

The Effectiveness of Applying Smart Tourism in “Monkey Forest Ubud” Towards A Sustainable Economy

I Wayan Gede Lamopia

Institut Teknologi Bisnis STIKOM Bali, Indonesia

Abstract: *Monkey Forest Ubud has implemented smart tourism based on information technology as a form of innovation towards a sustainable economy. The implementation of the website www.monkeyforestubud.com has never been measured for its effectiveness. This study aims to measure the effectiveness of the website by using the McKlean variables of service quality and user satisfaction. The measurement of effectiveness is carried out by using qualitative research by means of in-depth interviews. Based on field studies and overall effectiveness measurements, it can be concluded to have been running effectively, including service quality. There are indicators of responsiveness, reliability, guarantee, and tangible. While on user satisfaction, there are indicators of quality and accessibility. As a form of recommendation, it is still necessary to evaluate the recommended place menu that offers a 360⁰ virtual tour. Unfortunately, this cannot be accessed and needs attention. Apart from this, the information website about Monkey Forest Ubud has been running effectively.*

Keywords: *Effectiveness, Smart Tourism, Monkey Forest Ubud, Sustainable Economy*

Introduction

In the Industry 4.0 era, the development of Information and Communication Technology (ICT) is growing rapidly. ICT is a tool that can help life in various fields, including in the world of tourism. ICT has changed the world of tourism globally both locally and internationally by gradually changing the structure of the industry and developing various opportunities and threats. ICT plays an important role for the competitiveness of an organization and tourism destination (R. R. Putra, U. L. Siti Khadijah, 2020). In the current era of digitalization, with the development of information and communication technology, people's trends change very quickly. This is due to the ease of accessing information on media sites. The tourism sector requires rapid adaptation to the environment and intense competition (F., 2020).

The utilization of information and communication technology in a tourism destination can accelerate and provide convenience in developing tourist destinations. Connecting all sectors involved in the tourism industry with intelligent forms of information and communication technology that can be accessed by the public is the concept of smart tourism. By applying the concept of smart tours, it can make easier for someone to get services according to their needs and desires (Budiarta, 2018). Through information and communication

technology, both local and foreign tourists can easily access and provide information related to the tourist destinations they want to go to. The application of information and communication technology in tourism development using the concept of smart tourism is a tourism activity that is supported by the efforts of a tourist destination to collect and process data from infrastructure, social connections, and other resources available in institutions both in government and private. (Dean Dionisius Beoang, 2018). One of the attractions that has implemented the concept of smart tourism is Monkey Forest Ubud, which is located in Padangtegal Village, Ubud, Bali Province.

Padangtegal Village is one of the villages located in Ubud District, Bali Province. Geographically this village is located north of Banjar Taman Kelod, East; Peliatan Village, South; Pengosekan Village; Banjar Ubud Kelod. Monkey Forest Ubud is a popular place that is very sacred for Balinese people where it becomes the habitual ground for hundreds of monkeys in the area. Monkey Forest Ubud tourist attraction is one of the tourist destinations that is in great demand by tourists. Research on Monkey Forest Ubud was carried out in 2014 on the promotional media for the Monkey Forest Ubud tourism object in terms of semiotics. In that year, marketing media to increase the promotion of Monkey Forest Ubud were in the form of brochures, t-shirts, and tickets that applied 3 colors (Ni Ketut Rini Astuti, 2014).

In 2019, the management of Monkey Forest Ubud began to improve, namely by applying the concept of smart tourism towards a sustainable economy. Smart tourism is the best step to survive in the rigors of the evolution of technology and information where the physical dimensions and government of tourism enter the next level (digitalization) so as to achieve a new generation that is more modern in accordance with the times (F., 2020). This website has been applied to foreign and domestic tourists. This location was also temporarily closed due to the COVID-19 pandemic, so it could not run optimally. In November 2020, Monkey Forest Ubud was declared to be reopened but before it was declared to reopen, this particular tourist spot was also one of the digital-based tourist areas. In order to reach the New Era of Bali, Monkey Forest Ubud has also implemented a digital payment system using QRIS code.

