

## Implementation of Smart Tourism in Kedang Ipil Village

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### Abstract

*Information communication technology nowadays is used in the economic era digital and tourism industry. Related to ecotourism is applying intelligent tourist villages, preserving natural resources, maintaining physical and mental health, and providing a positive response to the surrounding community. Not fully utilized by online media. Compete globally but able to take advantage of information technology. This research aims to see the village's concern and readiness to use information technology to realize smart tourism. The qualitative research method used interviews of all managers of Kedang Ipil Village. The results showed that the Kedang Village manager used social media to introduce and even sell the old Kutai traditions through Facebook, website and Instagram.*

### Keywords

smart tourism; tourism villages; digital technology



## I. Introduction

In the era of the digital economy, the development and application of intelligent tourism have been carried out by various countries, including Indonesia. The idea of intelligent tourism destinations is growing quite rapidly because the tourism industry is one of the potential industries for information and communication technology to be used widely from an operational and business perspective. Intelligent tourism destinations are based on optimization situations based on the seamless connection between high-quality information technology and physical infrastructure through sensors, intelligent devices, and managing big data deployed in specific geographic areas (Koo, Shin, Gretzel, Hunter, & Chung, 2016).

Intelligent tourism has been widely developed and researched in tourism development because it is closely related to smart cities. It can create competitiveness in smart tourist destinations to provide a quality travel experience to visitors by seeking competitive resources. In addition, the involvement of other stakeholders, such as information and communication technology, tourism companies and the government, are needed.

For example, the city of Porto has established its position as an intelligent travel destination by helping travellers evaluate communication and interactivity with tourists/visitors. There are four hundred twenty-three tourists who visited this city. Information conveyed about information and communication technology in Porto is considered contrary to tourists' decisions for the city. This information helps determine whether applications and information available on the internet have positively contributed to tourist satisfaction during their visit to Porto. In particular, the existence of information and communication technology accessibility describes the choice of tourist destinations, their experiences, and their satisfaction (da Costa Liberato, Alén-González, & de Azevedo Liberato, 2018).

One form of implementing smart tourism is the development of ecotourism. Ecotourism is a form of intelligent tourism because it is considered able to help preserve natural resources, maintain tourists' physical and mental health, and bring benefits to the local community. The definition of ecotourism, according to the International Ecotourism Society, is an environmentally friendly tourism activity that prioritizes aspects of nature conservation, socio-cultural aspects of empowerment, local community economics, aspects of learning and education, which essentially empowers local communities. Applying environmentally friendly ecotourism concepts, utilizing the wealth and beauty of nature, incredibly unspoiled nature, will create a unique experience for visiting tourists.

The Minister of Home Affairs Regulation Number 33 of 2009 concerning Guidelines for Ecotourism Development in the Regions also regulates ecotourism, the principles of ecotourism development in the regions and other arrangements related to the development of ecotourism in the regions. This regulation also states the principles of ecotourism development as an indicator of tourism area development with an ecotourism approach. Ecotourism is usually developed by countries with attractive natural resources, socio-culture, and local community wisdom (Santoso, 2017).

The Indonesian government's strategy in developing ecotourism is through Community-Based Tourism (CBT). Community-Based Tourism is an effort to realize sustainable tourism development, namely tourism development that pays attention to the current and future economy that meets the needs of visitors, industry, social and environmental impacts. Community-Based Tourism emphasizes the participation of local communities, intending to increase the number of tourist visits (Global Compact Network). UNWTO, 2016).

Community-Based Tourism is carried out in tourist villages with natural potential, and the authenticity of the culture of the community is still maintained, which is used as a tourist attraction. Tourism village development provides a positive value because it can create jobs, increase community income, and become an independent village (Adukaite, van Zyl, & Cantoni, 2016). In Laos, Nam Ha ecotourism applies Community Based Tourism to integrate environmental and cultural preservation with social and economic development. Work with local villagers and ensure that income from tourist visits can supplement and replace other economic activities (Davison, Harris, & Vogel, 2005).

