

Developing Green Tourism-Based Model of Information Technology Utilization in Tourism Villages

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Abstract: The purpose of this study is to develop a model for the use of information technology in Tourism Villages by mapping the use of information technology on all aspects of tourism villages based on the concept of green tourism that focuses on environmental preservation and community welfare. The method used in this research is an information research framework consisting of stages of literature review and environmental aspects, analysis, construct identification, model development, model evaluation, and model application methods. The results of the research are in the form of a model for the use of information technology in green tourism-based tourism villages along with the method of applying the model. This model consists of two connected constructs, namely the use of information technology and green tourism. The implementation of this model in tourist villages is explained in the method of applying the model which contains a mapping of information technology needs and implementation steps based on the classification of tourist villages, namely pioneering, developing, advanced and independent. This model can be used as a reference for tourism village managers in utilizing information technology according to their needs.

Keywords: Utilization of Information Technology, Tourism Village, Green Tourism

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Introduction

The development of tourism in rural areas is currently one of the special concerns in the tourism sector. This is due to the saturation of modern forms of tourism and the desire to return to experiencing life in the countryside and interacting with the community and its socio-cultural activities. The development of tourism in this rural area is packaged in the form of a tourism village (Andayani et al., 2017). Bali Province has many villages with various potentials that can be developed into Tourism Villages. Based on data from the Bali Provincial Tourism Office in 2019, the number of villages that have been designated as Tourism Villages in Regencies/Cities in Bali is 155 villages (www.disparda.baliprov.go.id). The tourism village is a combination of attractions, accommodation, and supporting facilities that are presented in a structure of community life that blends with the procedures and traditions in society (Wahyuningsih & Pradana, 2021). Tourism villages are believed to be able to encourage regional growth and the welfare of rural communities. The presence of tourism in many ways has been proven to strengthen people's pride in their culture (Arida et al., 2019).

The development of tourism, especially tourism villages, is closely related to the concept of green tourism. Tourism village is currently one form of implementing community-based and sustainable tourism development which is widely used as an opportunity to improve people's living standards (Wahyuningsih & Pradana, 2021). While the concept of green tourism produces tourism products that are responsible for taking an active approach to sustainable tourism development (Tran & Xuan, 2021). The concept of green tourism can encourage tourism sustainability through a selective stage for the development of marketing activities in attracting

tourists who have environmental concerns and sensitivity to culture (Yadnya & Wibawa, 2020). Green tourism can be used to signal that tourism activities that take place in the area do not damage the environment (Font & Tribe, 2001). The concept of green tourism itself has been promoted in several countries to reduce carbon emissions resulting from the practice of tourism and hotel managers (Laaroussi et al., 2020). The link between the concept of village tourism and green tourism is the development of sustainable tourism so that it has an impact on the preservation of the village environment and also the welfare of the community.

Information Technology has become a necessity in various aspects of life, including tourism. The significant influence of information technology in the tourism sector can be seen from information technology as a platform in online tourism activities. In developing a tourism village, the role of information technology is needed both in the marketing and operational aspects of the tourism village. The Covid-19 pandemic has greatly impacted the tourism industry, including tourism villages. The closure of several tourism-related industries is a challenge for tourism villages to survive. Tourism villages are required to be innovative and creative in maintaining their sustainability in the midst of this Covid-19 pandemic. One way that can be done is by utilizing information technology. The Covid-19 pandemic has caused the need for tourism villages for information technology to increase. The limitations of social interaction caused by the Covid-19 pandemic can be overcome by utilizing information technology. Information technology implementation can be in the form of e-tourism by adopting information technology in tourism activities and applying the smart village model which is implemented at the village level. The tourism village seeks to innovate by utilizing information technology. Several previous studies related to information technology in tourism villages such as Paksewali Village, Klungkung developed a tourism village towards a smart eco-tourism village (Pantiyasa, 2019), Pujorahayu Village developed a tourism village with a smart tourism concept (Helmita et al., 2021), Boon Pring Sanankerto Turen Tourism Village applied the smart village concept to develop tourism village (Subekti & Damayanti, 2019). Information technology related needs in tourism villages vary according to the level or development of the tourism village. The more developed the tourism village, the more complex the need for information technology. The use of information technology that is not in accordance with the needs will cause losses for the tourism village both in terms of finance and development. Therefore we need an information technology utilization model that will be the basis for tourism villages in implementing information technology according to their needs. Several studies related to this research are the Utilization of Information and Communication Technology in the Application of the Smart Tourism Concept in Pangandaran Regency (Putra et al., 2020). The results show that the potential for smart tourism in Pangandaran Regency is in the form of technology-based infrastructure that supports websites, social media, recommendation systems, and also the number of millennial tourists. Meanwhile, the development of the smart tourism concept is divided into demand and supply factors with collaboration while destination management, and the development of smart technology by considering Big Data and supporting factors for efficient digital marketing. Research related to the relationship between technology and tourism is a study conducted by (Kotoua & Ilkan, 2017) investigating the relationship between visiting intentions and tourist satisfaction as a source of mediation for tourists through information seeking and e-word of mouth. The findings of the analysis show that the dimension of tourist satisfaction as a mediator affects the overall intention of visiting tourists. Simple websites no longer have an impact on destination marketing due to advances in technology. Websites should provide different marketing tools and channels to facilitate the surfing and information needs of tourists. Research related to the development of information technology models has been carried out such as the development of information technology-based models used to preserve Balinese classical dance. The development of the model aims to describe the use of information technology in the process of digitizing and preserving Balinese classical dance (Januhari et al., 2020).

