

# **THE ROLE OF GREEN ECONOMY, SUSTAINABLE HALAL ENVIRONMENT, AND DIGITAL TOURISM ON COMMUNITY INCOME: A CASE STUDY IN WEST JAVA AND LAMPUNG TOURISM VILLAGES**

**Erike Anggraeni\***

*Raden Intan Lampung State Islamic University, Indonesia*

**Khavid Normasyhuri**

*University of Lampung, Indonesia*

**Muhammad Kurniawan**

*Raden Intan Lampung State Islamic University, Indonesia*

**Tri Atmaja Pramudita Wisnu Kusuma**

*University of Lampung, Indonesia*

## **ABSTRACT**

This study aims to investigate the influence of green economy, sustainable halal environment, and digital tourism on the community income in West Java and Lampung tourism villages. There was a total of 500 respondents participated in this quantitative study through a random sampling technique. The data was collected using a questionnaire measured using a 5-point Likert scale and analyzed using SmartPLS 3.0. The results show that the green economy, sustainable halal environment, and digital tourism have a positive and significant influence on the community income. Further, this study highlights that the digital tourism is able to positively moderate the influence of both green economy and sustainable halal environment on the community income. These findings imply that the developing innovative sustainable tourism business models not only increases the income of tourist village communities but also preserves the environment and promotes social inclusion. This offers valuable guidance for optimizing the economic benefits of tourism while minimizing its negative impacts on the environment and local communities.

**JEL:** Z3.

**Keywords:** *green economy, sustainable halal environment, digital tourism, community income.*

## **1. INTRODUCTION**

The global tourism industry is currently recovering from the effects of the COVID-19 pandemic. Many countries are reopening their borders to overseas travelers, including Indonesia. Indonesia is aggressively attempting to broaden, diversify, and promote its tourism destinations in order to attract a wider range of tourists on a global scale. It is because the tourism is frequently viewed as a mean to boost the local and national economies, which is a key sector with a global economic influence (Aldao, Blasco, Espallargas, & Rubio, 2021). It creates jobs, contributes significantly to economic growth, and drives economic development in less developed areas. Community income in the tourism destinations (Scarlett, 2021) are strengthened through a range of income sources, from tourism-related jobs and local company development, to tax revenue. The tourism destinations benefit the regions' economies significantly from increased tourist visits,

---

\* Corresponding Author: erike@radenintan.ac.id

Received : 23-09-2023, Accepted: 01-03-2024, Published: 02-03-2024

P-ISSN : 2087-9954, E-ISSN: 2550-0066. DOI: <http://dx.doi.org/10.26418/jebik.v12i3.71003>

resulting to a domino effect causing increased local income and expenditure to promote overall economic growth (Kyara, Rahman, & Khanam, 2021).

The tourism destinations is part of village tourism – a strategic approach to tourism development that seeks to increase the popularity of villages or rural areas. The village tourism integrates elements from several sectors, including tourism, culture, environment, and economy, to provide an excellent and sustainable tourism experience for the tourists, while also providing economic and social benefits to the community (Lu, Li, & Xu, 2020). Nevertheless, there are also potential tourism risks, such as overtourism which occurs when the number of tourists exceeds a destination's carrying capacity. The overtourism may develop lower overall quality of tourists' experiences (long waiting times, traffic jams, and crowds) (Zhang, Wang, Sun, & Wei, 2020), and have a negative impact on the environment (water and air contamination, natural ecosystem damage, destruction of forests and natural habitats, and carbon emissions from transportation) (Insch, 2020).

One approach to develop sustainable tourism villages and address the overtourism challenges is through the green economy concept (Licastro & Sergi, 2021). The green economy focuses on sustainable economic growth, while considering the environmental and social aspects in economic development (Zhang, Ren, Zhang, & Zhang, 2020). Its practices in the tourism villages can help to develop sustainable and eco-friendly tourism destinations and protect the natural environment and biodiversity. It promotes the development of sustainable products and services that ethically utilize natural resources, such as ecotourism products which can attract more tourists who value sustainability (Battour, Salaheldeen, & Mady, 2022). This concept also advocates effective waste management, ecosystem preservation, and environmental damage prevention (Ratnasari, Gunawan, Mawardi, & Kirana, 2020). Further, it emphasizes the economic sustainability, which includes promoting local businesses, creating job opportunities, and ensuring equitable distribution of economic benefits. The tourists would prefer the tourism destinations that have well-maintained natural environments, resulting in the potential to increase the community income through tourism activities (Pongsakornrungsilp & Pongsakornrungsilp, 2021).

However, there are internal conflicts that can affect the community income. Adopting the sustainable and eco-friendly practices frequently involves significant initial expenses, such as for the development of more eco-friendly infrastructure. It may put a financial pressure on the tourism village management and community, especially if there is no apparent relationship between the expenses and an increase in the community income (Sheldon, 2022). Transitioning from a conventional to sustainable business takes time and demands adjustments in mentality and daily operations, and during this period, the community income temporarily decline due to the smaller scope of market (Vargas-Sánchez, 2021).

On the other hand, Islamic halal principles in the tourism villages has the potential to be a pioneering strategy in increasing the community income. The integration of sustainability and Islamic halal principles promote the sustainable tourism while adhering to the Islamic halal principles. The tourism villages adopting the concept of a sustainable halal environment can develop businesses that comply with the halal principles, such as promoting halal food or other products (Hassani & Moghavvemi, 2020). However, they face the main challenge of limited and comparatively lower market for sustainable halal products and services than that of conventional ones. In addition, efforts to maintain the environment and Islamic values may result in the

restrictions on the number of tourist visits or certain activities that do not adhere to the Islamic principles. In addition, external factors – such as currency fluctuations, changes in global market demand, or regulatory changes – can all affect the income from the halal tourism. This might restrict the potential tourism-related revenue for the community income (Rahman, Moghavvemi, Thirumoorthi, & Rahman, 2020) and also cause uncertainty (Hidayat, Rafiki, & Nasution, 2022).

Furthermore, technological advances support the development of tourism sector, particularly in terms of marketing. Digital tourism marketing has evolved as a crucial element in enhancing the income growth in the tourism destinations. It encompasses the use of digital technologies and internet platforms to advertise and market the tourism destinations to potential tourists. The incorporation of technology in the tourism sector has a substantial influence on the quality of the tourists' experience, efficiency of operations, and profit prospect (Li, Pearce, & Oktadiana, 2020). Besides, the use of social media (Instagram, Facebook, and Twitter) as part of the technological advances enable the tourism destinations to successfully communicate with a global audience while minimizing expenses and increasing the tourist visits (Egger, Lei, & Wassler, 2020). Such social engagement raises the public awareness of the tourism destinations and create opportunities to market more products and services.

Additionally, the digital tourism marketing use location-based technology to target advertising and promotions to the tourists within a certain distance of the tourism destinations, and stimulate the tourist visits and their spending. Effective digital tourism marketing can increase the community income from the tourists. Online reviews and recommendations from previous travelers can help other tourists make selections about the tourism destinations and services (Alford & Jones, 2020). By making good use of digital tourism marketing, the tourism destinations can establish more effective strategies to attracting more tourists, promoting their services and products, and overall increasing the community income. This can be achieved with a thorough understanding of online consumer behavior and innovative digital marketing tailored to the tourists' needs and preferences (Ponsignon & Derbaix, 2020).

Although the digital tourism marketing benefits the tourism industry, there are various issues that can affect the community income in the tourism villages. Not all community members of the tourism villages have the access to use or knowledge of digital technologies, which can lead to a digital gap. Some of them who do not have the access to use or knowledge of digital technologies will miss out on the economic benefits of digital tourism (Kontogianni & Alepis, 2020). Further, the use of social media and digital tourism marketing can influence direct social engagement between the tourists and local community. A low level of direct social engagement can negatively impact the tourism cultural experience and sustainability. It is critical to address this issue effectively and develop a balanced strategy for the application of digital tourism technology to increase the community income while maintaining the sustainability and cultural values of the tourism destinations (Richards, 2020).

In shorts, the relationships between green economy, sustainable halal environment, and digital tourism offer various benefits that can affect the community income. The relationship between green economy can make the tourism destinations more attractive to the tourists who value the environment and halal food, resulting in an increase in the tourist visit and community income (Sun, Lin, & Higham, 2020). Further, the relationship between digital tourism and sustainable halal environment can also increase the tourist visit and community income (Torabi, Rezvani, Hall, & Allam, 2023) from the effective use of social media about the locations, and

sustainable and halal products, services, and activities, which simultaneously expanding the market reach (Wang, Yang, & Yue, 2022). Meanwhile, the relationship between green economy and digital tourism can increase the community income through sustainable practices, and the transition of the green economy and a sustainable halal environment supported by the digital tourism, which can also extend the market rapidly (Gabor, Panait, Bacoş, Naghi, & Oltean, 2023).

