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The impact of eco-innovation, ecotourism policy and social media on sustainable tourism development: evidence from the tourism sector of Indonesia

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ABSTRACT

Tourism growth is a significant factor in the economic development around the globe, and eco-innovation and tourism policies could improve the tourism development and needs the researchers' attention. Thus, the present article investigates the impact of eco-product innovation, eco-process innovation, eco-organizational innovation, eco-tourism policies, and social media on sustainable tourism development in Indonesia. This article has used primary data collection methods like questionnaires to collect the data from the selected respondents. The research also applied the smart-PLS to check the association among variables and test the hypotheses. The results revealed that eco-product innovation, eco-process innovation, eco-organizational innovation, eco-tourism policies, and social media have a positive nexus with sustainable tourism growth in Indonesia. This shows that through social media, the tourism firms keep in contact with the stakeholders, can have information, and share their own ideas with them. In this way, they can keep their tourism practice innovative and according to the requirements of stakeholders. This article guides the regulators to develop effective policies that improve sustainable tourism growth using eco-innovation and eco-tourism policies.

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Introduction

For the past three decades, the tourism industry has fared well all around the world. It all started when its latent potential was discovered, and steps were taken to realize it. Since then, this wonderful business has been able to create employment possibilities for a large number of people all around the world. This appealing sector is not a

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new phenomenon in the world. It had existed since the dawn of human civilization when it was initially defined by the movement of people on pilgrimages and other religious excursions. Tourism, as a social phenomenon, refers to the collection of occurrences and connections that emerge through the interactions of tourists, companies, host governments, and host communities in the process of recruiting and hosting these tourists and other visitors. The industry will never cease, and people all around the world will always require its services. Tourism is either a major business or a leading sector in many nations, and it is the world's fastest-growing industry. Tourism development is an essential component of the growth of other sectors, and it is always carried out in a sustainable manner with varied components and supporting sectors. Meanwhile, the Asia Pacific region's strong economic expansion offers a large possibility for the development of tourist markets in Southeast Asian nations such as Thailand, Malaysia, and Indonesia, among others. Indonesia, for example, has a lot of promise in terms of tourism (Singgalen et al., 2019). As a capital for its tourism growth, Indonesia has a great tourist potential for cultural heritage and the environment. The tourism industry in Indonesia is a major contributor to the country's and people's economic progress. This incredible sector has been growing since the 1970s and has accelerated since the 1990s. This industry, on the other hand, has already had a good impact on the country's economic development while simultaneously having some detrimental repercussions on the country's social, cultural, and environmental conditions. However, in order to maintain tourism alive and well in the country, a sustainable development strategy is required (Lasso & Dahles, 2018). The tourism sector was affected badly in 2019 due to covid. This pandemic has not only slowed down but, in the initial stages of the pandemic, has marked a full stop in this industry. As a result of this pandemic, the basic controlling measures were taken as social distancing, movement from one place to another place, lockdown, blockage of food, and the hospitality industry. These changes have shown their impact on the bottom line of society. This also results in an increase in unemployment which badly affects the common man's life. There is an urgent need to express a special interest in this industry with the view to bringing it back to the sustainability stage. Keeping in view, the present study has selected this industry.

The tourist business in Indonesia is expanding. Over 14 million foreign visitors visited the nation in 2017, up more than 2 million from the previous year. This fast growth in tourists, as well as the billions of dollars in foreign cash that they bring, appears to be set to continue. This isn't a coincidence; it's the outcome of a well-coordinated and purposeful government effort to boost the industry's growth. In 2015 the Ministry of Tourism established a target of 20 million international tourists by 2019 (Budhiasa & Riana, 2019). With numbers hovering around 9 million at the time, this seemed like an ambitious goal, but the most current statistics show they are on track to meet or exceed it. Indonesia's tourist industry requires well-defined metrics to avoid troublesome difficulties. As a result, a sustainable tourism idea or practice that is compatible with the country's tourist strategy and development is required. The goal should be to benefit all stakeholders, as defined by the World Tourism Organization (WTO) and the United Nations Environment Program (UNEP). Sustainable tourism is defined as activities that fully consider current and