In the context of innovation, the application of the smart tourism concept needs to be measured for its effectiveness. Measurement of the effectiveness of using the website as a step to optimize tourism from the field of information technology (U. L. S. K. Ferdiansyah H., Cipta E., 2 C.E.). On the website listed above, so far there has never been a measurement of the effectiveness of either the manager or the visitors who use the platform so that it cannot be used as an improvement or sustainability in the discourse of tourism management. Therefore, in this study, we will try to measure the effectiveness of the application of smart tourism on the monkeyforestubud.com website. This effectiveness measurement is important considering that in 2019 research has been conducted on the effect of website effectiveness in meeting user information needs by Zhafira Salsabil, et al and resulting in this effectiveness measurement affecting marketing strategies as well as information media that pays attention to the current state of the digital world. (Zhafira Salsabil, 2019).

Method

The measurement of effectiveness this time is quite different, because it will carry out measurements by strengthening symptoms or phenomena of human behavior in the use of smart

tourism at Monkey Forest Ubud by means of in-depth interviews with qualitative research types. (Arikunto, 2013) Qualitative research was carried out through intense contact with informants consisting of from the management of Monkey Forest Ubud and Tourism Connoisseurs. Research on the effectiveness of the implementation of smart tourism Monkey Forest Ubud on the monkeyforestubud.com website refers to indicators of information needs aspects. In measuring the success rate of an information system, there are several measurement models that can be used, one of which is the model developed by DeLone and McLean. In this case, considering the research time is quite short, the researcher only takes two dimensions, namely Service Quality and User Satisfaction. (Delone, William & McLean, 2003).

Empirical Result

a. The Demographic Condition of Monkey Forest Ubud

Tourism development is currently being discussed by the Bali provincial government due to the COVID-19 pandemic with the tagline "Bali Returns". As a tourist area that has a variety of tourism, Indonesia has a leading tourist destination located at the tip of the island of Java, namely the Province of Bali. As a leading tourist destination, the province of Bali has potential that can be developed, one of which is in nature tourism. The uniqueness of the culture, customs and natural beauty on the island of Bali indeed has a special place in the hearts of tourists. Moreover, it is supported by tourism facilities and infrastructure such as transportation, accommodation, attractions and entertainment, as well as the sophistication of information systems (Pantiyasa, 2019).

One of the tourist destinations that has significant progress on the island of Bali is Monkey Forest Ubud. Located in a position in the middle of the island of Bali which is geographically bordered by the north of Banjar Taman Kelod, east of Peliatan Village, and south of Pengosekan Village. Topographically, the location of the Monkey Forest Ubud tourist spot is in the lowlands with an average height of 325 m above sea level with a slope gradient of 0-2%. Based on observations from observations in the local area, the population in 2021 currently reaches \pm 4000 people with a fairly high population growth. This density is caused by the increase in birth rates and the large number of people migrating to Padangtegal Village. This Monkey Forest Ubud is an object of tourist attraction which is known as Wanara Wana. This place is an area that is considered sacred by the residents of the local traditional village. Located in the Padang Tegal Traditional Village area, this monkey forest tour offers natural tourism with hundreds of monkeys that inhabit the forest. Developments are happening so fast in the Monkey Forest Ubud tourist area, here is a summary of the demographic conditions of the Monkey Forest Ubud based on an interview with the manager at the Monkey Forest Ubud, Mr. Adi Widyartana.



Figure 1. Barcode for Website Information

b. Smart Tourism Implementation at Monkey Forest Ubud Towards a Sustainable Economy

Monkey Forest Ubud has made a breakthrough to support the direction of sustainable economic development by utilizing information technology. Initially, the delivery of information in Monkey Forest Ubud was done manually by placing booklets, brochures and physical information at the location of the Monkey Forest Ubud area. By looking at the times, this information development strategy switched to using information technology in the form of a website. Moreover, due to the COVID-19 pandemic required the Monkey Forest Ubud tourism site attraction (TSA) to close temporarily.

The utilization of information technology as a form of innovation from Monkey Forest Ubud can be accessed at www.monkeuforestubud.com where the complete menu offered is quite complex. Based on interviews and observations on the website, the informative menu of the Monkey Forest Ubud can be seen in the following image:

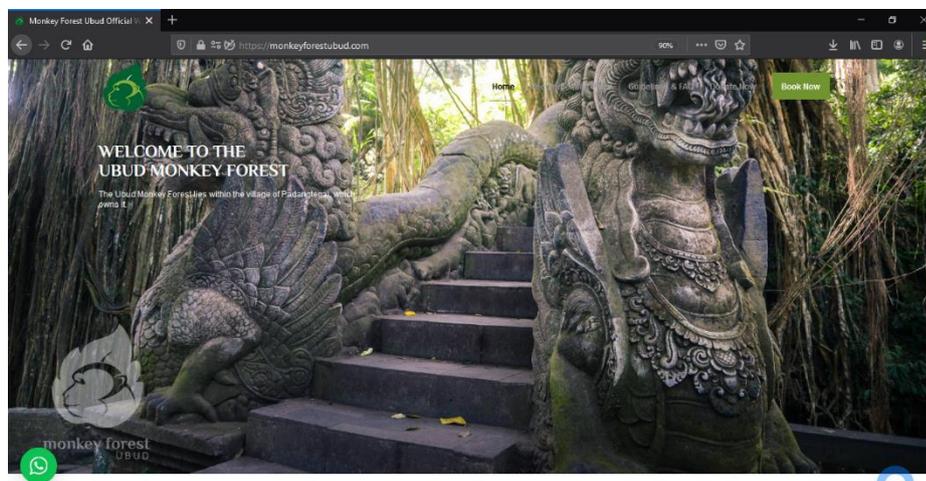


Figure 1 Website Main Page

The picture above is the main page view of the website and the menus listed include Home, recommended place, Guidelines & FAQ, Donate Now, and Book Now. In addition to the menu above, there is also a feature if tourists want to communicate with the tour management team in the form of chat. This feature can be seen in the image below.

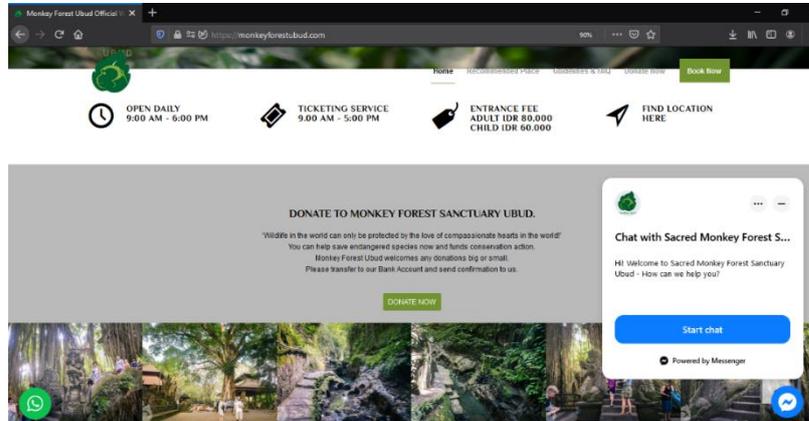


Figure 2 Chat Page with the Monkey Forest Ubud Management

In addition to the chat feature, the display above also displays tickets for tourist attractions, ticket service hours, admission tickets, and also a google map for the Ubud Monkey Forest location. The IT development team from the Monkey Forest Ubud tourism management also offers place recommendations for tourists along with a 360⁰ virtual tour at the coordinates on the map.