In 2018, the Ministry of Trade revealed that Indonesia is the world's largest archipelagic country, with over 17,508 islands. In addition, according to the Sharia Economic Master Plan 2019-2024 developed by the National Committee for Sharia Economics and Finance, archipelagic areas provide promising tourism opportunities, with their rich cultural resources have significant potential for the growth of the halal tourism sector. However, emphasizing the importance of establishing cultural boundaries that are aligned with the sharia law, sharia ideals, and halal principles has been one significant issue. Other restrictions to the halal tourism businesses include the uncertainty of green economy and halal environment legislation in Indonesia and other countries (Arrobas, Ferreira, Brito-Henriques, & Fernandes, 2020); regulatory changes influencing the business strategies; policies on the ecologically conscious economy and sustainable halal products; a regulatory authority to oversee the execution of halal tourism; quality of human resources; level of public knowledge and awareness on the benefits of green economic principle, halal environment (Collins-Kreiner, 2020), and maintaining an environmentally friendly environment; and uneven distribution of green economy products and ecologically friendly halal products throughout Indonesia. Further, differences between global and local perspectives and approaches occur when global sustainable methods may not necessarily align with local conditions and preferences. Consequently, it is essential to analyze and adapt the implementation strategies accordingly (Slamet, Abdullah, & Laila, 2022).

The novelty of this study lies on the integration of green economy, sustainable halal environment, and digital tourism in optimizing the community income. This study also further investigates the moderating role of digital tourism is able to strengthen or weaken the efforts to increase the community income. Further, the results of this study are expected to provide theoretical implications for developing a more holistic sustainable tourism concept that considers the interaction between green economy, sustainable halal environment, and digital tourism so as to help in understanding how aspects of sustainability, cultural values, and technology interact in the tourism context. Besides, the results of this study are expected to provide managerial implications for the government and related organizations in designing more integrated and comprehensive policies that combine aspects of the green economy, sustainable halal environment and digital tourism.

## **2. THEORETICAL FRAMEWORK AND EMPIRICAL STUDIES**

### **2.1. Social Welfare Theory**

The social welfare theory proposed by Richard Morris Titmuss in 1970 explains the role of social values in the development of an effective welfare system. The welfare referred to is the situations and factors that help to handle social issues effectively, meet basic needs, and maximize social opportunities. The effective welfare system is developed based on ethical and moral principles that prioritize the greater good and community well-being. Focusing on the ethical and social values can provide a more solid foundation for sustainable social policy (Eric, Semeyutin,

& Hubbard, 2020). The social welfare encompasses several dimensions, such as finance, education, physical well-being, work opportunities, and equality (Yergeau, 2020). Prosperous living conditions can be achieved when the needs are met, the social problems are addressed, and all community members have the opportunities to work, acquire education, access to health care and participate in the social development. Sustainable development must include measures to minimize the social and economic inequality and be built on social justice principles, which ensure that rights, opportunities and resources are allocated fairly throughout the community (Qiu, Park, Li, & Song, 2020). This study connects the relationship between the social welfare theory and community empowerment, highlighting the significance of empowering the community. The implementation of the green economy model in the tourism villages may actively engage the community participation in decision-making processes, while also promoting the responsible use of natural resources. This may allow the community to gain more control over their resources and generating income from the sustainable businesses (Auster, Barr, Brazier, 2020).

## **2.2. Income Distribution Theory**

The income distribution theory proposed by Amartya Sen in 1993 explains that income distribution is important because economic inequality can limit individual freedom. Income inequality may restrict individuals' access to opportunities and choices necessary to increase their freedom, emphasizing the importance of addressing poverty and inequality in development efforts (Song, Xie, Tan, & Wang, 2020). The right development is the one that creates greater opportunities for poor and marginalized individuals to overcome their limits and improve their lives (Nitsch & Vogels, 2022). Income, education, health and political freedom are all aspects of individual freedom that must be considered in the development. They are alternatives to the more conventional per capita income index. The main goal is to foster individual freedom, expected to result in increased welfare and a more equitable income distribution (Tiku, Shimizu, & Hartono, 2022). This study connects the relationship between the income distribution theory and community participation in the economic policy and decision-making. By implementing the sustainable halal environment into the tourism destinations, it is expected that the local community can manage the natural resources more effectively, promoting the sustainable development and increasing the community income (Subramaniam, Masron, & Loganathan, 2022).

## **2.3. Unified Theory of Acceptance and Use of Technology (UTAUT)**

The unified theory of acceptance and use of technology (UTAUT) is a conceptual framework proposed by Viswanath Venkatesh and Fred D. Davis in 2003 to explain factors influencing the acceptance and use of information technology in different settings. The UTAUT model aims to create a comprehensive framework for understanding the humans' intentions and actions in adopting and using new technology (Rashideh, 2020). Utilizing the UTAUT, stakeholders in the tourism sector can improve their marketing strategies, maximize tourist experiences, and promote the adoption of digital technology within the tourism industry. This refers to the degree to which people believe that using the technology is easy, encouraging people to use and even master the technology (Chang, Walimuni, Kim, & Lim, 2022). The UTAUT is relevant to this study, as those who previously had favorable encounters with the digital tourism or have observed its effectiveness in increasing the tourism business are more likely to continue using it, which may improve the community income by increasing the tourist visit (Tussyadiah, 2020). In this case, the digital tourism serves as an effective mean to attract more tourists,

communicate the unique value of tourism villages, and improve the community income (Ronaghi & Ronaghi, 2022).

#### **2.4. Community Income**

Increasing the community income refers to the growth or increase in the total amount of income received by all community members in a region or country over a given time period, such as a month, a year or other period. This increase can be measured in the form of per capita income (income per person) or the total income of the entire community (Lim & Won, 2020). Further, increasing the community income aims to improve the overall welfare and life quality of the community. This includes improving the access to basic needs, health care, education, housing, and many commodities and facilities. It is crucial for achieving equitable and sustainable economic development objectives. Ensuring equitable and sustainable growth in the community income is important for fostering a more prosperous and equitable society (Yamagishi, Gantalao, & Ocampo, 2021).

#### **2.5. Tourism Village**

A tourism village is a specific location within a village that offers tourism attractions based on its distinctive natural, cultural, and socio-economic characteristics. These attractions can be improved by establishing facilities, infrastructure, and services that correspond to the tourism standards, regulations, and ethical principles (Nagy & Segui, 2020). Further, the tourism village is part of a strategic approach to the development of rural regions that combines inherent tourism potential, cultural assets, historical values, and local knowledge to attract and accommodate the tourists. It is developed to improve the economic, social, and cultural well-being of community, while simultaneously advocating for the conservation and promotion of the region's natural and cultural assets (Shen & Shen, 2021), and harnessing the inherent tourist opportunities of the tourism village (Pazhuan & Shiri, 2020). Further, according to Rua (2020), the tourism villages identify, develop and promote local tourism potential such as nature, culture, traditions, culinary delights, crafts and local activities, generating the community income. The tourism villages can collaborate with local businesses, such as homestays and souvenir vendors. This collaboration can open up new opportunities for generating the community income. The community can develop creative and unique tourism activities, such as local tours, cultural events, festivals and other locally based activities. Li, Knight, Luo, & Hu (2020) stated that the tourism villages that manage its tourism sustainably will attract the tourists in the long run while also assisting the community in maintaining their natural and cultural resources to generate a sustainable income.

#### **2.6. Green Economy**

The green economy is an economic development framework that prioritizes sustainability and environmental conservation. It seeks to achieve equilibrium between sustainable economic growth and environmental and social protection. It can be defined as an economy that promotes the community welfare and reduces poverty in an inclusive and sustainable manner, while mitigating environmental risks and substituting the natural resources (Bilgaev, Dong, Li, Cheng, Tulohonov, Sadykova, & Mikheeva, 2021; Jackman & Moore, 2021). It also promotes the community social welfare through sustainable investment and innovation (Cabral & Dhar, 2021). According to Yue, Liao, Zheng, Shao, & Gao (2021) and Moise, Gil-Saura, & Ruiz-Molina (2021), implementing the green economy in the tourism villages can have a significant influence on increasing the community income, expanding markets for the sustainable products, and advancing

the sustainable tourism. The tourists with a strong environmental consciousness will be more attracted to visit the tourism villages which have nature conservation programs.