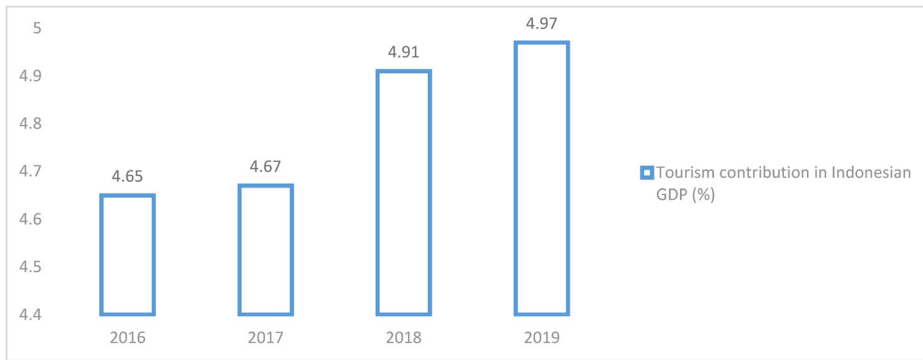


Figure 1. GDP from tourism in Indonesia.

Source: OECD Tourism Trends and Policies <https://doi.org/10.1787/20767773>

future economic, social, and environmental impacts while also meeting the needs of tourists, the industry, the environment, and the host community (Lasso & Dahles, 2018; Nugroho & Numata, 2020). These concepts are in line with the definition provided by UNEP (2005). After faults in broad-based tourist development initiatives were discovered, this viewpoint emerged. Although there were a few commentaries in the 1980s, the big sustainability arguments began in the 1990s (Nugroho & Numata, 2020). The original notion of sustainable tourism placed a strong emphasis on environmental preservation. However, in recent years, a greater emphasis has been placed on cultural and economic considerations, with the role of the host in long-term tourism being highlighted. Sustainable tourism viewpoints may be classified into numerous categories, such as techno centric or quirky. Over the next few decades, this change is expected to continue. The GDP from the tourism industry in Indonesia is given in Figure 1.

Despite the availability of extensive literature on tourism, still the gaps exist which are needed to be addressed, hence become the motivation of study. As Pandemic hit the world it became the main interest of researchers, hence, several researches have been conducted in tourism context regarding pandemic situation, however, specifically talking about Indonesia, the study seems to scarce especially some underlying factors which are needed attention to be explored. Although, Manzoor et al. (2019), evaluated sustainable tourism growth that either the factors contributed in economy or not, however, this particular study will look into factors that affect sustainable tourism growth such as ecological product innovation, ecological process innovation, ecological tourism policy, ecological organizational innovation and social media in the context of Indonesian economy with updated data. Similarly, León-Gómez et al. (2021), reviewed the nexus between sustainable tourism development and economic growth, whereas, our study will specifically evaluate the growth factors related to sustainable tourism with recent data. In addition, Cerović Smolović et al. (2018) scrutinized the road through which sustainable tourism growth and innovation can be achieved, whereas, the present study will explore the phenomenon in more detailed manner. Lastly, Yoopetch and Nimsai (2019), did some digging on science mapping related to sustainable tourism growth, however, the present study is evaluating the factors with recent data set. As it can be seen that in prior literature the topic has

been investigated from different angle, whereas, the present study contributes in such a way that it views the linkage of sustainable tourism growth and with Indonesia's economy, hence, highlighting the significance of sustainable tourism. Moreover, the evidences may help the tourism related professional and practitioners to revamp their policies regarding the tourism to bring back the industry at roadway to grow in order to support the country. Finally, it may also help scholars to identify other plausible factors which are related to sustainable growth.

The paper is outlined in to five sections, the very first section provides the glimpse of topic and address the gap which shows that why the study is conducted in first place. The following section is a detailed discussion regarding the topic in the light of preceding literature which helps reader to establish the linkage among constructs. The third section talks about the methodology part where data techniques and method are discussed which are used in analysis. In next section, the obtained results is presented and is contrasted with prior evidences. Finally, the last section of study offers some implications and recommendations.