Previous studies have only applied one part of information technology in tourism villages and have not paid attention to the level of the tourism village. Previous research has also not developed a model for the use of information technology for all aspects contained in the Tourism Village. This study develops a model for utilizing information technology for tourism villages to be able to survive the Covid-19 pandemic. The novelty of this study compared to previous research

is that this research develops a model of using information technology in Tourism Villages based on the concept of green tourism which focuses on environmental conservation and community welfare and this model maps the use of information technology on all aspects that exist in tourism villages.

Methodology

The model used in this study is the IS Research Framework proposed by Hevner (2004). According to Hevner (2004), information systems research must have two sides, namely relevant to the knowledge of the environment (relevance) and obedient to the existing basis (rigor) (Januhari et al., 2020). The research methodology used in this study adopts the methodological framework of the artifacts produced in this study in the form of constructs that are the basis for the Development of Information Technology Utilization Models in Green Tourism-Based Tourism Villages. The stages carried out in this study as shown in Figure 1 can be explained as follows:

1. Literature review
The model is built based on the results of the knowledge base study and its relevance to the environment. Literature review that can be seen from the side of the knowledge base, the knowledge that is the basis of model development is the concept of village tourism, green tourism, and the use of information technology.
2. Assessment of environmental aspects
In terms of the environment, research identification related to village tourism, green tourism, and the use of information technology is carried out based on existing research. In addition, an exploration of the use of information technology in tourism villages was carried out through observation and interviews. The results of the environmental study will show the scope of the need for the use of information technology in tourism villages. In terms of the environment and knowledge base, it is hoped that the model made will be following the existing knowledge base and relevant to the actual environmental conditions.
3. Analysis
The analysis phase is carried out to analyze the concept and analyze the case. Concept analysis includes analysis of tourism villages and green tourism. While the case analysis includes the use of information technology in tourism villages. This analysis will be the basis for obtaining the factors that will become constructs in the model.
4. Identification
Identifying the factors that will become constructs and elements of the construct in the design of the model and their correlations. This stage ends by determining the constructs and elements of the constructs used for the design stage of the Information Technology Utilization Model in Green Tourism-Based Tourism Villages.
5. Model building
Model development is a build process carried out to form a Model of Information Technology Utilization in Green Tourism-Based Tourism Villages.
6. Model evaluation
The evaluation stage is the stage to evaluate the model that has been built through a Focus Group Discussion with experts and the tourism village. This evaluation resulted in an Information Technology Utilization Model in Green tourism-Based Tourism Villages that had been evaluated.
7. Model Specification
The model re-specification stage is the stage that is carried out based on the results of the evaluation of the Information Technology Utilization Model in Green tourism-Based Tourism Villages. This stage will modify the model so that the resulting model can be implemented in tourism villages.
8. Model Application Method
At this stage, the method of implementing the Information Technology Utilization Model in Tourism Villages Based on Green tourism is produced.