### **2.7. Sustainable Halal Environment**

The sustainable halal environment refers to the combination of sustainability principles and Islamic halal values. This concept focuses on establishing and administering a halal-compliant environment in accordance with Islamic teachings, while taking into account the dimensions of economic, social, and environmental sustainability (Yagmur, Ehtiyar, & Aksu, 2020; Pamukcu & Sariisik, 2021). It also includes aspects such as environmental balance, where human actions do not damage or harm the environment, for example agricultural practices, water use and waste management (Suban, Madhan, & Shagirbasha, 2021). In addition, the sustainable halal environment encompasses elements of social and economic equality, such as fair management of natural resources and equitable benefit sharing. Further, according to Battour, Rahman, & Rana (2020), implementing the sustainable halal environment in the tourism village management positively influences the growth of community income. The tourism villages become more attractive to Muslim tourists, because they are promised that the products, services and activities offered comply with the halal principles. Katuk, Ku-Mahamud, Kayat, Hamid, Zakaria, & Purbasari (2021) stated that the tourism villages develop halal food products, drinks and other goods, starting from the ingredients used, the process and presentation, which in turn increasing the number of Muslim tourist visits who are looking for the tourism experiences that align with their beliefs.

### **2.8. Digital Tourism**

Digital tourism refers to the use of digital technology to improve the tourist experiences, market the tourism destinations, and manage the tourism businesses (Ketter, 2020). It is a comprehensive strategy that uses the digital technology to understand, improve and meet the tourist interests at all phases of their travel journey, including the planning, travel, and post-trip phases (Almeida-Santana, David-Negre, & Moreno-Gil, 2020). The digital technology referred to include using the internet, social media, websites, apps, and etc. According to Adeyinka-Ojo, Lee, Abdullah, & Teo (2020) and Cassia, Castellani, Rossato, & Baccarani (2021), the use of digital technology allows the tourist destinations and businesses to access a bigger and more targeted audiences through online marketing campaigns, social media, and digital advertising, increasing the number of tourist visits. Pasca, Renzi, Pietro, & Mugion (2021) added that the digital technology enables tourism service providers to provide more complete, accurate and accessible information to the tourists, assisting them in travel planning and better decision making. It can also enhance the tourist experience through increased personalization, intelligent recommendations, better navigation, and access to multimedia content.

## **HYPOTHESIS DEVELOPMENT**

### **Green Economy and Community Income**

The green economy is an economic concept that focuses on the sustainable, environmentally friendly and inclusive economic development. It has been implemented in the tourism sector, including the tourism villages. The tourism villages implementing the green economy principles manage their natural resources sustainably, helping to reduce operational costs and create efficiencies, which in turn can increase the community income (Armoo, Franklyn-

Green, & Braham, 2020; Tagliapietra, Povilanskas, Razinkovas-Baziukas, & Tamin, 2020). Further, a study by Bhaduri & Pandey (2020) found that implementing the green economy concept in the tourism villages can result in significant benefits to the community income. The community may achieve a greater income by widening the scope of economic activities, such as producing the eco-friendly products and designing the nature conservation programs. In addition, Hasyimi & Azizalrahman (2021) found that the environmentally conscious tourists would prefer to buy and pay more for these eco-friendly products and services. Therefore, the first hypothesis that can be proposed is as follows:

**H1:** There is a positive relationship between green economy and community income in West Java and Lampung tourism villages.

### **Sustainable Halal Environment and Community Income**

The sustainable halal environment is a method that combines the environmental, sustainability, and halal principles in the development and management of tourism villages. The halal principles, in relation to the Islamic faith, encompasses activities that adhere to the Islamic religious principles while also promoting the environmental sustainability (Muneeza, Mustapha, Badeeu, & Nafiz, 2020). The tourism villages adopting the sustainable halal environment generate the halal-compliant products and services. This includes the halal-certified food, beverages, lodging and tourism activities, attracting the tourists who value the halal aspects of their journeys (Preko, Mohammed, Gyepi-Garbrah, & Allaberganov, 2021). Further, a research by Aji, Muslichah, & Seftyono (2021) explained that the sustainable halal environment in the tourism villages has the potential to increase the community income, since it is more attractive for the Muslim tourists. The Muslim tourists prefer to visit destinations that understand and accommodate their religious needs, including the halal-certified restaurants, lodging and facilities. Adel, Dai, Roshdy, & Yan (2020) stated that establishing the infrastructure supporting the needs of Muslim tourists, such as mosques, cleansing facilities, and sharia-compliant toilets, create a friendlier environment for the Muslim tourists. This infrastructure can increase the attractiveness of tourism villages and accommodate the growing number of Muslim tourists, resulting in increased community income. Therefore, the second hypothesis that can be proposed is as follows:

**H2:** There is a positive relationship between sustainable halal environment and community income in West Java and Lampung tourism villages.

### **The Moderation Role of Digital Tourism on the Relationship between Green Economy and Community Income**

Implementing the green economy in the tourism villages with a reasonable level of digital tourism may result in significant synergies that improve the community income. The digital tourism applied in the tourism villages involves the use of digital technologies, such as the internet and social media, to promote the tourist activities. Using the digital platforms to promote the tourism villages as the environmentally friendly destinations can help attract the eco-conscious tourists (Coghlan & Carter, 2020; Webster & Ivanov, 2020). The tourism villages can also establish partnerships with various parties, including digital influencers, in order to promote the sustainability and reach a wider range of audience, creating more effective campaigns and expanding networks (Pardo & Ladeiras, 2020). Further, the social media allows the tourism villages to share information about their sustainability practices, conservation programs and environmental efforts through social media contents (Cocola-Gant, Gago, & Jover, 2020), which



expect an influence on the tourist behavior and the tourists to contribute to the tourism village sustainability. Therefore, the fourth hypothesis that can be proposed is as follows:

**H3:** Digital tourism moderates the positive relationship between green economy and community income in West Java and Lampung tourism villages.

### **The Moderation Role of Digital Tourism on the Relationship between Sustainable Halal Environment and Community Income**

The tourism villages implement the digital tourism platform to advertise and promote the halal products and services, which attract the Muslim tourists in search of tourism experiences that are in line with their belief and potentially increase the community income from the tourism industry (Bargeman & Richards, 2020; Nilsson, 2020; Pratono, Prima, Sinaga, Permatasari, Ariani, & Han, 2020). The digital tourism facilitates the tourism villages to promote themselves as halal tourism destinations, including the information about halal-compliant facilities and activities, such as halal-certified restaurants, mosques, and environment (Law, Leung, & Chan, 2020). Therefore, the fifth hypothesis that can be proposed is as follows:

**H4:** Digital tourism moderates the positive relationship between sustainable halal environment and community income in West Java and Lampung tourism villages.

## **3. RESEARCH METHODS**

This study was done in a quantitative manner and implemented a moderation technique to examine the factors that could strengthen or weaken the direct relationship between independent and the dependent variables, hence influencing the direction of the relationship (Sugiyono, 2017). There were four variables studied in this study; with green economy and sustainable halal environment as the independent variables, community income as the dependent variable, and digital tourism as the moderating variable. Further, this study analyzed primary data collected through a questionnaire measured by a 5-point Likert scale. The data was analyzed using SmartPLS 3.0. The research objects studied were tourism villages, located in West Java (Alamendah Tourism Village and Baros Tourism Village), and Lampung (Minang Rua Tourism Village and Ringgis Jaya Tourism Village) during a period of one year – in 2023. There was a total of 500 respondents participated in this study, collected through a random sampling technique.

## **4. DATA ANALYSIS AND DISCUSSIONS**

The following Table 1 presents the profile of respondents as follows:

**Table 1. Respondent Profile**

No.	Characteristic	Total (N = 500)	Percentage (%)	
1.	Education	Senior high school	379	75.8 %
		Diploma	83	16.6 %
		Bachelor degree	38	7.6 %
2.	Age	17 – 25 years old	78	15.6 %
		26 – 30 years old	134	26.8 %
		31 – 35 years old	179	35.8 %
		≥ 35 years old	109	21.8 %
3.	Gender	Male	234	46.8 %
		Female	266	53.2 %
4.	Occupation	Student / College student	120	24 %
		Freelancer	118	23.6 %
		Housewife	195	39 %
		Others	67	13.4 %
5.	Monthly Income	IDR 1,500,000 – IDR 2,000,000	138	27.6 %
		IDR 2,000,001 – IDR 2,500,000	176	35.2 %
		≥ IDR 2,500,001	186	37.2 %

Source: Processed data (2023)

This study finds that most of the respondents are only senior high school graduates (75.8%), between 31 – 35 years old (35.8%), female (53.2%), housewives (39%), and have a monthly income of approximately more than IDR 2,500,001 (37.2%). Further, the measures of variables studied are summarized in Table 2 as follows:

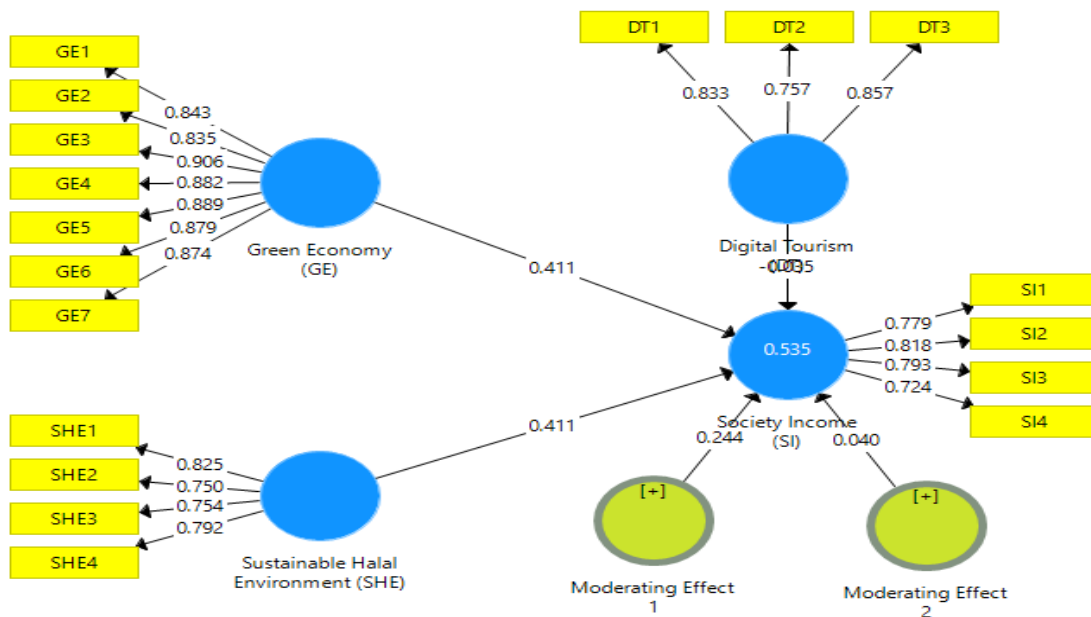
**Table 2. Operational Variables**

No.	Variable	Indicator
1.	Green economy (GE)	Natural resource management Waste management Nature conservation and biodiversity Local economic empowerment Promotion of local culture and heritage Green infrastructure development Environmental education and awareness
2.	Sustainable halal environment (SHE)	Halal facilities Social sustainability Ecological sustainability Economic sustainability
3.	Digital tourism (DT)	Adaptation of new technology Interactive content Digital campaign
4.	Community income (CI)	Economic income Social welfare Investment and infrastructure Society participation

Source: Processed data (2023)

This study conducted an internal model evaluation measured by its R-squared value. A higher R-squared value was considered more capable of explaining the variability in the dependent variable. A R-squared value higher than 0.2, 0.25, 0.50, and 0.75 suggested an inadequate, poor, adequate, and significant degree of explanation, respectively. On the other hand, the hypotheses

were measured based on the p-value and t-statistics. The results of measurement model evaluation are presented in the following Figure 3:



Source: Processed data (2023)

**Figure 3. Evaluation of Measurement Model**

Further, the data of this study was analyzed for its validity and reliability. The data validity was measured based on the loading factors of higher than 0.70 (Hamid, 2019).

**Table 4. Results of Validity Test**

No.	Variable	Item	Loading Value	Decision
1.	GE	GE1	0.843	Valid
		GE2	0.835	Valid
		GE3	0.906	Valid
		GE4	0.882	Valid
		GE5	0.889	Valid
		GE6	0.879	Valid
		GE7	0.874	Valid
2.	SHE	SHE1	0.825	Valid
		SHE2	0.750	Valid
		SHE3	0.754	Valid
		SHE4	0.792	Valid
3.	DT	DT1	0.833	Valid
		DT2	0.757	Valid
		DT3	0.857	Valid
4.	CI	CI1	0.779	Valid
		CI2	0.818	Valid
		CI3	0.793	Valid
		CI4	0.724	Valid

Source: Processed data (2023)

The results of validity test presented in Table 4 indicate that all variables, namely green economy (GE), sustainable halal environment (SHE), digital tourism (DT), and community income (CI), have loading values of higher than 0.70. Therefore, the data could be considered valid. Furthermore, the results of reliability test can be seen in the following Table 5:

**Table 5. Results of Reliability Test**

No.	Variable	Cronbach's Alpha	C. R.
1.	GE	0.948	0.951
2.	SHE	0.787	0.791
3.	CI	0.784	0.787
4.	DT	0.757	0.788
5.	GE*DT	1.00	1.00
6.	SHE*DT	1.00	1.00

Source: Processed data (2023)

Based on the results of reliability test, the data can be considered reliable, as they have a higher value of 0.70. This study also measures the moderation of green economy on the digital tourism with a Cronbach's Alpha and a composite reliability of both 1.00, indicating a perfect reliability. Similarly, the moderation of sustainable halal environment (SHE) on the digital tourism (DT) with a Cronbach's Alpha and a composite reliability of 1.00, indicating a perfect reliability. These findings indicate the data's high degree of reliability and consistency. Further, the hypotheses were tested and the results are presented in the following Table 6:

**Table 6. Results of Hypothesis Testing**

Hypothesis	Original Sample	T-Statistics	P-Value	Conclusion
H1 GE → CI	4.111	6.850	0.000	Supported
H2 SHE → CI	4.276	4.432	0.000	Supported
H3 GE*DT → CI	2.440	3.482	0.001	Supported
H4 SHE*DT → CI	3.783	6.380	0.000	Supported

Source: Processed data (2023)

The results of hypothesis testing confirm that all hypothesis can be supported empirically. The first hypothesis proposes that there is a positive relationship between green economy and community income in West Java and Lampung tourism villages. It has a coefficient of 4.111, a t-statistics of 6.850, and a p-value of 0.000. This finding suggests that the green economy positively and significantly influences the community income. In this study, it was found that the green economy implemented in the West Java and Lampung tourism villages involved a responsible use of natural resources, preservation of the environment, adoption of renewable energy sources, and local community involvement (Ayiine-Etigo & Amankwah-Amoah, 2021), which simultaneously increased the tourist visit, expanded the market and provided a variety of chances to boost the community income (KC, Dhungana, & Dangi, 2021). The tourism villages provided several activities for the tourists, such as recycling and composting from organic waste. This nature conservation and biodiversity increased the attractiveness of tourism villages. In addition, the tourism villages also developed women's work groups for the production of environmentally friendly handicrafts, organic farming or agritourism. This local economic empowerment helped increase the income and independence of village communities. Further, efforts to increase the community income in the tourism villages also included the development of green infrastructure, such as water management. This finding suggested that the tourism village community had adopted a high environmental education and awareness which made them adopt more sustainable and environmentally friendly practices. These practices were such an efficient use of resources and cost savings, which in turn increased the community income. Although the implementation of green economy in the tourism villages was to achieve sustainable economic growth and increase the income, however, there were several challenges faced. Inadequate collaboration among the government, private sector, and local communities might inhibit the implementation of sustainable

economy. Strong collaboration among these stakeholders were essential to achieve maximum effectiveness (Tian, Bélaïd, & Ahmad, 2021).

On the other hand, the green economy implemented in the tourism villages represented the implementation of the social welfare theory which emphasized the significance of effective management and allocation of resources in the practice of social welfare services. The tourism village community involved in the decision-making processes and promoted responsible use of natural resources, which enhanced their autonomy over their own resources and generated income from the sustainable business (Auster *et al.*, 2020). Further, this finding is in line with the one by Bhaduri & Pandey (2020) that the application of the green economy in the tourism villages could bring significant benefits in increasing the community income where the green economy principles encouraged economic diversification through the development of environmentally friendly economic sectors, such as the production of environmentally friendly goods and nature conservation programs. Similarly, Hasyimi & Azizalrahman (2021) found that the environmentally conscious tourists would be more likely to use and pay more for these products and services, which would increase the community income. Therefore, it could be concluded that through wise and sustainable management of natural resources, nature conservation, local economic empowerment, and environmental education and awareness, the tourism villages could achieve a sustainable increase in the community income while protecting and improving the environment in the tourism villages (Pham, Coles, Ritchie, & Wang, 2021).