Literature review

Every industry needs an innovation process to attain the objectives of sustainability and growth. The tourism industry over the past few decades, has been rising all over the world. Especially the developing countries have attained more growth in their outcome and performance. The tourism industry of Indonesia conveyed positive growth with rising tourist and their spending in the respective tourist countries. In this context: Liu et al. (2022) and Mat Dahan and Yusof (2020) Investigated the rapid growth of industries, and eco-process innovation has been rewarding for the social and environmental impacts of sustainable tourism growth. The industry of tourism has produced not only positive growth in the outcomes of tourist places but also provided numerous opportunities. The countries having fewer opportunities have grown in the last few years due to the rising tourism and the investment opportunities increment due to tourism. Further, Ansari and Kant (2021) and Lee et al. (2022) discussed the barriers in the supply chain of tourism that have been eliminated by the significant establishment of eco-process innovation adaptation practices. Eco-process innovation is considered a technique and tool that establish perception toward the improvement of tourism. The eco-process innovation has established significant changes by eliminating the negative impacts on the environments that disrupt the tourism destinations. The prominent rise in tourism is dependent on the quality of environment and standard of living that is associated with the minds of tourists. Additionally, Buijtendijk et al. (2018) and Chien et al. (2021) examined the sustainability of tourism transition with the management of the travel industry that has adopted significant eco-process innovation. Many developing countries depict the understanding and association of people toward tourists from other countries. Sustainable tourism growth in Indonesia needs adequate understanding and development to enhance its performance. The performance is positive to the application of effective eco-process innovation practices in sustainable tourism growth. Similarly, Kobarg et al. (2020) elaborated on the collaboration of innovation among different

tourism partners that has induced green policies through the eco-process innovation for tourism growth. Eco-process innovation is considered a vital tool and instrument for the significant development of the tourism industry. There is a need for innovation in the eco-process that could facilitate sustainable tourism growth. Many technical innovations take place in the tourism industry with the insertion of improvements in facilities and environmental sustainability. Finally, Chien et al. (2022) and Torkington et al. (2020) narrated the discourse of sustainability and growth in the policy of national tourism with the effective eco-process innovation. There is a need to develop an effective eco-process that could contribute to facilitating a role for the environment and maintainability of tourist places. This maintainability is specially to increase the intentions of tourists for more visiting other countries. The induction of effective eco-process innovation is highly influential in the tourism industry that helps in sustainable tourism growth (Ojogiwa, 2021). Thus, the hypothesis derived from the above debate is as under:

H1: Eco-process innovation significantly influences sustainable tourism growth.

Many positive steps have been taken by the world to increase and sustain tourism growth. It is due to the benefits of growing tourism for the developing countries which have low economic stability. The countries like Indonesia have inserted effective policies and measures to enhance their tourism for the development of opportunities and to reduce the low outcome effects. In this context: Regmi and Walter (2017) analyzed the relationship between sustainable development, ecotourism policy, and modernization theory that help the poor countries with sustainable tourism growth. These effects comprise numerous internal gaps that exist in the economic conditions. For the significant support of sustainable tourism growth, the policy of ecotourism has induced positive impacts on the development of tourism destinations. Additionally, Cobbinah et al. (2021) narrated the operationalization of ecotourism and its applicability that is helpful in the development of practices for sustainable tourism growth. The impacts of tourism sustainability are certain in the economic aspects that require managed policies which are established under ecotourism policy. There is a deem need to balance the economic, ecological, and social factors in the country that can have the best effects on the conditions of a country. Therefore, these factors help in the development of a tourism policy that is friendly toward the tourists. Further, Pujar and Mishra (2021) explored the impacts and influence of the ecotourism industry that emphasizes the tourist planning and benefits for more sustainable tourism growth. The tourists are more motivated when the facilities are provided to them from the time of departure. Therefore, it is dependent on the policies and ecotourism facilities that admire more tourists to the countries (Jermsttiparsert, 2021). Indonesia has induced some effective and facilitating policies for sustainable tourism growth. Moreover, Wondirad (2019) investigated the certainty of ecotourism and its use for disciplined and prominent growth in the tourism industry. The inducement of ecotourism policies has raised the outcome levels and enhanced broader aspects of opportunities for the people of Indonesia. This development is aimed to support the principles of the tourism industry for its development and enhancement all over the world. Furthermore, Noordeloos (2018) enumerated the factors associated with ecotourism policy that rapidly grows and influences

sustainable tourism growth. Ecotourism policies have been considered a strong initiative and balancing aspect that has contributed to significant planning for sustainable tourism growth. It provides numerous benefits for the tourists and the people visiting places with rising income and lifestyle levels. These levels are completely dependent on their earnings from the tourists that spend a huge portion in the designated places. Many countries promote tourism for a better outcome and limelight internationally the performance of tourism in the countries (Zhao et al., 2021). Thus, the hypothesis derived from the above debate is as under:

H2: Ecotourism policy significantly influences sustainable tourism growth.