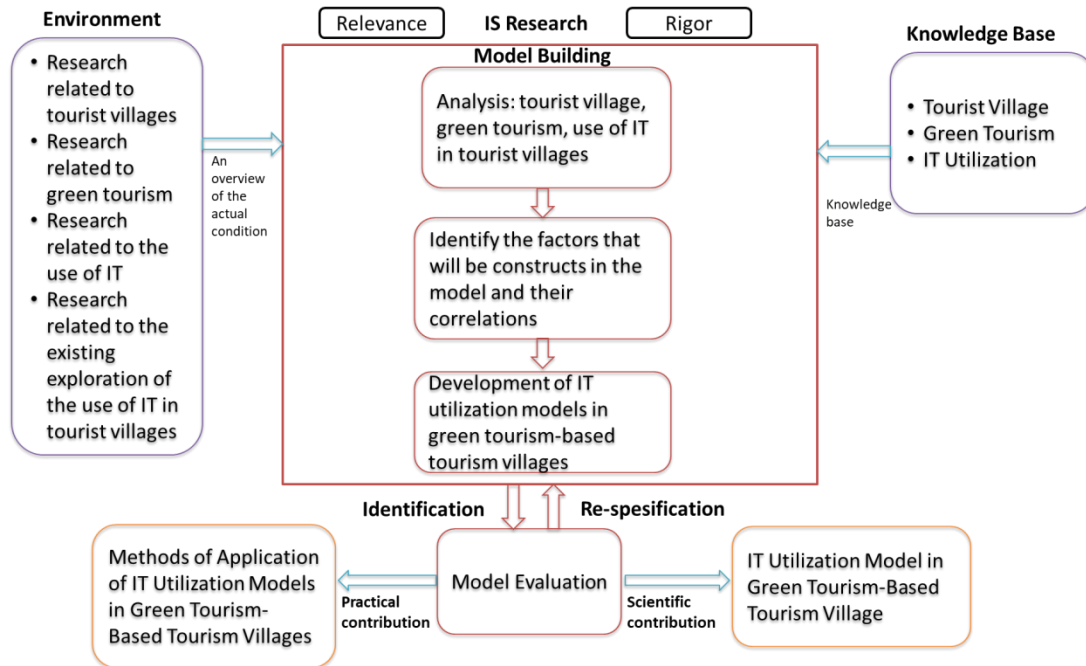


Figure 1. Research Method

Results and Discussions

Results

Tourism Village Analysis

Several sources suggest Tourism Villages with different definitions. Comparison of the concept of Tourism Village is seen in Table 1.

Table 1. Comparison Of The Concept Of Tourism Village

Definition of Tourism village	References
A tourism village is a rural area that offers an overall atmosphere that reflects the authenticity of the countryside both from socio-economic, socio-cultural, customs, daily life, has a typical village architecture and spatial structure, or unique and interesting economic activities and has the potential to the development of various components of tourism, such as attractions, accommodation, food and beverages and other tourist needs	(Andayani et al., 2017)
A tourism village is the development of a village that has tourism potential and is equipped with supporting facilities such as transportation, road access to tourism villages, lodging, culinary, handicraft centers, souvenir centers. In addition, the natural and rural environment that is still pristine and well maintained is the most important factor of the tourism village area. With a tourism village, all the daily activities of the community can become a tourist attraction, so that the tourism village does not have to change the face of the village, but must strengthen the characteristics possessed by each village, both cultural characteristics or characteristics of its natural resources.	(Helmita et al., 2021)
A tourism village is a village that has the potential as a community-based tourist destination and is based on the local cultural wisdom of its people and can also be a trigger for economic improvement based on the principle of cooperation and sustainability.	(Wirdayanti et al., 2021)

Based on the results of comparisons made to several definitions of a tourism village, the operational definition of a tourism village in this study is a village that has tourism potential that emphasizes local wisdom or the socio-cultural life of the village community.

There are 4 (four) types of tourism villages that can be used as references, including (Wirdayanti et al., 2021) :

1. Tourism villages based on the uniqueness of natural resources are tourism villages that make natural conditions the main attraction such as mountains, valleys, beaches, rivers, lakes, and various other unique forms of landscapes.
2. Tourism village based on the uniqueness of local cultural resources, namely tourism villages that make the uniqueness of traditional customs and daily life of the community the main attraction such as livelihood activities, religion, and other forms of activity.
3. Creative tourism village is a tourism village that makes the uniqueness of creative economic activities from home industry activities of local communities, both in the form of handicrafts, as well as distinctive artistic activities, the main attraction
Combination-based tourism village is a tourism village that combines one or more tourist attractions such as nature, culture, and creativity.