Tourism is an industrial sector which is currently got a lot of attention from many countries in the world. The tourism sector is believed to have the ability to increase economic growth (Maciej Debski 2013). Moreover, the tourism sector is positively encouraged to be able to replace the oil and gas sector which has been the main capital in the country's foreign exchange earnings (Siswanto 2007). The advantage of the tourism sector lies in its ability to increase foreign exchange and to drive various other business sectors such as the home industry. Thus, developed countries and developing countries continue to develop and improve the quality of their country's tourism. (Amin et al, 2019)

Kutai Kartanegara Regency is one of the regencies that has many leading tourist areas in East Kalimantan Province. Of the many tourist areas in Kutai Kartanegara Regency, most tourist areas are based on nature tourism and cultural tourism. Thus, the development of tourism with the concept of ecotourism can be applied in tourist areas in Kutai Kartanegara Regency, one of which is Kedang Ipil Village, Kota Bangun District. The Kartanegara Regency Government revealed that one of the problems faced in developing tourist villages in the low quantity and quality of marketing tourism villages is both directly and through mass media, and has not utilized the existing online media to its full potential. Most tourist villages still rely on conventional media (word of mouth) to do marketing. Another problem is the lack of knowledge and understanding and the readiness

of some village tour managers/guides regarding information and communication technology. Some tourism village managers consider all online technological advances to be unimportant to them.

What is important is how to preserve nature, culture and traditions so that they are not polluted and not eroded by increasingly rapid technological advances. Some of the problems mentioned earlier can be an obstacle to the readiness of tourist villages to compete globally. This causes the tourist village not to develop as expected. Tourist villages are becoming globally unknown to the public and consequently reduce the number of visits and affect the incomes of rural communities. In order to compete globally, tourist villages need to implement smart tourism, which is innovative in managing resources (natural, cultural, human) and innovative in utilizing information and communication technology. To achieve this goal, given this, the involvement of local communities is significant because their participation is naturally related to how groups and individuals are empowered and have control over their lives. More importantly, communities should be allowed to make critical decisions and have an active role and influence at every level of decision-making and planning. In addition, people are one of the main reasons tourists visit destinations; tourists are drawn from a particular place and social context, where they will help shape the context of the tourist experience in the host community (Richards & Hall, 2000).

Therefore, it is essential to understand their perceptions of tourism and how tourism affects their livelihoods from a social, economic, environmental and cultural perspective. Tourism as a potential industry in Indonesia can play an essential role in reducing poverty among local communities with the resources to promote tourism. When Indonesia wants to realize a knowledge-based society, the government has emphasized providing access to information and communication technology for urban and remote communities. The existence of a tourist village is very dependent on the activities of the manager. Tourism village managers are stakeholders who are directly involved in the development of tourist villages.

Measurement of the readiness of information and communication technology for tourism village managers in the application of intelligent tourism is carried out in the Kedang Ipil Tourism Village located in Kutai Kartanegara Regency. Kedang Ipil Tourism Village was chosen as the object of research because it is independent. Independent tourist villages are usually able to carry out their promotions so that they regularly get tourist visits. In addition, independent tourism villages also have mature managerial skills and can create various innovations to attract tourist visits. The purpose of measuring the readiness of tourism village managers in the use of information technology is to provide an overview of the extent to which tourist village managers have implemented the concept of smart tourism and to find out which indicators of information and communication technology readiness need to be improved so that tourist villages can compete globally. This can be a recommendation for tourism village managers and local governments in developing tourist villages.

The measurement of the readiness of tourism village managers in the use of information and communication technology for the application of intelligent tourism in this study refers to the pillars of ICT readiness in the Travel & Tourism Competitiveness or Tourism Competitiveness Index issued by the World Economic Forum (WEF). The TTCI measures a set of policies that enable the sustainable development of the travel and tourism sector, which contributes to the development of a country's competitiveness. TTCI is used to measure the tourism competitiveness of a country. In addition, the intelligent tourism development strategy in Indonesia is also based on the index.