Further, the second hypothesis proposes that there is a positive relationship between sustainable halal environment and community income in West Java and Lampung tourism villages. It has a coefficient of 4.276, a t-statistics of 4.432, and a p-value of 0.000. This finding suggests that the sustainable halal environment positively and significantly influences the community income. In this study, it was found that the combination of sustainable and halal principles provided double benefits, namely maintaining the environmental sustainability and increasing the community income (Hassani & Moghavvemi, 2020). Although this concept offered a lot of potential, there were a number of challenges in its implementation. A poor level of awareness and understanding of the sustainable halal environment could be a major obstacle (Baran, 2020). At the initial phase, it was important for the tourism village community and entrepreneurs to obtain education and information on the benefits and implementation of this concept. It was because overall, the tourism villages must obtain a halal certification and it could be such a challenge and required major changes to ensure that the tourism operations and products were halal-compliant (Ngah, Gabarre, Eneizan, & Asri, 2021). However, these Muslim-friendly tourism villages attracted a larger market of Muslim tourists, which would increase the tourist visit and community income through the activities, restaurants, and the products and services developed. Managing and promoting the natural beauty and healthy environment, and developing sustainable products and services were the key to maintain the attractiveness of tourism villages, and simultaneously increase the community income.

In addition, this finding supports the income distribution theory. This theory explained that the income distribution was important because the economic inequality could limit the individual freedom and access to opportunities necessary to address the poverty and inequality in development efforts (Song *et al.*, 2020). Implementing the sustainable halal environment in the tourism villages enabled a greater involvement of local community in the management of natural resources and promotion of sustainable development, and offered the community chances to

participate in increasing the community income (Subramaniam *et al.*, 2022). Furthermore, this study is supported by Aji *et al.* (2021) who explained that the tourism villages practicing the sustainable halal environment were such more attractive destinations for the Muslim tourists who preferred Muslim and halal-friendly tourism destinations, including the restaurants, accommodation and facilities. Similarly, Adel *et al.* (2020) added that the Muslim and halal-friendly tourism villages could be supported by mosques, cleansing areas and sharia-compliant toilets. Therefore, it could be concluded that the tourism village community could achieve long-term income growth by integrating halal facilities, social sustainability, ecological sustainability and economic sustainability in the tourism villages, while also maintaining and improving the environmental welfare and supporting the local communities (Secinaro & Calandra, 2021).

Furthermore, the third hypothesis proposes that there is a positive relationship between digital tourism and community income in West Java and Lampung tourism villages. It has a coefficient of 2.440, a t-statistics of 3.482, and a p-value of 0.000. This finding suggests that the digital tourism positively and significantly influences the community income. This finding suggests that the digital tourism strengthens the positive relationship between green economy and community income. In this study, the integration of digital tourism in the tourism villages was in the form of digital advertising. The social media contents included the information on the tourism villages' sustainability programs, conservation initiatives, and environmentally beneficial activities, which could enhance the tourists' environmental consciousness and make them actively engage with the tourism villages online. This would also result in a more immersive and engaging tourism experience, fostering an emotional connection with the tourism villages. Engaged tourists were more likely to support and participate in the sustainability programs in the tourism villages. Further, this study finds that the social media content was used to report the tourism villages' sustainability practices on the waste management, use of renewable energy, or conservation initiatives. In addition, the digital tourism enabled the community to participate in the digital economy, such as selling local products online or promoting the tourism services digitally, which benefitted them in terms of increased community income and sustainable economic practices. This finding suggested that the integration of digital tourism in the tourist villages could strengthen the influence of the green economy in a more effective way. Nevertheless, the tourism villages faced a major challenge, where many community members had insufficient access to modern technologies (Ingrassia, Bellia, Giurdanella, Columba, & Chironi, 2022). It was due to limited infrastructure, slow internet connections, or lack of technological knowledge and skills to use the technology effectively to promote their businesses (Kitsios, Mitsopoulou, Moustaka, & Kamariotou, 2022).

Moreover, this finding is in line with the UTAUT, represented by the adoption of digital technology by the tourism village communities perceived as highly beneficial (e.g. promoting the sustainable tourism) and easy to use (e.g. providing information on the sustainability) (Jansson, 2022). The positive attitude towards the use of digital technology in supporting the green economy in the tourism villages increased the intention to use it, and eventually there were more community members encouraged to practice and promote the green economy principles. As a result, the positive experiences with digital technology in supporting the green economy could increase the community income and sustainability (Shen, Xu, Sotiriadis, & Wang, 2022). Further, a study by Coghlan & Carter (2020) supported this finding and found that the digital tourism played an important role in expanding the reach of audience, increasing the promotions, and optimizing the

operational management of tourism villages. Similarly, Cocola-Gant *et al.* (2020) explained that through the digital tourism, the tourism villages could produce and share the social media content that focused on the sustainability. Therefore, it could be concluded that combining the green economy and digital tourism could create a synergy that allowed the tourism villages to remain economically profitable while still prioritizing the environmental sustainability (Wei, 2022).

Finally, the last hypothesis proposed that the digital tourism moderates the positive relationship between sustainable halal environment and community income in West Java and Lampung tourism villages. It has a R-squared value of 0.735, indicating that the green economy, sustainable halal environment, and digital tourism have a positive and significant impact on the community income for 73.5%, and the rest 26.5% could be explained by other variables not include in the study. This finding suggests that the digital tourism strengthens the positive relationship between sustainable halal environment and community income. The sustainable halal environment implemented was in the form of the wise use of resources, maintaining the ecosystem sustainability, and promoting the tourism that was in accordance with the halal principles (Jia & Chaozhi, 2020). Further, the digital tourism was implemented in the use of digital technology and internet platforms to enhance and advertise the halal environment-based tourism by the tourism community (Wu, Cao, Liu, & Chen, 2022). The digital technology had made the tourism villages easily accessible by the tourists (through digital apps and websites) about their halal facilities (Pratono *et al.*, 2020); the tourists could share about the information to fellow tourists; and the tourism villages could receive better exposure among the tourists widely online. This established the tourism villages' image and attracted the Muslim and eco-conscious tourists. Further, the implementation of digital tourism facilitated the tourism villages to establish partnerships with tourism platforms that focused on the Muslim tourists. On the other hand, the tourism villages could receive feedback from the tourists about their experiences on their sustainable halal environment, which could be used to improve the services. However, there were several issues faced, where there were insufficient knowledge and understanding of the halal environment and sustainability concept within the tourism village community (Bulchand-Gidumal, 2022).

Furthermore, this study is supported by the UTAUT. In this study, it was found that the sustainable halal environment and digital tourism offered tangible benefits for the tourism village community (Nautiyal & Polus, 2022). The technology employed as part of the digital tourism for promoting the sustainable halal environment should contain user-friendly features and be readily available to the rural community. The higher the usability of a technology, the more likely it would be adopted and used to improve the halal ecosystem and increase the community income (Talwar, Kaur, Escobar, & Lan, 2022). In addition, this study is supported by Bargeman & Richards (2020) who explained that by implementing the sustainable halal environment, the tourism villages could attract more Muslim tourists looking for halal-compliant destinations and increase the community income. Therefore, it could be concluded that integrating the digital tourism with the sustainable halal environment would not only boost the community income by attracting more tourists, but also ensured that the tourism villages could be the Muslim-friendly destinations (Gelter, Fuchs, & Lexhagen, 2022).

## 5. CONCLUSIONS, SUGGESTIONS, AND LIMITATIONS

This study aims to investigate the influence of green economy, sustainable halal environment, and digital tourism on the community income in West Java and Lampung tourism

villages. This study finds that the green economy, sustainable halal environment, and digital tourism have a positive and significant influence on the community income. Further, this study highlights that the digital tourism is able to positively moderate the influence of both green economy and sustainable halal environment on the community income. This study finds that the tourism villages managed the waste efficiently and utilized it for activities such as recycling and composting, which generated income for the community. The nature conservation and biodiversity increased the attractiveness of tourism villages. Further, the Muslim friendly facilities, such as the restaurants, lodging, and services, attracted more Muslim tourists and simultaneously reached a larger market of Muslim tourists increased the community income. In addition, the adaptation of new technology and digital campaigns facilitated the tourism villages to be accessible by the tourists, mainly about the tourism villages' information, especially the Muslim tourists who preferred the halal-compliant journeys. This digital tourism contributed to the increase in the tourist visits, which in turn could increase the community income in the tourism villages.

The results of this study implied that in terms of policy making, the government and stakeholders must support the development of environmentally friendly tourism infrastructure, prioritize the implementation of green technology, and ensure that facilities comply with sustainable halal environmental standards. The government and related institutions are also suggested to support the development of applications and digital platforms that promote the halal and sustainable tourism. These initiatives should focus on up-to-date information and user interactions that facilitate better tourism experiences. Encouraging investment and providing financial incentives to the tourism villages that implement the sustainable and halal practices can encourage further adoption and increase the community income.