While the classification of Tourism Villages in Indonesia is divided into four, namely:

1. Stub
Determination of the classification of pilot tourism villages using the following criteria:
 - a. Still in the form of potential that can be developed to become a tourist destination.
 - b. The development of tourism infrastructure is still limited.
 - c. There have not been / there are very few tourists who visit and come from the surrounding community.
 - d. Public awareness of tourism potential has not grown.
 - e. Assistance from related parties (government, private sector) is needed.
 - f. Utilizing Village Funds for the development of Tourism Villages.
 - g. The management of the tourism village is still village local.
2. Grow
Determination of the classification of developing tourism villages using the following criteria:
 - a. Already known and visited, the local community and visitors from outside the area.
 - b. There has been the development of tourism infrastructure and facilities.
 - c. It has started to create jobs and economic activities for the community.
3. Forward
Determination of the classification of advanced tourism villages using the following criteria:
 - a. The community is fully aware of the tourism potential, including its development.
 - b. It has become a well-known tourist destination and is visited by many tourists, including foreign tourists.
 - c. Tourism facilities and infrastructure are adequate.
 - d. The community has the ability to manage tourism businesses through tourism awareness groups/local working groups.
 - e. The community has been able to utilize village funds for the development of tourism villages.
 - f. Tourism village management system that has an impact on improving the economy of the community in the village and village original income.
4. Independent
Determination of the classification of independent tourism villages using the following criteria:
 - a. The community has provided innovation in developing village tourism potential (product diversification) into an independent entrepreneurial unit.
 - b. It has become a tourist destination that is known by foreign countries and has implemented the concept of sustainability that is recognized by the world.
 - c. Facilities and infrastructure have followed the minimum international standards of ASEAN.

Analysis of Green tourism

Several sources suggest green tourism with different definitions. Comparison of the concept of green tourism is seen in Table 2.

Table 2. Comparison of The Concept of Green Tourism

Definition of Tourism village	References
Green tourism is defined as "a form of eco-friendly tourism development based on the following principles: First, rational use of natural resources for the calendar of tourism development needs; Second, limiting the impact of tourism activities on the natural environment; Third, prioritizing the development of types/tourism products that are responsible for the natural environment with a focus on ecotourism	(Tran & Xuan, 2021)
Green tourism is environmentally sustainable travel to destinations where the flora, fauna, and cultural heritage are the primary attractions and where environmental impacts are minimized (major and minimal environmental impact). It was also stated that "Green tourism refers to tourism activities that can be maintained or sustained, indefinitely in their social, economic, cultural and environmental contexts: sustainable tourism". culture and environment.	(Arismayanti Ketut, 2015)
Green tourism is a term used for sustainable tourism practices which are substantively included in environmentally, economically and socio-culturally sustainable tourism.	(Azam & Sarker, 2011)

Based on the results of comparisons made to several definitions of Green tourism, the operational definition of Green tourism in the form of tourism that emphasizes sustainable tourism by taking into account the balance with the natural environment, socio-culture and economy.

Analysis of Information Technology Utilization in Tourism Villages

Community-based tourism development and local potential in the tourism village guidebook (Wirdayanti et al., 2021) carry the concept of 8 ASEAN Community Based Tourism (CBT) Criteria + 1 Digitization. This digitization is the use of technology consisting of:

1. Applying technology as a medium for information dissemination and promotion.
2. Applying technology in tourism village management.

The utilization of information technology can be used in the promotion of tourism villages to tourists by using online media to attract tourists to visit tourism villages. Utilization of digital media as a means of promoting tourism villages through:

1. Use of social media as promotional media such as Facebook, Instagram, and Youtube.
2. Determine the segmentation of tourists who want to be addressed, generally based on age, and origin of tourists. This segmentation will determine how to promote, for example:
 - a. Facebook: aimed at families and tourists in general, generally the attractions marketed are fun.
 - b. Instagram: aimed at young tourists, generally the attractions that are marketed are attractions with beautiful views.
 - c. Youtube: intended for all tourists, generally the attractions that are marketed are activities that can be done at these tourist attractions.
 - d. Twitter.
 - e. TikTok.
 - f. Tourism Village application platform.
 - g. Village Website.
3. Use of attractive media images and videos.
4. Use of language that is persuasive or attracts the reader's interest to read further.
5. In terms of sales, digitization can be utilized by registering tourism village attractions in marketplace websites or websites that sell tourist attractions, such as traveloka, Agoda, ITX, and others.
6. Creating a tourism village website, can take advantage of free blog pages such as blogspot to be able to write in full about tourism villages.