The pillars of TTCI include safety, environment and business security, health and hygiene, human resources and labour market, ICT readiness, significant travel and tourism destinations, international openness, price competitiveness, environmental sustainability, airport infrastructure, port and land infrastructure, tourism service infrastructure, natural resources, as well as culture and business travel. The ICT Readiness indicator in TTCI is used to measure the readiness of tourism village managers in utilizing information technology adapted to conditions in tourist villages.

Information and communication technology readiness is when an economy applies existing technologies to increase industrial productivity, emphasizing its ability to make maximum use of information and communication technologies in daily activities and production processes to increase efficiency and enable innovation to increase power in Competitive. This pillar measures the penetration level of information and communication technologies (internet, mobile telephony and broadband) that provide businesses and individuals access to online services critical to running the growing tourism industry. This pillar also looks at the quality of power supply and the capacity of businesses and individuals to use and provide online services. The pillars of ICT readiness in TTCI consist of 8 indicators: a. use of ICT for business-to-business transactions; b. Use of the internet for business-to-consumer transactions; c. internet individuals; d. Broadband internet subscribers; e. Cell phone subscriptions; f. Mobile broadband subscription; g. Mobile network coverage; h. Quality of electricity supply (World Economic Forum-WEF, 2017).

## **II. Research Methods**

Using a qualitative method design with case studies aims to obtain in-depth and detailed data and information from respondents by including various sources of information. Sources of data needed in this study came from primary data obtained directly from respondents through face-to-face interview techniques, interviews and observations by telephone, and secondary data obtained and presented by other parties such as government agencies, previous research and other related documentation.

Data collection methods in this study include interviews, observations, and documents. In-depth interviews were conducted with the Kedang Ipil managers, the information needed and obtained from documentation in the form of notes, photos, reports, government/private documents, tourist village documents, news, information and data on websites and social media. Interviews were recorded with audio and word-for-word transcripts. Data analysis used a qualitative content analysis approach to reveal themes and concepts. The themes that emerged from parents' perceptions of disruptive power, independence, stress and other critical substantive issues were derived inductively through constant comparative methods (Hossain, 2011). The researcher sharpened the thematic analysis by holding meetings and discussions until the theme was agreed upon through data triangulation.

### III. Results and Discussion

#### 3.1. Kedang Ipil Tourism Village Based on Information and Communication Technology

Kedang Ipil Tourism Village is approximately 74 KM from Kutai Kartanegara Regency. Kedang Ipil comes from the Kutai language, Kedang, which means river, while Ipil is a type of solid lime wood. This wood grows and develops on the banks of the river in Kedang Ipil Village. The residents of Kedang Ipil Village are natives of Kutai and still maintain a strong Kutai culture with their language and variety of customs. As a form of preserving Kutai customs and culture, a traditional Kutai ceremony is held every year to celebrate the village's anniversary. Sometimes, the Ipil and Nut Baham traditional ceremonies (read: a message of gratitude for the opening of the rice harvest). The majority of Kedang Ipil villagers work as farmers. The people of Kedang Ipil Village still take care of nature as part of their lives. Every day they work in their fields, gardens and fields. However, the infrastructure in the form of roads leading to Kedang Ipil Village is still damaged. The road used is the road that connects oil palm companies around Kedang Ipil Village.

The village, which is included in the Kota Bangun District, Kutai Kartanegara Regency, has three houses of worship. They live in a very high sense of brotherhood with mutual respect. Even though they have three different worship and beliefs, they are still one in their customs and culture. They are united in one tribe, namely Kutai Adas Lawas. For the differences unite and strengthen their brotherhood. They are united by traditional rituals, ranging from the rituals of the beginning of human life to the rituals of human death from the face of the earth. Kedang Ipil Village, with its beautiful and unspoiled village area, has much potential to be developed. However, so far, the district government has not given maximum attention. We can see this situation from the pattern of people's lives and infrastructure there.