However, this study has faced two limitations. First, this study only studied the tourism villages in two provinces, namely West Java and Lampung. Thus, the results cannot be generalized to other settings and representative for the real conditions of tourism villages in Indonesia in a wider context. Therefore, future researches are suggested to extend the research settings, especially locations which follow and apply the halal and Muslim friendly environment (such as Southeast Asian countries: Malaysia and Brunei Darussalam) to obtain more accurate results. Second, this study only investigated the influence of three variables (digital tourism, green economy, and sustainable halal environment) on the community income. In fact, this study finds that there might be other factors that influenced the increase in the community income. Therefore, future researches are suggested to include more variables in the research framework examining their relationships in increasing the community income.

## REFERENCES

- Adel, A. M., Dai, X., Roshdy, R. S., & Yan, C. (2020). Muslims' travel decision-making to non-Islamic destinations: perspectives from information-seeking models and theory of planned behavior. *Journal of Islamic Marketing*, 12(4), 918–940. <https://doi.org/10.1108/JIMA-04-2020-0095>
- Adeyinka-Ojo, S., Lee, S., Abdullah, S. K., & Teo, J. (2020). Hospitality and tourism education in an emerging digital economy. *Worldwide Hospitality and Tourism Themes*, 12(2), 113–125. <https://doi.org/10.1108/WHATT-12-2019-0075>



- Aji, H. M., Muslichah, I., & Seftyono, C. (2021). The determinants of Muslim travellers' intention to visit non-Islamic countries: a halal tourism implication. *Journal of Islamic Marketing*, 12(8), 1553–1576. <https://doi.org/10.1108/JIMA-03-2020-0075>
- Aldao, C., Blasco, D., Espallargas, M., & Rubio, S. (2021). Modelling the crisis management and impacts of 21st century disruptive events in tourism: the case of the COVID-19 pandemic. *Tourism Review*, 76(4), 929–941. <https://doi.org/10.1108/TR-07-2020-0297>
- Alford, P., & Jones, R. (2020). The lone digital tourism entrepreneur: Knowledge acquisition and collaborative transfer. *Tourism Management*, 81(May), 104139. <https://doi.org/10.1016/j.tourman.2020.104139>
- Almeida-Santana, A., David-Negre, T., & Moreno-Gil, S. (2020). New digital tourism ecosystem: understanding the relationship between information sources and sharing economy platforms. *International Journal of Tourism Cities*, 6(2), 335–345. <https://doi.org/10.1108/IJTC-09-2019-0173>
- Arrobas, F., Ferreira, J., Brito-Henriques, E., & Fernandes, A. (2020). Measuring tourism and environmental sciences students' attitudes towards sustainable tourism. *Journal of Hospitality, Leisure, Sport and Tourism Education*, 27(December 2019), 1–12. <https://doi.org/10.1016/j.jhlste.2020.100273>
- Auster, R. E., Barr, S. W., & Brazier, R. E. (2020). Wildlife tourism in reintroduction projects: Exploring social and economic benefits of beaver in local settings. *Journal for Nature Conservation*, 58, 125920. <https://doi.org/10.1016/j.jnc.2020.125920>
- Ayiine-Etigo, D. A., & Amankwah-Amoah, J. (2021). COVID-19 and Africa's aviation and tourism sectors: A new agenda for the future? *Tourism Management Perspectives*, 39(October 2020), 100840. <https://doi.org/10.1016/j.tmp.2021.100840>
- Baran, T. (2020). A literature review and classification of the studies on “halal” in Islamic business journals (2010-2018). *Journal of Islamic Marketing*, 12(5), 1012–1024. <https://doi.org/10.1108/JIMA-10-2019-0206>
- Bargeman, B., & Richards, G. (2020). A new approach to understanding tourism practices. *Annals of Tourism Research*, 84(September 2019), 102988. <https://doi.org/10.1016/j.annals.2020.102988>
- Battour, M., Rahman, M. K., & Rana, M. S. (2020). The impact of PHTPS on trip quality, trip value, satisfaction and word of mouth: Non-Muslim tourists' perspective. *Journal of Islamic Marketing*, 11(6), 1517–1538. <https://doi.org/10.1108/JIMA-03-2019-0058>
- Battour, M., Salaheldeen, M., & Mady, K. (2022). Halal tourism: exploring innovative marketing opportunities for entrepreneurs. *Journal of Islamic Marketing*, 13(4), 887–897. <https://doi.org/10.1108/JIMA-06-2020-0191>
- Bhaduri, K., & Pandey, S. (2020). Sustainable smart specialisation of small-island tourism countries. *Journal of Tourism Futures*, 6(2), 121–133. <https://doi.org/10.1108/JTF-01-2019-0010>
- Bilgaev, A., Dong, S., Li, F., Cheng, H., Tulohonov, A., Sadykova, E., & Mikheeva, A. (2021). Baikal region (Russia) development prospects based on the green economy principles. *Sustainability (Switzerland)*, 13(1), 1–21. <https://doi.org/10.3390/su13010157>
- Bulchand-Gidumal, J. (2022). Post-COVID-19 recovery of island tourism using a smart tourism destination framework. *Journal of Destination Marketing and Management*, 23, 100689. <https://doi.org/10.1016/j.jdmm.2022.100689>

- Cabral, C., & Dhar, R. L. (2021). Green competencies: insights and recommendations from a systematic literature review. *Benchmarking*, 28(1), 66–105. <https://doi.org/10.1108/BIJ-11-2019-0489>
- Cassia, F., Castellani, P., Rossato, C., & Baccarani, C. (2021). Finding a way towards high-quality, accessible tourism: the role of digital ecosystems. *TQM Journal*, 33(1), 205–221. <https://doi.org/10.1108/TQM-03-2020-0062>
- Chang, M., Walimuni, A. C. S. M., Kim, M. cheol, & Lim, H. soon. (2022). Acceptance of tourism blockchain based on UTAUT and connectivism theory. *Technology in Society*, 71(June), 102027. <https://doi.org/10.1016/j.techsoc.2022.102027>
- Cocola-Gant, A., Gago, A., & Jover, J. (2020). Tourism, Gentrification and Neighbourhood Change: An Analytical Framework– Reflections from Southern European Cities. *The Overtourism Debate*, 121–135. <https://doi.org/10.1108/978-1-83867-487-820201009>
- Coghlan, A., & Carter, L. (2020). New Product Design: Creating a Digital VR Game to Promote the Conservation of Nature-based Tourism Attractions. *The Emerald Handbook of ICT in Tourism and Hospitality*, 167–179. <https://doi.org/10.1108/978-1-83982-688-720201011>
- Collins-Kreiner, N. (2020). Religion and tourism: A diverse and fragmented field in need of a holistic agenda. *Annals of Tourism Research*, 82(September 2019). <https://doi.org/10.1016/j.annals.2020.102892>
- Egger, I., Lei, S. I., & Wassler, P. (2020). Digital free tourism – An exploratory study of tourist motivations. *Tourism Management*, 79(December 2019), 104098. <https://doi.org/10.1016/j.tourman.2020.104098>
- Eric, T. N., Semeyutin, A., & Hubbard, N. (2020). Effects of enhanced air connectivity on the Kenyan tourism industry and their likely welfare implications. *Tourism Management*, 78(October 2018), 104033. <https://doi.org/10.1016/j.tourman.2019.104033>
- Gabor, M. R., Panait, M., Bacoş, I. B., Naghi, L. E., & Oltean, F. D. (2023). Circular tourism economy in European union between competitiveness, risk and sustainability. *Environmental Technology and Innovation*, 32(October). <https://doi.org/10.1016/j.eti.2023.103407>
- Gelter, J., Fuchs, M., & Lexhagen, M. (2022). Making sense of smart tourism destinations: A qualitative text analysis from Sweden. *Journal of Destination Marketing and Management*, 23(January), 100690. <https://doi.org/10.1016/j.jdmm.2022.100690>
- Hamid, R. S. (2019). *Structural Equation Modeling (SEM) Berbasis Varian Konsep Dasar dan Aplikasi Program Smart PLS 3.2.8. dalam Riset Bisnis*. Inkubator Penulis Indonesia.
- Hassani, A., & Moghavvemi, S. (2020). Muslims' travel motivations and travel preferences: The impact of motivational factors on Islamic service, hedonic and product preferences. *Journal of Islamic Marketing*, 11(2), 344–367. <https://doi.org/10.1108/JIMA-11-2018-0215>
- Hasyimi, V., & Azizalrahman, H. (2021). Economy-led sustainable touristic city: the case of Surakarta, Indonesia. *Journal of Tourism Futures*, 1–17. <https://doi.org/10.1108/JTF-06-2020-0088>
- Hidayat, S. E., Rafiki, A., & Nasution, M. D. T. P. (2022). Halal industry's response to a current and post-COVID-19 landscape and lessons from the past. *Journal of Islamic Marketing*, 13(9), 1843–1857. <https://doi.org/10.1108/JIMA-06-2020-0180>