Digital Village is a village that utilizes Information and Communication Technology (ICT) in all aspects of village development to improve the quality of efficient public services, increasing village competitiveness with village innovation, and solving strategic village problems. From this definition of a Digital Village, we can define a Digital Tourism Village as a village that utilizes ICT in the development of its tourism ecosystem. Currently, the use of internet technology and social media is the spearhead in the dissemination of tourist information. Complete tourist information includes, among others:

1. Booking travel packages by tourists (booking)
2. Tourist identity (demography and socioeconomic status)
3. Room occupancy schedule and tourism village visit schedule
4. Tourist transactions while in the Tourism Village
5. Criticism, input, and suggestions

This research takes a case study, namely Tourism Village in the Province of Bali. This study took a sample of 3 tourism villages from regencies in Bali province, namely Blimbingsari Tourism Village, Jembrana Regency, Cau Belayu Tourism Village, Tabanan Regency, and Singapadu Kaler Tourism Village, Gianyar Regency. Based on the results of observations and interviews obtained data related to tourism villages and the use of information technology as shown in Table 3.

Table 3. Utilization of Information Technology in Tourism Villages

	Blimbingsari Tourism Village	Singapadu Kaler Tourism Village	Cau Belayu Tourism Village
Tourism Potential	Nature and religion tourism	Natural tourism	Nature and religion tourism
Type	Combination-based Tourism Village	Combination-based Tourism Village	Combination-based Tourism Village
Tourism Village Classification	Advanced	growing	stub
Manager	Tourism Awareness Groups and Village Owned Enterprises	Village-Owned Enterprises as holding company	Tourism Awareness Groups and Village Owned Enterprises
Information Technology Utilization	Utilization of information technology in the field of marketing such as websites and social media. As for online bookings, we have collaborated with Online Travel Agents (OTA)	Utilization of information technology in the field of marketing such as websites and social media.	Utilization of information technology in marketing such as social media.

Based on the results of observations and interviews, the current use of information technology in tourism villages is limited to the marketing and order aspects. While the actors or those involved in the management of the tourism village are:

1. Tourism Awareness Group
Manage everything from ordering, selling, and marketing tour packages, tourist information, and coordinating with homestay managers, restaurants, or other tourism product managers.
2. Village Owned Enterprises
Manage finances from tourism activities in tourism villages.

Construct Identification

Based on the results of the analysis and observation, the identification of constructs and sub-constructs in this study was carried out. The constructs in this study are as follows:

1. Utilization of Information Technology in Tourism Villages

The use of information technology in Tourism Villages is a construct in this study because it is the core or object of the model in this study. The construct of information technology utilization in Tourism Village is built from several sub-constructs, namely software, hardware, and network. The following is an explanation of each sub construct.

a. Software

Software is one of the main components in computer systems and information technology. The sub-construct of this software is analyzed based on the category of management information system and the needs of the tourism village. The description of the software requirements can be seen in Table 4.

Table 4. Software Requirements Based on Management Information Systems and The Needs of Tourism Villages

Category	Software
Transaction	Online Reservation System
	Sales System
Financial	Accounting System
	Tax System
Marketing	Website
	Email
	Social Media
	Online Travel Agent
	Travelers Review System
Human Resource	Human Resource Management System
Customer Relation	Tourism Information System
	Customer Satisfaction System

b. Hardware

Hardware is a major component in computer systems and information technology. This hardware sub-construct is analyzed based on the needs of the tourism village. Software needs can be seen for tourism villages, namely Personal Computers (PCs), Laptops, Printers, Smartphones, and Kiosks.

c. Network

The network in this case is the internet network which is an important component in the use of information technology. Not only tourism villages need an internet network, almost all aspects, especially during the COVID-19 pandemic, are dependent on the internet network.

2. Green tourism

Green tourism is the second construct in this research. Green tourism is a construct in this research because it focuses on the use of information technology by paying attention to environmental preservation and community welfare. The sub-construct of green tourism is to emphasize sustainability or sustainability from three aspects, namely:

a. Environment

What is meant by environmental sustainability is that the impact of the construction of information technology utilization can reduce excessive use of paper and waste because it has been replaced by the use of the software.

b. Economy

What is meant by sustainability from an economic point of view is that the impact of constructing the use of information technology can increase the effectiveness in completing work so that it does not take too long. In addition, it can also improve

efficiency in terms of human resource efficiency and costs. In addition, optimization of marketing and dissemination of information on tourism villages through the use of information technology can affect improving the community's economy.

c. Socio-cultural

What is meant by socio-cultural sustainability is that the impact of the construction of using information technology can improve in direct communication with the help of the internet network, and can also communicate with other people who are in different regions and countries. In addition, with an increase in the community's economy in the economic sub-construct can lead to additional or absorption of labor as well as relationships or harmony in society.