Kedang Ipil Tourism Village has potential tourism potential to be developed. Nature tourism can occur at the Kadua Raya waterfall and Putang waterfall. These two waterfalls are located in the Kedang Ipil Village area and are still not appropriately managed, even though the natural tourism potential of these two waterfalls is very promising. In addition to nature tourism, there is still a sector that needs to be the government's primary concern in Kedang Ipil Village, namely the community economic sector. The people of Kedang Ipil Village produce palm sugar almost every day. In a day, they can produce a ton of palm sugar. However, unfortunately, their efforts are not matched by the selling price of palm sugar in the market. They sell sugar cheaply. Residents still cannot get economic prosperity because it is still produced in small quantities in their homes. Prices slightly increase before the holidays. This is our common concern to build solidarity to help them in the marketing process to improve the community's economy. Information and communication technology development encourages changes in information media and interactions in village government and society. This is also driven by the need for public information disclosure that encourages government administration in a transparent, efficient and effective manner. The development of technology is also a demand that is realized by the government apparatus of the Kedang Ipil village.

### **3.2. Readiness of the Kedang Ipil Tourism Village Community towards Information and Communication Technology**

Human Resource Factors: The components analyzed in the Human Resources factor include: a) Knowledge of the village community about the application of information and communication technology in village government (village website, social media); b) Ability to use the internet; c) Level of approval of the need for internet training; d) Ability to communicate via the internet and; e) Ability to use the internet with a mobile phone.

The people have widely known the Kedang Ipil Tourism Village website of Kedang Ipil Tourism Village; this can be seen from the enthusiasm of the community in providing up to date information on tourism activities in Kedang Ipil Village to the Dewi Karya Tourism Group (Pokdarwis) and Tourism Activist Communities such as Exotic Kaltim, Traces of Culture and Mahakam Explore so that they can be disseminated both through the website and social media. Most of the villagers are at an ordinary level in using the internet, as their mindset is still dominated by direct human interaction, which is much better because the sense of detachment will continue to grow. However, most of the villagers are used to and intelligent enough to use the internet as a communication medium to maximize activities in coordinating tourism activities that involve the community.

In terms of using the internet via mobile phones, tourism managers consider this technology easy to use. This shows an increase in the utility of mobile phones for internet access and through communication activities, both through email and other social networks, such as Facebook and Instagram. Then when viewed from the level of agreement by tourism managers about the need for information technology training to improve knowledge and skills, there is a high willingness from the younger generation in Kedang Ipil Tourism Village. This can be interpreted as an effort to develop human resource competencies in rural communities through information technology training programs adapted to the needs and formats of the community's culture.

Socialization of the use of information technology for rural communities needs to be carried out on an ongoing basis to understand the use of information technology/internet for productive activities of the community, especially in the economic development of rural communities. From the several aspects of human resources mentioned above, it can be concluded that the condition of the human resources of Kedang Ipil Tourism Village is quite capable of accepting information technology. The development of the internet as a medium of communication between the government and rural communities can be developed for applications that can be accessed via mobile phones. For example, the local community is also involved in managing and providing tour packages for Kedang Ipil Tourism Village. Kedang Ipil Tourism Village managers are local people who are appointed with the responsibility to manage the tourism village. The management structure of Kedang Ipil Tourism Village consists of: The local community is also involved in the management and provision of Kedang Ipil Tourism Village tour packages. The management structure of the Kedang Ipil Tourism Village consists of:

#### **a. The Elements of the Village Apparatus**

Village Head is responsible as the primary coordinator and acts as an intermediary in communicating and transacting with outside parties, especially in visits to Kedang Ipil Tourism Village. The Village Secretary is responsible for reporting, correspondence, documentation, coordination of the preparation and implementation of management policies for the Kedang Ipil Tourism Village. The Head of Finance and Treasurer carries out administration which includes receipt of deposits, deposits/payments, administration and accountability for income and expenditure receipts in implementing the management

of Kedang Ipil Tourism Village. The Kaur and Kasi, who are in charge of carrying out budgetary activities, take actions that result in expenditures at the expense of the budget. Youth organization; Collecting, mobilizing and channelling the participation of the younger generation in developing villages and developing the creative potential of the younger generation in a directed manner to develop themselves as supporters of village development.