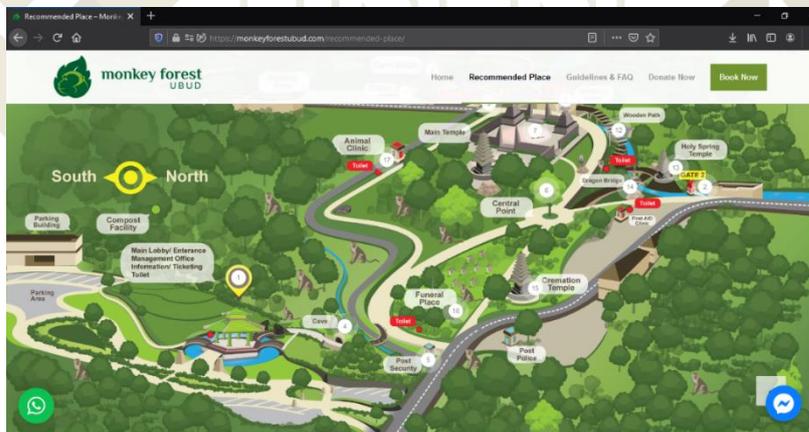


Figure 3 Recommended Places at Monkey Forest Ubud

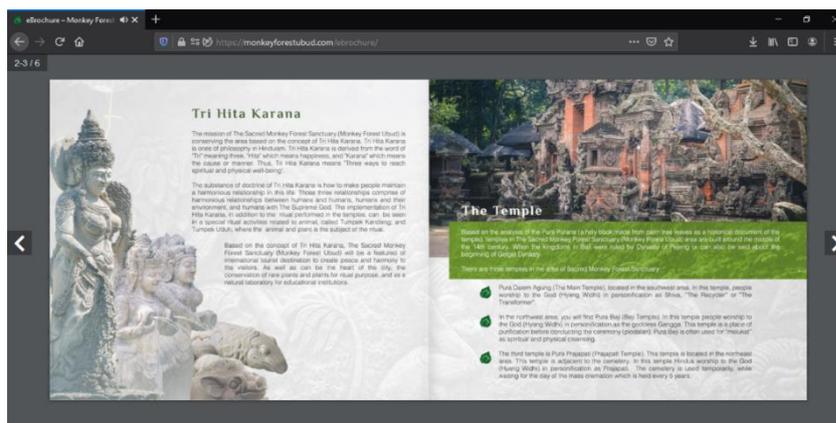


Figure 4 The e-Brochure on Monkey Forest Ubud

Even though the Monkey Forest Ubud management team has innovated information by utilizing information technology, they also continue to provide electronic brochures that can also be accessed by tourists. In addition, there is also a guide menu for dealing with monkeys in Monkey Forest Ubud.

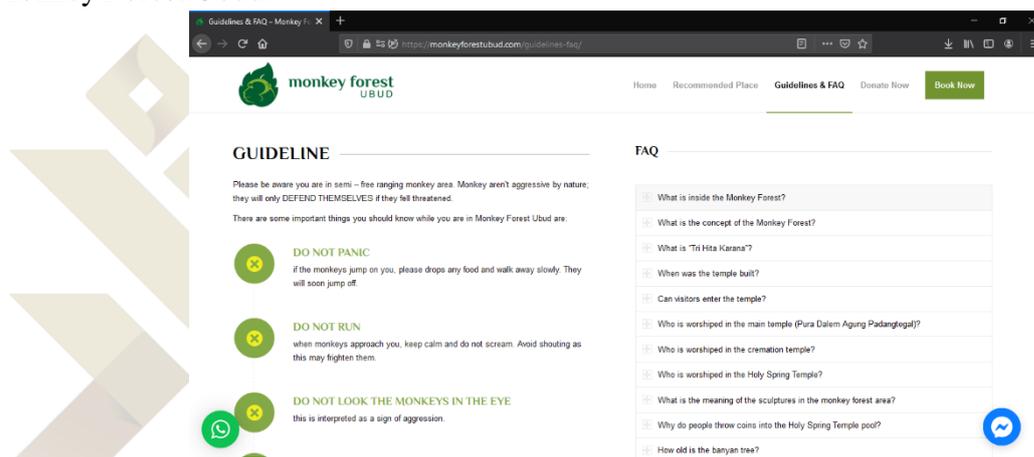


Figure 5 Guideline and FAQ

This website is quite informative in conveying information and events while at Monkey Forest Ubud. General information is also provided to provide knowledge for tourists. The language used here also uses English, this is also to help foreign tourists who want to visit these tourist attractions.

Anyone can also purchase tickets at Monkey Forest Ubud from the website www.monkeyforestubud.com which is listed on the "Book Now" menu. In this menu, tourists will be given 3 ticket choices, namely special Bali ID cards (original Balinese), Normal Prices (general), and also KITAS holders (identity residing in Bali but not native to Bali). Here is a picture of the ticket purchase menu:

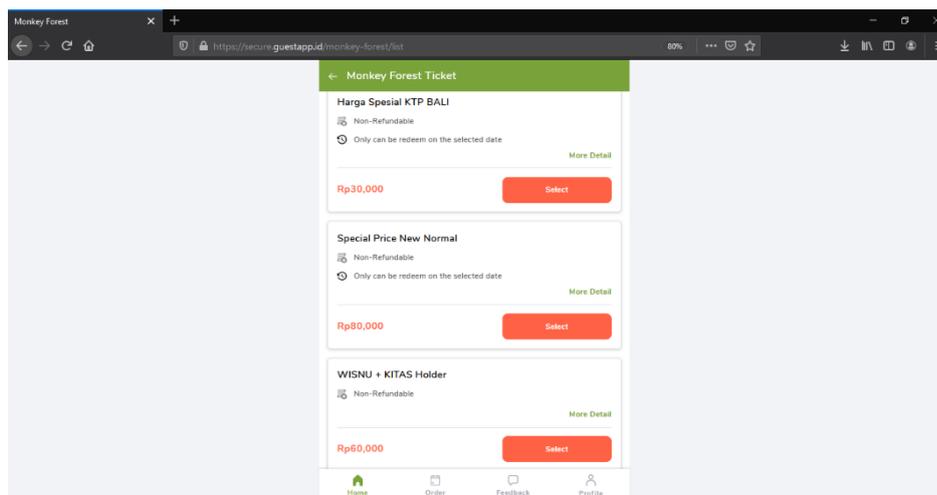


Figure 6 Admission Ticket Prices

The usefulness of the website www.monkeyforestbud.com above is one of the gates to open a sustainable economy. A sustainable economy from an economic point of view can bring profit, in addition to presenting benefits. This development has productive characteristics in terms of quantity and quality, and provides job opportunities and other benefits for middle- and lower-class individuals. Where, sustainable economy has a close relationship with the objectives of other sustainability aspects, namely social and environmental aspects. Digitalization is also an alternative solution for tourism actors to continue to survive. This is often referred to as smart tourism.

To get to a sustainable economy by utilizing smart tourism, it is necessary to look at the effectiveness of the website that has been implemented so far. Referring to the concept of effectiveness which can be defined as a measure of the success or failure of a strategy, this research has been carried out using two variables Mc. Clean, namely Quality of Service and User Satiaction. (Chikmawati, 2016) This effectiveness measurement was taken based on the results of interviews by random sampling, namely website users from the tourist side. Once again, this effectiveness measurement is measured not using quantitative data, but qualitative descriptive by means of an interview technique whose measurement results are drawn by a hypothesis in the form of indicators of service quality effectiveness and user satisfaction.

1. Service quality

Service quality is defined as a comparison of customer expectations with services that are real when perceived. This quality is the support that customers receive when they access information. McLean also emphasized that service quality in this case affects user satisfaction. The quality of service in the www.monkeyforestbud.com information system can be seen in the following table:

Table 1 Service Quality Indicators on Monkey Forest Ubud

Variables	Indicators	Description
Service Quality	Responsiveness	Responsive chat feature available
	Reliability (instant service)	360 ⁰ virtual maps
		The availability of information, guidelines, dan FAQ do that user /

		visitor won't be confused during visiting time
		Google Map apps is available for easiness of quick finding a location
	Assurance	Tickets booking with transparent admission fee is available
	Tangible (direct evidence of tool services kit)	The availability of direct brochures as well as electronic means for easiness
		Clear contact person on WhatsApp and social media platforms

1. User Satisfaction

User satisfaction is an action response that arises after the interaction between the system and system users. In this study, the satisfaction felt by the visitors at Monkey Forest Ubud as a whole felt quite satisfied with the information system that had been developed by the tour management team. The following are indicators of user/visitor satisfaction at Monkey Forest Ubud when accessing www.monkeyforestubud.com :

Table 2 User Satisfaction Indicators at Monkey Forest Ubud

Variables	Indicators	Description
User Satisfaction	Quality	Website provides informative memberikan tampilan informatif dan juga menarik dan user friendly
	Accessibility	Website address is easy to search. Also, the website address is visibly shown on the entrance lobby
		A WhatsApp and online chat media communication is available
		Tickets can be bought through online, so there's no need to sehingga tidak perlu berdesakan saat di loby.

Based on the results of measuring the effectiveness of the implementation of smart tourism www.monkeyforestubud.com above, from overall it has been going well and getting a feeling of satisfaction from the visitor's side. But there are still things that need to be considered, namely on the recommended place menu. The menu is a menu of places that can be visited by visitors virtually. The website shows a virtual 360⁰ tour service at <https://monkeyforestubud.com/tour360/2>, but when accessing one of the buttons, the display is still not fully accessible. Apart from that, the tourists who became informants in this study said

they were quite helped and satisfied with the implementation of smart tourism at Monkey Forest Ubud. The innovation that has been created by the Monkey Forest Ubud tourism object is able to be a recommendation for tourist objects that still apply the manual system. The ease of information and communication based on digitalization is also a level of improvement in the economic side so that it can develop and be sustainable.