This green tourism construct will be connected with the information technology utilization construct in the Tourism Village. The relationship between these two constructs is that the use of information technology affects or has an impact on the sustainability of the green tourism aspect.

Model Building

Based on the established constructs and sub-constructs, a model for the use of information technology in a tourism village based on green tourism is built. This model consists of two main constructs, namely the use of information technology in Tourism Villages and green tourism. The description of each sub-construct and the elements in it is adjusted to the description in the sub-chapter of construct identification. In addition, the connection between constructs and sub-constructs is also based on sub-chapter construct identification where there is a connection between the constructs of using information technology in tourism villages and the constructs of green tourism. The model for using information technology in a tourism village based on green tourism can be seen in Figure 2.

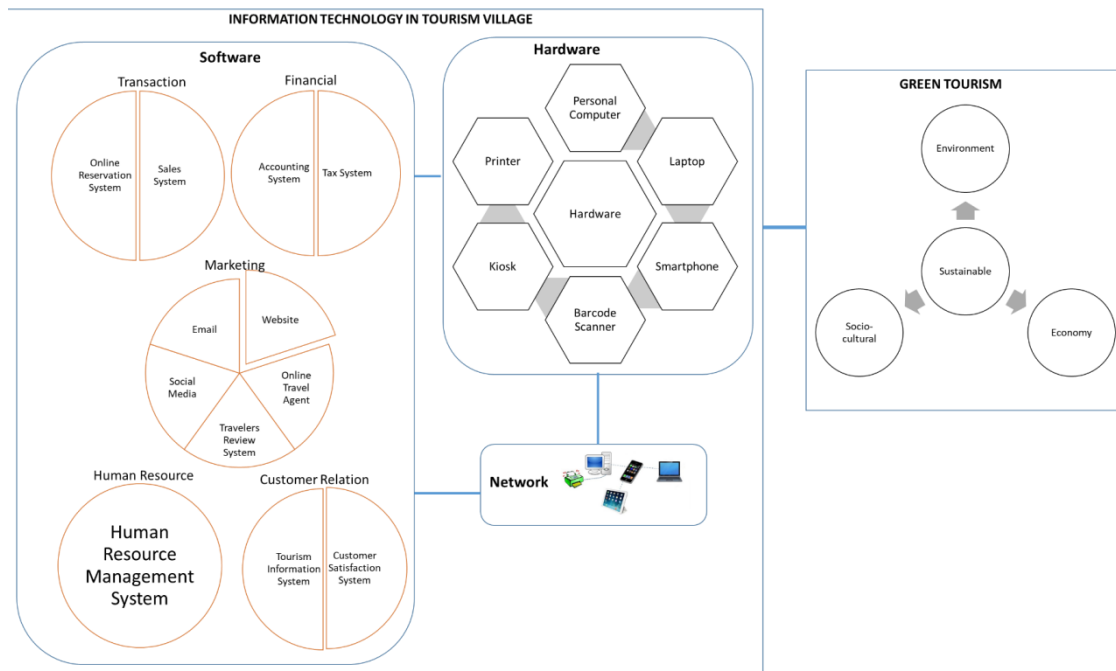


Figure 2. Green Tourism-Based Model of Information Technology Utilization in Tourism Villages

Discussions

Model Evaluation

After the development of the model, then the evaluation of the model is carried out. The purpose of the evaluation is to determine the suitability of the model for the actual conditions of

information technology needs in tourism villages and the suitability of the scientific aspect. The model evaluation method is the focus group discussion (FGD) method. The focus group discussion was conducted with the tourism village to determine the suitability of the model with actual conditions and experts, namely Lecturers with fields of knowledge and expertise related to the information technology model for this tourism village. Experts who carry out the evaluation consist of tourism village experts, tourism experts, accounting experts, and information technology experts. As for the tourism village, it is the manager of the tourism village.