Tourism Awareness Group Dewi Karya is an organization at the community level whose members consist of tourism actors who have concern and responsibility and play a role as a driver in developing tourism and can increase regional development through tourism for the community in tourist areas. Tourism Activist Community such as Exotic Kaltim, Cultural Trail and Mahakam Explore; This has become the main driving force for the tourism development movement in all corners of the archipelago and ensures the sustainability of the youth tourism development program.

#### **b. Utilization of Information and Communication Technology in Kedang Ipil**

Tourism Village Managers of Kedang Ipil Tourism Village have used several information and communication technology facilities, both via the internet and cellular phones, to communicate, coordinate and transact, and conduct marketing and promotion of Kedang Ipil Tourism Village. The following are details of the use of information and communication technology by Kedang Ipil Tourism Village Utilization of ICT for business-to-business transactions. These several business fields transact with Kedang Ipil Tourism Village managers.

Other Tourism Village Managers Kedang Ipil Tourism Village Managers use telephone, SMS, and WhatsApp to communicate and coordinate with other tourist village managers in Kutai Kartanegara Regency. They share information and knowledge about tourism village management. In addition, they also share tourists if one tourist village has several tourists that exceed its capacity so that it is transferred to another tourist village. The manager of the Kutai tourism village, the Kartanegara Regency Government, who is a member of the Kutai Kartanegara Lantern Forum, has a WhatsApp group to communicate and exchange information. Communication and transaction activities with the Kedang Ipil Tourism Village manager via telephone, SMS, or WhatsApp when they want to order tour packages for tourists who use their services. The Kedang Ipil Tourism Village manager does not have a permanent partnership with one of the travel agents. Tour and travel agents who come to tourist villages are very diverse.

Lodging In Kedang Ipil Tourism Village, there are many choices to stay. If tourists hang a hammock, camping, or want to stay at a resident's house or homestay, tourists can communicate directly with the villagers they meet. Homestays are spread over several points of the village, which have a nameplate on each homestay. Hanging a hammock can be done on many fruit trees in front of the Traditional Hall or combined with a tent set around Kandua Raya Waterfall. The Kedang Ipil Tourism Village manager uses cell phones to communicate and transact.

The internet is used for business-to-consumer transactions for marketing and promotion of Kedang Ipil Tourism Village. Initially, the Kedang Ipil Tourism Village promotion and marketing was still done conventionally and through brochures made by the manager with assistance from the district government. Promotion and marketing through online media starting in 2017, including websites, Facebook, Instagram, Kedang Ipil Tourism Village has a website with the address [www.kutaiadatlawas.com](http://www.kutaiadatlawas.com) and a website managed by the district government, [www.kutaikartanegara.com](http://www.kutaikartanegara.com).

The website contains various activities, photos of activities in Kedang Ipil Tourism Village and tour packages offered at Kedang Ipil Tourism Village and their prices. Various information and photos related to tourism activities in the Kedang Ipil Tourism Village can be seen on Facebook along with the tour packages offered on the Dewi Karya Kedang Ipil Facebook account, namely Kedang Ipil Tourism Village Instagram Kedang Ipil Tourism Village @desa\_wisata\_kedang\_ipil Active since July 2017. Various photo and video information about tourism activities in Kedang Ipil Tourism Village can be seen on Instagram. Kedang Ipil Tourism Village Instagram followers have reached 650 people. Instagram is the most frequently updated social media by the manager of the Kedang Ipil Tourism Village.

To communicate and transact with tourists. Tourists who want to visit the Kedang Ipil Tourism Village can place an order by telephone, SMS, or WhatsApp to the Kedang Ipil Tourism Village manager, the Dewi Karya Tourism Awareness Group (POKDARWIS). They do not have to come directly to the Kedang Ipil Tourism Village to place an order. They can order directly by looking at the various tour package information that has been provided on the website and then contacting the contact number listed on the website and social media. All promotional and marketing activities for the Kedang Ipil Tourism Village on social media Facebook and Instagram are managed by the Dewi Karya Tourism Awareness Group (POKDARWIS) in collaboration with the Tourism Activist Community as Exotic Kaltim, Cultural Trails and Mahakam Explore. Information and communication technology is used to communicate and coordinate with fellow Kedang Ipil Tourism Village managers.