Over the past few years, tourism growth has attained significant increases all over the world. This increment involves various circumstances of entertainment, investment, and enjoyment in the respective countries to be visited (Huang et al., 2022). Visitors all over the world are attracted to tourism activities due to the inclusion of social media. In this context: Hussain et al. (2019) explored the dominant role of social media in the development and sustainability of tourism growth with business and tourist behaviors. The social media inducement in the current world has conveyed a dominant rise in tourism growth. Therefore, the countries like Indonesia consider social media as an effective platform to convince international tourists. This convincing is not only to let the tourist see the places but also offers many programs to be invested in to enhance the outcome channels. Further, Park et al. (2019) discussed the communication environment of social media that highly endorses the development and sustainability of tourism growth. The world emphasizes social media nowadays due to the best pictures and ratings of the visited countries. Most people all over the world search the destinations with their expectations of entertainment and enjoyment, but the element of trust factor is more importantly considered. Therefore, the use of social media urges tourists to select the place of visitation by showing the feasibility and safety of the designated countries. Furthermore, Tham et al. (2020) narrated the considerable attention and perception of tourists toward destinations that have been considerably changed with the social media influence. The introduction of social media has encouraged tourists with various advertisements for cheap and the best places. Indonesia has considerably attained more importance in the world due to its best and mind-blowing places. These mind-blowing places are cheap and feasible as compared to the other countries, as Indonesia earns more of its income from the tourist industry. Additionally, Senyao and Ha (2022) assessed the participation of social media channels that are important marketing tools for the decision-making and experience for the tourists. The establishment of social media has changed the perspectives of visitation due to pictures and experiences. While changing the perspectives of tourists, the decision-making has also been transformed, which has significantly influenced sustainable economic growth. Subsequently, Perles-Ribes et al. (2018) discussed the residential tourism destinations and their sustainability and growth by the effective inducement of social media with steady-state elements. The trending tours of individuals and agencies have also convinced the tourists to remain united and attain more enjoyment from the tourism. Social media has been considered an important factor for the tourism industry that has facilitated sustainable tourism growth. Thus, the hypothesis derived from the above debate is as under:

H3: Social media significantly influence sustainable tourism growth.

With the development of feasibility for sustainable tourism growth, the development of organizations has inserted a positive role. Sustainability in tourism growth has been considered an objective for many countries due to their dependence on the tourism industry (Lisha & Abdullah, 2021). Indonesia is a renowned place for many tourists in the world, and the placement of organizations and innovation in them has positively influenced sustainable tourism growth. In this context: da Silva Rabêlo and de Azevedo Melo (2019) assessed the innovation in industries with an eco-organizational strategy that is multidimensional for sustainable tourism growth. The applicability and introduction of innovation in the organizations have contributed a significant proportion toward sustainable tourism growth. This sustainable growth in tourism induces effective opportunities and benefits to the organizations and medium-class people. Moreover, Biscione et al. (2022) examined the internal and external drivers and aspects of eco-organizational innovation that explore potential measures for sustainable tourism growth. The development of trust in the tourism industries has inserted positive contribution toward the tourists. The organizations in the tourist countries effectively help the tourist to visit the countries by attaining the best facilities. Eco-organizational innovation contributes to the changes in innovation, instructions, and management tools. These changes provide feasible policies for the attraction of tourists from international countries. Further, Muscio et al. (2017) analyzed the driving knowledge of innovation and eco-organizational innovation that not only enhances economic performance but also focuses on natural resources for tourism. Innovation in organizations is associated with the change in organizational systems and infrastructures that attracts more tourists from all over the world. Most of the tourists in the world rely on the policies and facilities of the organizations where the agreements take place in terms of prices. Furthermore, Kuo et al. (2022) enumerated the strategies of the proactive environment in the hotel industry that provides green core competence, green competitive advantage, and eco-innovation. The organizations are responsible for the transformation of services and facilities for the tourists. Even though the drivers, hospitality, and environmental responsibility are also dependent on the eco-organizational innovation. This induces the improvement in the tourism industry with broader aspects and better improvements in societies and institutions. Also, Can and Gozgor (2018) investigated the diversification of tourists due to uncertain market conditions requiring eco-organizational innovation for sustainable tourism growth. There are corresponding elements of eco-organizational innovation that comprise the understanding of corporate and environmental benefits (Sibuea et al., 2021). It is because of the rising trends of tourism and the levels of investments that has been gradually increased in past few years. Innovation in the management of the organization is also important for the positive rise and development of sustainable tourism growth. Thus, the hypothesis derived from the above debate is as under:

H4: Eco-organizational innovation significantly influences sustainable tourism growth.

