (AVE) as a criterion for assessing convergent validity. The AVE value describes the large variance or diversity of manifest variables that a latent construct can have. The AVE value is obtained from the sum of the squares of the loading factors divided by the error.

Table 3. Average Variance Extracted (AVE) Value of the Model Construct

Construct Variables	<i>Average Variance Extracted (AVE)</i>	Information
Community Participation (X1)	0.629	<i>Valid</i>
THK (Y) based ecotourism	0.554	<i>Valid</i>
ICT Support (M)	0.668	<i>Valid</i>

Based on Table 3, the results of the Average Variance Extracted (AVE) Value test on the construct show that all variables in the model are said to be valid. Sequentially from the Role of Community Participation (X1); Ecotourism development based on THK (Y) and ICT support has an AVE value of 0.629; 0.554 and 0.668.

## 2) Discriminant Validity

Discriminant validity testing aims to show that in a measurement model, indicators of a construct do not have a high correlation with other constructs. In testing the discriminant validity of reflective indicators, it is carried out using the criteria of looking at the cross loading values between the indicators and their constructs.

Table 4. Cross Loading of Indicators for Each Construct

Indicator Variables	Construct/Latent Variables		
	Society participation	THK Ecotourism	ICT support
X1.1	<b>0.869</b>	0.625	0.611
X1.2	<b>0.758</b>	0.549	0.55
X1.3	<b>0.747</b>	0.61	0.567
Y.1	0.593	<b>0.766</b>	0.45
Y.2	0.572	<b>0.775</b>	0.619
Y.3	0.573	<b>0.683</b>	0.488
Y.4	0.551	<b>0.754</b>	0.501
Y.5	0.526	<b>0.769</b>	0.478
Y.6	0.516	<b>0.715</b>	0.488
M.1	0.668	0.565	<b>0.849</b>
M.2	0.665	0.448	<b>0.774</b>
M.3	0.492	0.582	<b>0.812</b>
M.4	0.574	0.604	<b>0.832</b>

Discriminant validity testing is assessed based on cross loading of measurements with the construct. If the cross loading value of the reflective indicator with the construct is greater than the cross loading value with other constructs, then the outer model can be said to be valid. Based on Table 4, it can be seen that the cross loading value of each indicator on its construct also shows a value greater than the cross loading value with other constructs.

### 3) Construct Reliability Testing

Construct reliability shows the consistency of the results of measuring one concept or variable. The role of thumb value for Cronbach's Alpha and Composite Reliability is greater than 0.7

Table 5 Reliability and Construct Validity

Latent Variables	<i>Cronbach's Alpha</i>	<i>Composite Reliability</i>	Note.
Community Participation (X1)	0.702	0.835	<i>Reliable</i>
THK (Y) Based Ecotourism	0.839	0.881	<i>Reliable</i>
ICT Support (M)	0.835	0.889	<i>Reliable</i>

Table 5 shows that all Composite Reliability values are greater than 0.7 and Cronbach's Alpha values are greater than 0.6. This states that the variables used are reliable for further data processing.

#### 3.2.2. Evaluation of the Structural Model (Inner Model)

##### 1) Determination Test

Measuring the structural model in SEM-PLS is carried out by evaluating the R-Square (R<sup>2</sup>), the Goodness of Fit Inner Model contains the R-Square coefficient for each endogenous variable. The R-Square value obtained was 0.654. The R-Square results are greater than 0.67 for endogenous latent variables in the structural model indicating that the influence of exogenous variables (which influence) on endogenous variables (which are influenced) is included in the good category (Ghozali, 2021)

##### 2) Hypothesis Testing

Table . 6 Path Coefficient

Construct	<i>Original Samples</i>	<i>Standard Deviation</i>	<i>QStatistics</i>	<i>PValue</i>	Information
X1 → Y	0.419	0.112	3,723	0,000	Significant
EM → X3	0.028	0.057	0.485	0.628	Non-Significant

Table 6 shows that Community Participation has a positive and significant influence on THK-based Ecotourism Development with a path coefficient value of 0.419; tstatistic of 3.723, at level 0.05 Pvalue: 0.000. Furthermore, the Moderation Effect (X1\*Z) has a positive and non-significant effect on THK-based Ecotourism Development with a path coefficient value of 0.028; tstatistic of 0.485, at level 0.05 Pvalue: 0.628.