- Ingrassia, M., Bellia, C., Giurdanella, C., Columba, P., & Chironi, S. (2022). Digital Influencers, Food and Tourism—A New Model of Open Innovation for Businesses in the Ho.Re.Ca. Sector. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(1), 50. <https://doi.org/10.3390/joitmc8010050>
- Insch, A. (2020). The challenges of over-tourism facing New Zealand: Risks and responses. *Journal of Destination Marketing and Management*, 15(April), 100378. <https://doi.org/10.1016/j.jdmm.2019.100378>
- Jackman, M., & Moore, W. (2021). Does it pay to be green? An exploratory analysis of wage differentials between green and non-green industries. *Journal of Economics and Development*, 23(3), 284–298. <https://doi.org/10.1108/jed-08-2020-0099>
- Jansson, A. (2022). Guided by data: A logistical approach to tourism in the platform economy. *Digital Geography and Society*, 3(July). <https://doi.org/10.1016/j.diggeo.2022.100040>
- Jia, X., & Chaozhi, Z. (2020). “Halal tourism”: is it the same trend in non-Islamic destinations with Islamic destinations? *Asia Pacific Journal of Tourism Research*, 25(2), 189–204. <https://doi.org/10.1080/10941665.2019.1687535>
- Katuk, N., Ku-Mahamud, K. R., Kayat, K., Hamid, M. N. A., Zakaria, N. H., & Purbasari, A. (2021). Halal certification for tourism marketing: the attributes and attitudes of food operators in Indonesia. *Journal of Islamic Marketing*, 12(5), 1043–1062. <https://doi.org/10.1108/JIMA-03-2020-0068>
- KC, B., Dhungana, A., & Dangi, T. B. (2021). Tourism and the sustainable development goals: Stakeholders’ perspectives from Nepal. *Tourism Management Perspectives*, 38(May), 100822. <https://doi.org/10.1016/j.tmp.2021.100822>
- Ketter, E. (2020). Millennial travel: tourism micro-trends of European Generation Y. *Journal of Tourism Futures*, 7(2), 192–196. <https://doi.org/10.1108/JTF-10-2019-0106>
- Kitsios, F., Mitsopoulou, E., Moustaka, E., & Kamariotou, M. (2022). User-Generated Content behavior and digital tourism services: A SEM-neural network model for information trust in social networking sites. *International Journal of Information Management Data Insights*, 2(1), 100056. <https://doi.org/10.1016/j.ijime.2021.100056>
- Kontogianni, A., & Alepis, E. (2020). Smart tourism: State of the art and literature review for the last six years. *Array*, 6(September 2019), 100020. <https://doi.org/10.1016/j.array.2020.100020>
- Kyara, V. C., Rahman, M. M., & Khanam, R. (2021). Tourism expansion and economic growth in Tanzania: A causality analysis. *Heliyon*, 7(5). <https://doi.org/10.1016/j.heliyon.2021.e06966>
- Law, R., Leung, D., & Chan, I. C. C. (2020). Progression and development of information and communication technology research in hospitality and tourism: A state-of-the-art review. *International Journal of Contemporary Hospitality Management*, 32(2), 511–534. <https://doi.org/10.1108/IJCHM-07-2018-0586>
- Li, J., Pearce, P. L., & Oktadiana, H. (2020). Can digital-free tourism build character strengths? *Annals of Tourism Research*, 85(July), 103037. <https://doi.org/10.1016/j.annals.2020.103037>
- Li, Y., Knight, D. W., Luo, W., & Hu, J. (2020). Elite circulation in Chinese ethnic tourism. *Annals of Tourism Research*, 85(152), 103030. <https://doi.org/10.1016/j.annals.2020.103030>

- Licastro, A., & Sergi, B. S. (2021). Drivers and barriers to a green economy. A review of selected balkan countries. *Cleaner Engineering and Technology*, 4, 100228. <https://doi.org/10.1016/j.clet.2021.100228>
- Lim, J., & Won, D. H. (2020). How Las Vegas' tourism could survive an economic crisis? *Cities*, 100(January), 102643. <https://doi.org/10.1016/j.cities.2020.102643>
- Lu, S., Li, G., & Xu, M. (2020). The linguistic landscape in rural destinations: A case study of Hongcun Village in China. *Tourism Management*, 77(June 2019), 104005. <https://doi.org/10.1016/j.tourman.2019.104005>
- Moise, M. S., Gil-Saura, I., & Ruiz-Molina, M. E. (2021). "Green" practices as antecedents of functional value, guest satisfaction and loyalty. *Journal of Hospitality and Tourism Insights*, 4(5), 722–738. <https://doi.org/10.1108/JHTI-07-2020-0130>
- Muneeza, A., Mustapha, Z., Badeeu, F. N., & Nafiz, A. R. (2020). Need to pioneer Islamic tourism in tourist resorts in Maldives. *Journal of Islamic Marketing*, 11(4), 895–916. <https://doi.org/10.1108/JIMA-01-2019-0004>
- Nagy, K. X. H., & Segui, A. E. (2020). Experiences of community-based tourism in Romania: chances and challenges. *Journal of Tourism Analysis*, 27(2), 143–163. <https://doi.org/10.1108/JTA-08-2019-0033>
- Nautiyal, R., & Polus, R. (2022). Virtual tours as a solidarity tourism product? *Annals of Tourism Research Empirical Insights*, 3(2), 100066. <https://doi.org/10.1016/j.annale.2022.100066>
- Ngah, A. H., Gabarre, S., Eneizan, B., & Asri, N. (2021). Mediated and moderated model of the willingness to pay for halal transportation. *Journal of Islamic Marketing*, 12(8), 1425–1445. <https://doi.org/10.1108/JIMA-10-2019-0199>
- Nitsch, B., & Vogels, C. (2022). Gender equality boost for regenerative tourism: the case of Karenni village Huay Pu Keng (Mae Hong Son, Thailand). *Journal of Tourism Futures*, 8(3), 375–379. <https://doi.org/10.1108/JTF-01-2022-0032>
- Pamukcu, H., & Sariisik, M. (2021). Suggestions for standardization of halal tourism in hospitality industry. *Journal of Islamic Marketing*, 12(2), 389–407. <https://doi.org/10.1108/JIMA-04-2019-0078>
- Pardo, C., & Ladeiras, A. (2020). Covid-19 "tourism in flight mode": a lost opportunity to rethink tourism – towards a more sustainable and inclusive society. *Worldwide Hospitality and Tourism Themes*, 12(6), 671–678. <https://doi.org/10.1108/WHATT-07-2020-0064>
- Pasca, M. G., Renzi, M. F., Pietro, L. D., & Mugion, R. G. (2021). Gamification in tourism and hospitality research in the era of digital platforms: a systematic literature review. *Journal of Service Theory and Practice*, 31(5), 691–737. <https://doi.org/10.1108/JSTP-05-2020-0094>
- Pazhuan, M., & Shiri, N. (2020). Regional tourism axes identification using GIS and TOPSIS model (Case study: Hormozgan Province, Iran). *Journal of Tourism Analysis*, 27(2), 119–141. <https://doi.org/10.1108/JTA-06-2019-0024>
- Pham, L. D. Q., Coles, T., Ritchie, B. W., & Wang, J. (2021). Building business resilience to external shocks: Conceptualising the role of social networks to small tourism & hospitality businesses. *Journal of Hospitality and Tourism Management*, 48(October 2020), 210–219. <https://doi.org/10.1016/j.jhtm.2021.06.012>
- Pongsakornrunsilp, P., & Pongsakornrunsilp, S. (2021). Mindful tourism: nothing left behind—creating a circular economy society for the tourism industry of Krabi, Thailand. *Journal of Tourism Futures*, 9(3), 366–380. <https://doi.org/10.1108/JTF-01-2021-0001>