Conclusions

Based on the results of the research described above, it can be concluded that to achieve a sustainable economy, Monkey Forest Ubud uses the concept of smart tourism which lies in the use of information technology in the form of the website www.monkeyforestubud.com. The results of interviews and observations, the effectiveness of implementing smart tourism at Monkey Forest Ubud tourism objects is going well which has met the service quality variables which lie in responsiveness, reliability (immediate service), guarantees for booking tickets according to clear costs, tangible (direct evidence of tools). assistance in the form of brochures (both physical and electronic) as well as contact person whatsapp, chat and social media. Meanwhile, user satisfaction lies in accessibility where the website is easily accessible, tickets can be obtained online, and there are also communication media. While on quality, the website displays complete and interesting information. As for overall, this website has been very effective, but still needs to receive more input from the recommended place menu point of view by using a 360⁰ virtual tour which can't be accessed yet.

References

- Arikunto. (2013). *Prosedur Penelitian Suatu Pendekatan Praktik* [Research Procedure A Practical Approach]. Jakarta: Rineka Cipta.
- Budiarta, I. P. (2018). The Cultural Characteristics of International Tourists. *International Journal of Applied Science in Tourism and Events*, 2(1).
- Chikmawati, L. (2016). *Efektivitas Sistem Informasi Akademik (SIA) Fakultas Ilmu Budaya Universitas Diponegoro Dengan Pendekatan Model DeLone dan McLean* [The Effectiveness of Academic Information Systems (SIA) Faculty of Cultural Sciences, Diponegoro University Using the DeLone and McLean Model Approach]. *Jurnal Ilmu Perpustakaan*, 5(2), 201–210.
- Dean Dionisius Beoang, I. A. S. (2018). *Identifikasi Potensi Desa Wisata Sangeh, Kabupaten Badung* [Identification of the Potential of Sangeh Tourism Village, Badung Regency]. *Jurnal Destinasi Pariwisata*, 5(2).
- Delone, William & McLean, E. (2003). "The DeLone and McLean Model of Information Systems Success: A Ten-Year Update." *Journal of Management Information Systems*, 19.
- F., H. (2020). *Konsep Smart Tourism sebagai Implementasi Digitalisasi di Bidang Pariwisata* [The Smart Tourism Concept as an Implementation of Digitization in the Tourism Sector]. *Tomare*, 2(2).
- Miles, M.B, Huberman, A.M dan J, S. (2014). *Qualitative Data Analysis, A Methods Sourcebooks* (Edition 3). USA: Sage Publications.
- Ni Ketut Rini Astuti, C. A. A. (2014). *Media Promosi Objek Wisata Monkey Forestubud Gianyar Bali Sebuah Kajian Semiotika* [Promotional Media of Monkey Forest Ubud Gianyar Bali Tourism Object A Semiotic Study]. *Segara Widya*, 2(2).
- Nur, H. (2021). *Penerapan Smart Tourism Dalam Pengelolaan Pariwisata di Era Pandemi Covid19 Kabupaten Bantaeng* [Application of Smart Tourism in Tourism Management in the Era of the Covid 19 Pandemic in Bantaeng Regency]. Universitas Muhammadiyah Makassar.

Pantiyasa, I. W. (2019). *Konstruksi Model Pengembangan Desa Wisata menuju Smart Eco-Tourism di Desa Paksewali, Klungkung, Bali* [Construction of Tourism Village Development Model towards Smart Eco-Tourism in Paksewali Village, Klungkung, Bali]. *Jurnal Kajian Bali*, 9(1).

R. R. Putra, U. L. Siti Khadijah, and C. U. R. (2020). *Pemanfaatan Teknologi Informasi dan Komunikasi dalam Penerapan Konsep Smart Tourism di Kabupaten Pangandara* [Utilization of Information and Communication Technology in the Application of the Smart Tourism Concept in Pangandara Regency]. *Jurnal Master Pariwisata*, 7.

U. L. S. K. Ferdiansyah H., Cipta E., H. R. (2AD). *Pengembangan Pariwisata Halal Di Indonesia Melalui Konsep* [Development of Halal Tourism in Indonesia Through Smart Tourism Concept]. *Jurnal Sustainable Tourism*, 1.

Zhafira Salsabil, M. A. (2019). *Efektivitas Website Femaledaily.com dalam Memenuhi Kebutuhan Informasi Pengguna* [Femaledaily.com Website Effectiveness in Fulfilling User Information Needs]. *Jurnal Ilmu Kepustakaan*, 8(2).

About the Author:

Chief Researcher
I Wayan Gede Lamopia <i>Institut Teknologi Bisnis STIKOM Bali, Indonesia</i>
Researcher Member
-