#### The Influence of Community Participation on THK-based Ecotourism Development in Munggu Village

Based on the research results, it shows that community participation has a positive and significant effect on the development of THK-based Ecotourism in Munggu Village. The impact of community participation on the development of THK-based Ecotourism is 20 percent in the medium category, meaning that community participation in the development of THK-based Ecotourism in Munggu Village, Badung Regency needs to be increased.

The findings of this research are in line with the theory of community participation. According to Robert Chamber (2005), community participation is a form of understanding good practice. Individuals or groups can be included to build their own participation. Next, in line with the results of Siregar's research (2001), participation is a voluntary contribution from the community to a program for the community, community involvement in the decision-making process and in implementing the program and enjoying together the benefits of the development program. Community involvement in evaluating programs, an active process, in which the people of a community take the initiative and firmly declare their autonomy.

However, based on the results of the effect size analysis, community participation is still in the medium category at 20 percent, which is still not optimal and needs to be increased. The results of the effect size analysis are reflected in the results of the community perception index analysis of community participation, in the indicators of dedication to implementing tourism activities and cooperation in evaluating tourism activities, there are 0.77 percent of the public who disagree. The results of this analysis mean that the community, especially farmers who own and cultivate rice fields, have not been directly involved in the implementation and evaluation of tourism activities in Munggu. Furthermore, all stakeholders at DTW Munggu need to facilitate, motivate and encourage the community to actively participate in THK-based Ecotourism activities such as creating tourist attractions for traditional rice field processing starting from plowing, planting rice to harvesting which is done traditionally, so that farmers get economic benefits from tourist activities in Munggu and the sustainability of Subak are maintained. Direct involvement of farmers and operational management will create a sustainable and harmonious tourism environment.

### **The Influence of Community Participation on THK-based Ecotourism Development with Information and Communication Technology (ICT) Support in Munggu Village**

Based on the research results, it shows that community participation with indicators of tourism planning initiatives, dedication in implementing tourism activities and collaboration in evaluating tourism activities has an indirect effect on community welfare through THK-based ecotourism development with ICT support and has a positive and insignificant effect on community welfare. This means increasing community participation, there is THK-based Ecotourism Development with indicators of Ecological Sustainability, Cultural Sustainability, Improvement of Local Community Economy, Human Relations with the Environment, Human Relations with Humans and Human Relations with God with ICT Support which has a positive impact but has not been able to significantly improve Community Welfare. . ICT support in improving THK-based Ecotourism Development with Homologizer Moderator moderation (potential moderation). This shows that ICT Support has strong potential as a moderating variable that influences the strength of the relationship between the ICT Support variable and the THK-Based Ecotourism variable.

The research findings show that community participation in THK-based Ecotourism Development in Munggu Village, Badung Regency, has not been carried out optimally. This can be explained by the fact that tourism activities in Munggu which are managed by Munggu operational management do not directly involve the community, especially the farming community, in tourism activities in Munggu Village. Subak, with its terraced rice field landscape, is a special attraction for domestic and foreign tourists. Supported by the activities of the farming community who cultivate rice fields traditionally by maintaining the Balinese rice planting tradition, combined with ceremonies during activities in the rice fields. However, in tourism activities, farmers are only used as tourist objects and are not directly involved. This is confirmed from interviews conducted with operational managers and farmers in Munggu Village, as stated in the quote above.