- Ponsignon, F., & Derbaix, M. (2020). The impact of interactive technologies on the social experience: An empirical study in a cultural tourism contex. *Tourism Management Perspectives*, 35(3), 889–902.
- Pratono, A. H., Prima, D. A., Sinaga, N. F. N. T., Permatasari, A., Ariani, M., & Han, L. (2020). Crowdfunding in digital humanities: some evidence from Indonesian social enterprises. *Aslib Journal of Information Management*, 72(2), 287–303. <https://doi.org/10.1108/AJIM-05-2019-0123>
- Preko, A., Mohammed, I., Gyepi-Garbrah, T. F., & Allaberganov, A. (2021). Islamic tourism: travel motivations, satisfaction and word of mouth, Ghana. *Journal of Islamic Marketing*, 12(1), 124–144. <https://doi.org/10.1108/JIMA-04-2019-0082>
- Qiu, R. T. R., Park, J., Li, S. N., & Song, H. (2020). Social costs of tourism during the COVID-19 pandemic. *Annals of Tourism Research*, 84(June), 102994. <https://doi.org/10.1016/j.annals.2020.102994>
- Rahman, M., Moghavvemi, S., Thirumoorthi, T., & Rahman, M. K. (2020). The impact of tourists' perceptions on halal tourism destination: a structural model analysis. *Tourism Review*, 75(3), 575–594. <https://doi.org/10.1108/TR-05-2019-0182>
- Rashideh, W. (2020). Blockchain technology framework: Current and future perspectives for the tourism industry. *Tourism Management*, 80(April), 104125. <https://doi.org/10.1016/j.tourman.2020.104125>
- Ratnasari, R. T., Gunawan, S., Mawardi, I., & Kirana, K. C. (2020). Emotional experience on behavioral intention for halal tourism. *Journal of Islamic Marketing*, 12(4), 864–881. <https://doi.org/10.1108/JIMA-12-2019-0256>
- Richards, G. (2020). Designing creative places: The role of creative tourism. *Annals of Tourism Research*, 85(August), 102922. <https://doi.org/10.1016/j.annals.2020.102922>
- Ronaghi, M. H., & Ronaghi, M. (2022). A contextualized study of the usage of the augmented reality technology in the tourism industry. *Decision Analytics Journal*, 5(June), 100136. <https://doi.org/10.1016/j.dajour.2022.100136>
- Rua, S. V. (2020). Perceptions of tourism: a study of residents' attitudes towards tourism in the city of Girona. *Journal of Tourism Analysis*, 27(2), 165–184. <https://doi.org/10.1108/JTA-03-2019-0015>
- Scarlett, H. G. (2021). Tourism recovery and the economic impact: A panel assessment. *Research in Globalization*, 3(March), 100044. <https://doi.org/10.1016/j.resglo.2021.100044>
- Secinaro, S., & Calandra, D. (2021). Halal food: structured literature review and research agenda. *British Food Journal*, 123(1), 225–243. <https://doi.org/10.1108/BFJ-03-2020-0234>
- Sheldon, P. J. (2022). The coming-of-age of tourism: embracing new economic models. *Journal of Tourism Futures*, 8(2), 200–207. <https://doi.org/10.1108/JTF-03-2021-0057>
- Shen, K., & Shen, H. (2021). Chinese traditional village residents' behavioural intention to support tourism: an extended model of the theory of planned behaviour. *Tourism Review*, 76(2), 439–459. <https://doi.org/10.1108/TR-11-2019-0451>
- Shen, S., Xu, K., Sotiriadis, M., & Wang, Y. (2022). Exploring the factors influencing the adoption and usage of Augmented Reality and Virtual Reality applications in tourism education within the context of COVID-19 pandemic. *Journal of Hospitality, Leisure, Sport and Tourism Education*, 30(May 2021), 100373. <https://doi.org/10.1016/j.jhlste.2022.100373>
- Slamet, Abdullah, I., & Laila, N. Q. (2022). The contestation of the meaning of halal tourism. *Heliyon*, 8(3), e09098. <https://doi.org/10.1016/j.heliyon.2022.e09098>

- Song, M., Xie, Q., Tan, K. H., & Wang, J. (2020). A fair distribution and transfer mechanism of forest tourism benefits in China. *China Economic Review*, 63(January), 101542. <https://doi.org/10.1016/j.chieco.2020.101542>
- Suban, S. A., Madhan, K., & Shagirbasha, S. (2021). A bibliometric analysis of Halal and Islamic tourism. *International Hospitality Review*. <https://doi.org/10.1108/ihr-05-2021-0038>
- Subramaniam, Y., Masron, T. A., & Loganathan, N. (2022). Tourism and income inequality. *Journal of Business and Socio-Economic Development*, 2(2), 181–194. <https://doi.org/10.1108/jbsed-07-2021-0102>
- Sugiyono. (2017). *Metode Penelitian Kuantitatif, Kualitatif Dan Kombinasi (Mixed Method)*. Bandung : Alfabeta.
- Sun, Y. Y., Lin, P. C., & Higham, J. (2020). Managing tourism emissions through optimizing the tourism demand mix: Concept and analysis. *Tourism Management*, 81(June), 104161. <https://doi.org/10.1016/j.tourman.2020.104161>
- Tagliapietra, D., Povilanskas, R., Razinkovas-Baziukas, A., & Tamin, J. (2020). Emerald growth: A new framework concept for managing ecological quality and ecosystem services of transitional waters. *Water (Switzerland)*, 12(3). <https://doi.org/10.3390/w12030894>
- Talwar, S., Kaur, P., Escobar, O., & Lan, S. (2022). Virtual reality tourism to satisfy wanderlust without wandering: An unconventional innovation to promote sustainability. *Journal of Business Research*, 152(July), 128–143. <https://doi.org/10.1016/j.jbusres.2022.07.032>
- Tian, X. L., Bélaïd, F., & Ahmad, N. (2021). Exploring the nexus between tourism development and environmental quality: Role of Renewable energy consumption and Income. *Structural Change and Economic Dynamics*, 56, 53–63. <https://doi.org/10.1016/j.strueco.2020.10.003>
- Tiku, O., Shimizu, T., & Hartono, D. (2022). Tourism's income distribution in West Papua Province. *Annals of Tourism Research Empirical Insights*, 3(1), 100038. <https://doi.org/10.1016/j.annale.2022.100038>
- Torabi, Z. A., Rezvani, M. R., Hall, C. M., & Allam, Z. (2023). On the post-pandemic travel boom: How capacity building and smart tourism technologies in rural areas can help - evidence from Iran. *Technological Forecasting and Social Change*, 193(May), 122633. <https://doi.org/10.1016/j.techfore.2023.122633>
- Tussyadiah, I. (2020). A review of research into automation in tourism: Launching the Annals of Tourism Research Curated Collection on Artificial Intelligence and Robotics in Tourism. *Annals of Tourism Research*, 81(December 2018), 102883. <https://doi.org/10.1016/j.annals.2020.102883>
- Vargas-Sánchez, A. (2021). The new face of the tourism industry under a circular economy. *Journal of Tourism Futures*, 7(2), 203–208. <https://doi.org/10.1108/JTF-08-2019-0077>
- Wang, Q., Yang, L., & Yue, Z. (2022). Research on development of digital finance in improving efficiency of tourism resource allocation. *Resources, Environment and Sustainability*, 8(March), 100054. <https://doi.org/10.1016/j.resenv.2022.100054>
- Wei, D. (2022). Gemiverse: The blockchain-based professional certification and tourism platform with its own ecosystem in the metaverse. *International Journal of Geoheritage and Parks*, 10(2), 322–336. <https://doi.org/10.1016/j.ijgeop.2022.05.004>
- Wu, D. C., Cao, C., Liu, W., & Chen, J. L. (2022). Impact of domestic tourism on economy under COVID-19: The perspective of tourism satellite accounts. *Annals of Tourism Research Empirical Insights*, 3(2), 100055. <https://doi.org/10.1016/j.annale.2022.100055>

- Yamagishi, K., Gantalao, C., & Ocampo, L. (2021). The future of farm tourism in the Philippines: challenges, strategies and insights. *Journal of Tourism Futures*. <https://doi.org/10.1108/JTF-06-2020-0101>
- Yergeau, M. E. (2020). Tourism and local welfare: A multilevel analysis in Nepal's protected areas. *World Development*, *127*, 104744. <https://doi.org/10.1016/j.worlddev.2019.104744>
- Yue, X. G., Liao, Y., Zheng, S., Shao, X., & Gao, J. (2021). The role of green innovation and tourism towards carbon neutrality in Thailand: Evidence from bootstrap ADRL approach. *Journal of Environmental Management*, *292*(March), 112778. <https://doi.org/10.1016/j.jenvman.2021.112778>
- Zhang, C., Wang, S., Sun, S., & Wei, Y. (2020). Knowledge mapping of tourism demand forecasting research. *Tourism Management Perspectives*, *35*(28), 100715. <https://doi.org/10.1016/j.tmp.2020.100715>
- Zhang, N., Ren, R., Zhang, Q., & Zhang, T. (2020). Air pollution and tourism development: An interplay. *Annals of Tourism Research*, *85*(August). <https://doi.org/10.1016/j.annals.2020.103032>