At the beginning of the Kedang Ipil Tourism Village inauguration in 2016, the manager still uses traditional methods to coordinate and communicate. They usually hold meetings using written invitations or word of mouth to coordinate before tourists come to visit. Nowadays, using cell phones either by telephone, SMS, or WhatsApp can communicate and coordinate more easily and quickly. Meetings between managers are still being held before tourists arrive. Managers of Kedang Ipil Tourism Village started using mobile phones to communicate in 2017. Although all Kedang Ipil Tourism Village managers already have cell phones, not all managers are members of the WhatsApp management group.

Kedang Ipil Tourism Village is equipped with internet facilities. In collaboration with the Ministry of Communication and Information and TELKOMSEL, the internet network can be well connected. Thus, the commitment to realize the government and rural communities who are literate in information technology continue to be built. Telkomsel Smart Village Upgrading was launched so that villages can utilize information and communication technology in an integrated and comprehensive manner to support existing business processes to become advanced, independent and modern villages. Cooperation has been realized, while what has not been realized is a more intensive training and comparative studies in information and communication technology. The Kedang Ipil Tourism Village manager emphasizes developing innovations and maintaining the preservation of the authentic culture of the local community. Innovations need to be continuously developed to increase the length of stay of tourists in Kedang Ipil Tourism Village. Some of the innovations made are adding several tour packages to tourists following trendy tours every year, such as holding the Kutai Lama Traditional Culture Festival.

These various innovations are essential not to lose competitiveness with other tourist villages. Tourists who visit do not get bored even though they come to information and communication technology several times. The Kedang Ipil Tourism Village manager

admits that the use of information and communication technology is very supportive and makes it easier for them to manage tourist villages. Coordination and delivery of information can be done more quickly. The number of tourist visits has increased and comes from outside Kutai Kartanegara Regency due to the use of online media. Information and communication technology have also helped them create various innovations through various information found on the internet and the ease of dealing with outside parties or other business sectors. Power outages in the Kedang Ipil Tourism Village area are sporadic. In one month, there is not necessarily a power outage. Usually, power outages occur due to weather problems, such as heavy rain or strong winds. To anticipate the blackout, the Kedang Ipil Tourism Village manager already has a generator as a backup for electricity supply.

Village Tourism is ecotourism considered a form of intelligent tourism application because it can help preserve natural resources, maintain tourists' physical and mental health, and provide benefits to the local community. So that tourist villages can compete globally, tourist villages need to implement smart tourism, which is innovative in managing resources (natural, cultural, human) and competent in utilizing information and communication technology. Kedang Ipil Tourism Village, an independent tourism village in Kutai Kartanegara Regency, has managers who have utilized information and communication technology to support the management and business processes of the tourist village. The Kedang Ipil Tourism Village manager has used information and communication technology to transact and communicate with other business fields, including managers of other tourist villages, travel agencies, other tourism service providers, and lodging. The Kedang Ipil Tourism Village manager has also used the internet for marketing and promotion of the Kedang Ipil Tourism Village through the website, Facebook, and Instagram.

The Kedang Ipil Tourism Village manager has a WhatsApp group to coordinate with fellow Kedang Ipil Tourism Village managers; besides that, they also sometimes coordinate and communicate using telephone or SMS. The Kedang Ipil Tourism Village manager has also used the internet for marketing and promotion of the Kedang Ipil Tourism Village through the website, Facebook, and Instagram. The Kedang Ipil Tourism Village manager has a WhatsApp group to coordinate with fellow Kedang Ipil Tourism Village managers. They also sometimes coordinate and communicate using telephone or SMS. The Kedang Ipil Tourism Village manager has also used the internet for marketing and promotion of the Kedang Ipil Tourism Village through the website, Facebook, and Instagram. The Kedang Ipil Tourism Village manager has a WhatsApp group to coordinate with fellow Kedang Ipil Tourism Village managers. They also sometimes coordinate and communicate using telephone or SMS.