Based on the results of the focus group discussion, several conclusions can be drawn as follows: (1) The model that has been compiled is by the complete information technology needs of the tourism village; (2) The model needs to be equipped with an explanation of the use of information technology based on the classification of tourism villages, namely the classification of pioneering, developing, advanced, and independent tourism villages.

Model Application Method

The method of applying the model explains what tourism villages need to prepare and the steps for tourism villages in implementing or utilizing information technology. The method of applying the information technology utilization model in tourism villages is grouped based on four classifications of tourism villages, namely pioneering, developing, advanced and independent as shown in Table 5.

Table 5. Model Application Method

Classification	Stub	Growing	Advanced	Independent
Software				
Transaction	-	-	Online Reservation System Sales System	Online Reservation System Sales System
Financial	-	-	Accounting System	Accounting System Tax System
Marketing	Email Social Media	Email Social Media Website	Email Social Media Website Online Travel Agent	Website Email Social Media Online Travel Agent Travelers Review System
Human Resource	-	-	-	Human Resource Management System
Customer Relation	-	-	-	Tourism Information System Customer Satisfaction System
Hardware				
	Personal Computer Laptop	Personal Computer Laptop Printer	Personal Computer Laptop Printer Smartphone	Personal Computer Laptop Printer Smartphone Smartphone Kiosk
Network				
	Internet Network	Internet Network	Internet Network	Internet Network

Based on Table 5, it can be explained as follows :

1. **Stub Tourism Village**
For the classification of pioneer tourism villages which are tourism villages that are just starting to be developed, the use of information technology is to provide internet network access and hardware in the form of a personal computer or laptop. From the marketing side, to start promoting this pioneering tourism village, you can use email and social media.
2. **Grow Tourism Village**
For the classification of developing tourism villages which are tourism villages that are already known and visited by people from outside the region, the use of information technology is to provide internet network access and hardware in the form of personal computers or laptops, and printers. From the marketing side, to promote this developing tourism village, you can use email, social media, and the tourism village website as branding.
3. **Advanced Tourism Village**
For the classification of developing tourism villages which are tourism villages that are known and visited by tourists from abroad and there is already management of tourism villages, the use of information technology by providing internet network access and hardware in the form of Personal Computers or laptops, printers, and Smartphones. This smartphone is used as supporting hardware for transaction software. From the marketing side, to promote this advanced tourism village, you can use email, social media, and the tourism village website and work together with Online Travel Agents (OTA) such as Traveloka, Agoda, Booking.com. Aladdin, and others. In terms of facilitating the management of booking and payment transactions, tourists can develop reservation system applications and sales systems. From a financial perspective, to facilitate financial management, and accounting system application can be developed.
4. **Independent Tourism Village**
For the classification of independent tourism villages, which are tourism villages that become independent entrepreneurial units and apply the concept of sustainability, the use of information technology by providing internet network access and hardware in the form of Personal Computers or laptops, printers, Smartphones, Smartphoness, and Kiosks. Smartphoness as supporting hardware for transaction software while smartphoness and Kiosk as hardware supporting customer relation software. From the marketing side, to promote independent tourism villages, they have used all online marketing media such as email, social media, and tourism village websites, in collaboration with Online Travel Agents (OTA) such as Traveloka, Agoda, Booking.com. Aladin, and others and have been registered with the Travelers Review System such as trip advisor so that customers or customers can find out the rating of the tourism village. In independent tourism villages, all aspects have used software or application assistance to facilitate the management of the tourism village as a whole. From the management of booking and payment transactions, tourists can develop reservation system applications and sales systems, from a financial perspective to facilitate financial management, they can develop accounting system applications and tax systems for tax management. managing relationships with customers can develop a tourism information system that can provide information about the number of tourist visits and a customer satisfaction system that provides information about tourist satisfaction with the tourism village.

Conclusions

It can be concluded that the use of information technology in tourism villages currently varies according to the classification of tourism villages and focuses on the marketing aspect. The model for using information technology in tourism villages based on green tourism consists of two constructs, namely the use of information technology in tourism villages and green tourism. The construct of information technology utilization in tourism villages consists of three sub-constructs, namely software, hardware, and network. While the green tourism construct consists of three sub-constructs, namely sustainable environment, economy, and socio-cultural. The green tourism construct is connected with the information technology utilization construct in the

Tourism Village. The relationship between these two constructs is that the use of information technology affects or has an impact on the sustainability of the green tourism aspect.

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