The sustainability of tourism growth has been considerably more important for the world due to its huge contribution of opportunities and benefits. The innovation in tourism and its enhancement through various aspects could also be considered for sustainable tourism growth. In this context: Kobarg et al. (2020) investigated the

effects of innovation among products that induce marginalized impact on the tourism industry and ecological perspectives. For the sustainability of sustainable tourism growth, the role of eco-product innovation is vital; that has provided many facilities to the tourists. The effective and feasible policies toward the product innovation have also convinced the tourists from all over the world. This is due to the cheap products and facilitating eco-products that have contributed to eminent development in sustainable tourism growth. Further, Long and Liao (2021) analyzed the incentives of fiscal policies for the eco-product innovation that involves dynamic capabilities for the tourism industry. Eco-product innovation places compete for the picture of a friendly environment and feasible products and facilities for the tourists. These things are the positive contributor to more tourism in the countries that are dependent on the tourism industry. Furthermore, Al-Shami and Rashid (2022) explored the environment management and dynamic capabilities and their impact on sustainability and eco-product innovation. The eco-products create an effective environment for the attraction and attainment of more tourists. This is a significant factor in the tourism industry that plays an important role in sustainable tourism growth (Akula & Singh, 2021). Moreover, Afum et al. (2021) enumerated the relationship between business, green, social, and eco-product innovative performances that induces an impact on tourism growth. Most of the tourists face a lot of hurdles due to the food products in destined places. Therefore, the establishment of eco-production innovation has facilitated the tourists with a lot of benefits and advantages. Most of the products already exist in tourist places but their adverse effects impact the lives and health of tourists. Therefore, the innovation in eco-product has contributed friendly structure with the tourists that have attracted more tourists from all over the world. Pan and Dossou (2020) assessed the relationship between sustainable economic growth and tourism by the collection of revenues related to the eco-product innovation. Especially in Indonesia, every product is available in the market according to the changing tourists and their respective countries. Due to the establishment of eco-product innovation, the tourism industry has attained prominent growth. Even though, the exports have also been increased in the tourist countries due to the demand for eco-products that are health-friendly. Thus, the hypothesis derived from the above debate is as under:

H5: Eco-product innovation significantly influences sustainable tourism growth.

Research methods

The article investigates the impact of eco-product innovation, eco-process innovation, eco-organizational innovation, eco-tourism policies, and social media on sustainable tourism growth in Indonesia. This article has used primary data collection methods like questionnaires to collect the data from the selected respondents. The study has taken five predictors such as eco-product innovation (EPI), eco-process innovation (EPRI), eco-organizational innovation (EOI), eco-tourism policies (ETP), and social media (SM). In addition, the study has also used one predictive variable, such as sustainable tourism development (STD). The variables are shown in [Figure 2](#).

The measurement items of the variables are extracted from past literature, such as sustainable tourism development has nine items scale taken from Choi and Sirakaya

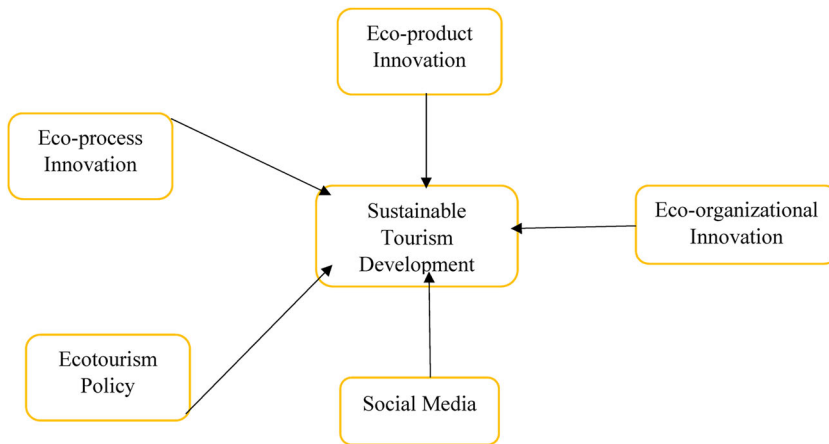


Figure 2. Theoretical framework.
Source: Authors' Creation.

(2005). In addition, eco-product innovation has six items extracted from Yurdakul and Kazan (2020). Moreover, eco-process innovation has four items taken from the article of Yurdakul and Kazan (2020). Furthermore, the article has used six items for eco-organizational innovation taken from Yurdakul and Kazan (2020). In addition, the eco-tourism policy has four items extracted from Chang et al. (2022). Finally, the study has taken four items scale of social media taken from the article of Chang et al. (2022). Table 1 highlights the measurement of variables.