Telkomsel Smart Village Upgrading was carried out in 2017. As a result, the community and village managers can utilize information and communication technology in an integrated and comprehensive manner to support existing business processes to become advanced independent modern villages. The village manager sent members of the Dewi Karya Awareness Group (POKDARWIS) to attend training on skills in the use of information and communication technology. Skills training trains participants to take full advantage of information media and social media, such as websites, Facebook and Instagram. With this capability, information can be easily and quickly disseminated to the public.

The solid information character of the tourism industry shows the importance of information and communication technology for tourism information dissemination systems. The emphasis is on the internet and especially on social media. The authors also note the take-off from online marketing and social media in tourism following a similar

path from what is happening in other industries (Tiago, Amaral, & Tiago, 2015). There is a lot of discussion and research on social media and its implications for the tourism and hospitality industry. Three influences have been identified on social media that need to be considered: 1) as an information and communication technology tool that relies on information technology and the company's digital marketing strategy; 2) as a channel that enables peer-to-peer communication, based on content creation, collaboration and content exchange between all companies; and 3) as a liaison to build virtual communities that influence people's behaviour (Zeng & Gerritsen, 2014).

In the village management area, the community can now communicate with the outside world via telephone and email. This is very important during an emergency. The most obvious impact is an increase in the number of tourists. Tourists who want to book tour packages can also order directly from the manager via telephone, SMS, WhatsApp, and the website. The Kedang Ipil Tourism Village area can be reached by all operator signals in Indonesia, both 3G and 4G. The development by the Kedang Ipil Tourism Village manager in the field of information technology has coordinated with the Ministry of Communication and Information and Telkomsel. An increase in the number of tourists results in increased employment opportunities, which generate more income for the community. In addition, from the interviews conducted, information and communication technology has brought in more tourists. This has helped local communities generate income, diversify the local economy, preserve culture, preserve the environment, and provide educational opportunities (Nair, 2011).

This study reveals a positive relationship between the development of information and communication technology and tourist arrivals in Kedang Ipil Tourism Village because the introduction, readiness, and development of information and communication technology have placed Kedang Ipil Tourism Village in tourism. Thus, it is estimated that the tourism industry in Kedang Ipil Tourism Village will develop as more tourists visit. In addition, the introduction of information and communication technology has become a catalyst for the tourism industry to develop, resulting in a better social, economic and environmental situation for the local community. The study also highlights the positive and significant outcomes of the tourism industry and the overall impact of tourism on local communities and tourists.

The condition of the world economy is also increasingly influenced by the use of information and communication technology and tourism as an independent economic sector that relies on the intensive use of information. All tourism-oriented organizations are experiencing a more significant impact from what is now known as information and communication technology (Costea, Hapenciuc, & Arionesei, 2017). The emergence of information and communication technology has impacted all value chain processes in the tourism, hospitality and catering industries (Costea et al., 2017).

#### **IV. Conclusion**

This study suggests the importance of involving rural communities in maintaining tourism development, and it is impossible to maintain a tourist destination that is not supported by the local community. Therefore, policy implementers need to consider local communities when planning tourism projects and understand their aspirations when developing the area. Planning and designing appropriate tourism development in rural tourism destinations by involving local communities will increase the positive impact of tourism. Several determinants of the success of tourism development that need to be considered are past experiences which show that information and communication

technology cannot function optimally without the aspirations and readiness of the community to improve their welfare. It is interesting to see the implementation of information and communication technology gradually in rural communities to help them improve their standard of living through tourism. This study is an excellent illustration of the government's efforts to bring internet networks to rural development goals. It has enabled rural communities to improve their environment towards intelligent tourism. It has been found that the development of tourist villages has limited ability to provide transparent procedures to safeguard and maintain the development of tourist villages. This in-depth study provides a clear picture of the role of information and communication technology as part of developing a tourist village.

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