ICT support to improve THK-based Ecotourism Development has not been carried out optimally. The use and application of ICT to support THK-based Ecotourism activities in Munggu Village is limited to the application of the internet and computer applications only to facilitate management activities in managing information related to tourism activities, for example. The application of social media is only used by employees to coordinate with each other in carrying out their duties. And the use of social media is only carried out to inform activities that are carried out at any time, if there are activities at tourist attractions such as festivals, farmers' activities in cultivating rice fields traditionally. The use of ICT has not touched substantial matters such as integrated promotion and management of the tourism industry, especially increasing the competitiveness of tourism organizations and destinations (Buhalis, 1998, 2003; O'Connor, 1999; Poon, 1993; Sheldon, 1997.). This happens because of the limited human resources (HR) possessed by management in managing tourism by utilizing ICT advances. Limited resources are reflected in the characteristics of the respondents. At the educational level, where the average human resources education is high school, management does not yet have human resources who specifically have expertise in the field of Information Technology.

The findings of the research results are in line with the results of research conducted by (Alford, 1999; Buhalis, 1998; Sheldon, 1997; Vlitos-Rowe, 1995), stating that ICT has a significant impact on the tourism industry, because this system, as a whole, regulates business activities, values or norms of behavior and ways of educating. To take advantage of the use of ICT in managing tourism activities, competent workforce in the ICT field is needed, but this is not yet optimal.

The findings of the research results are also in line with the results of research by Poon (1993), stating that ICT has become the lifeblood of the travel industry, the effective use of technology is fundamental for the tourism sector as it enters the 21st century, therefore the entire ICT system is being spread rapidly. rapidly across the tourism industry and no player will escape its impact. The important role of ICT in developing THK-based ecotourism in Munggu Village is not yet optimal, so efforts are needed from all stakeholders to improve human resources in the ICT sector. Such as providing scholarships for children in Munggu Village to continue their education in the ICT field.

Based on the results of the research and discussion described previously, it can be concluded that the participation of the Munggu Village community in supporting THK-based ecotourism development is still at the Consultation level, the community is not only informed but also invited to share opinions, although there is no guarantee that the opinions expressed will be consideration in decision making. This can be seen from the events carried out by management at the end of the year. This event aims to socialize and receive input from the community regarding the tourism program that will be implemented in the following year, but there is no guarantee that there is no guarantee for community input to influence decisions that have been made by the regional government and the management body. The influence of community participation on THK-based ecotourism development with the support of Information and Communication Technology (ICT) as a moderating variable is positive and not significant. ICT Support has a Homologizer Moderator moderation type. This means that with ICT support there is great potential to strengthen the relationship between community participation in THK-based ecotourism in Munggu Village, Badung Regency.

The results of the effect size analysis are reflected in the results of the community perception index analysis of community participation, in the indicators of dedication to implementing tourism activities and cooperation in evaluating tourism activities, there are 0.77 percent of the public who disagree. The results of this analysis mean that the community, especially farmers who own and cultivate rice fields, have not been directly involved in the implementation and evaluation of tourism activities in Munggu. It would be better if the DTW Munggu management body needs to facilitate, motivate and encourage the community to actively participate in THK-based Ecotourism activities such as creating tourist attractions for traditional rice field processing starting from plowing, planting rice to harvesting which is done traditionally, so that farmers get economic benefits from tourism activities. in Munggu and the sustainability of Subak is maintained. Direct involvement of farmers and operational management will create a sustainable and harmonious tourism environment.

Community participation in developing THK-based ecotourism with ICT support to improve community welfare needs to be optimized. The important role of ICT is for promotion, distribution, coordination and increasing organizational competitiveness in managing the tourism industry to be more creative, innovative and transparent. It would be better if the Government, management bodies, and society along with all stakeholders. It is necessary to increase the competency of human resources in the fields of Information Technology and Communication as well as tourism, such as strengthening communication networks, holding training related to ICT development and tourism and providing scholarships for local communities to increase competency and competitiveness. So ICT support can significantly increase the development of THK-based Ecotourism in Munggu Village, Badung Regency.

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