The surveys have sent to the respondents by mail and personal visits. The tourism promotion authorities are the respondents of the study. They were selected using simple random sampling. The researchers have sent around 674 surveys, but only 374 surveys were received after three weeks, representing around 55.49 percent response rate. The research also applied the smart-PLS to check the association among variables and test the hypotheses. It is an effective tool for primary data analysis and operates significantly with large and small data sets (Sarstedt et al., 2017). It used the measurement model assessment to examine the validity and reliability and used the structural model assessment to check the association among variables. The measurement assessment model includes convergent validity and discriminant validity. The convergent validity has been checked using Alpha, average variance extracted (AVE), composite reliability (CR), and factor loadings. In contrast, the discriminant validity has been examined using Fornell Larcker, Heterotrait Monotrait (HTMT) ration, and cross-loadings. The threshold for Alpha and CR, the values should be more than 0.70 (Kamis, 2021), while thresholds for the factor loadings and AVE, the values should be bigger than 0.50 (Ringle et al., 2015). In addition, the thresholds for Fornell Larcker, the first value in the column, should be larger than the rest, while the thresholds for cross-loadings, the values that exposed the linkage with the variable itself, should be larger than the values that exposed the association with other variables. Finally, the thresholds for HTMT ratio the values should be lower than 0.85 (Hair et al., 2020).

Table 1. Measurements of variables.

Items	Statements	Sources
Sustainable tourism development		
STD1	'Community environment is protected now for the future use of tourism development'.	(Choi & Sirakaya, 2005)
STD2	'The nature diversity should be valued and endangered for tourism development'.	
STD3	'I think about the tourism development should support the determinations for environmental conservation'.	
STD4	'Tourism should provide the shelter the community environment'.	
STD5	'Tourism also needs to be established in coordination among the cultural and natural environment'.	
STD6	'Proper tourism development needs that natural and wildlife habitats be sheltered'.	
STD7	'Tourism development should encourage optimistic environmental beliefs among all stakeholder in tourism'.	
STD8	'Regulatory standards related to environment are needed to decrease the negative influences of tourism development'.	
STD9	'I believe that tourism should be develop the environment for upcoming generations'.	
Eco-product innovation		
EPI1	'My firm manufactures the products using lack of material'.	(Yurdakul & Kazan, 2020)
EPI2	'My firm manufactures products that easily recycled'.	
EPI3	'My firm manufactures products that produce the very low amount of waste'.	
EPI4	'My firm manufactures products that reduce the damage caused by waste'.	
EPI5	'My firm manufactures products to reduce energy use'.	
EPI6	'My firm manufactures products that separable easily'.	
Eco-process innovation		
EPRI1	'My firm manufactures lack of polluting production processes than its alternatives'.	(Yurdakul & Kazan, 2020)
EPRI2	'My firm utilizes updated technologies to save energy in manufacturing processes'.	
EPRI3	'My firm has a recycling system in the manufacturing process'.	
EPRI4	'My firm renews its manufacturing processes to meet the standards stated by the environmental laws'.	
Eco-organizational innovation		
EOI1	'My firm follows an audit system and environmental management'.	(Yurdakul & Kazan, 2020)
EOI2	'My firm collaborates with industries in the supply chain to reduce environmental damage'.	
EOI3	'My firm makes high investments on research and development to minimize environmental impacts'.	
EOI4	'My firm has follow the ISO14001 environmental standard'.	
EOI5	'The raw material suppliers of our firm have the ISO14001 environmental standard'.	
EOI6	'My firm has a detached department for protection of environmental'.	
Ecotourism policy		
ETP1	'The government stimulates the documentation of historical watching marks for Indonesians'.	(Chang et al., 2022)
ETP2	'The government improves the tourist attractions worth visiting near historical places watching sites'.	
ETP3	'The government trains transport system ecological narrators'.	
ETP4	'The government maintains and preserves various historical places for tourists'.	
Social media		
SM1	'I think it is enviable to post videos and photos on social media after visiting historical places'.	(Chang et al., 2022)
SM2	'I think it is getting people's attention to post videos and photos on social media after visiting historical places'.	
SM3	'I think it is getting people's attention to post audios and messages on social media after visiting historical places'.	
SM4	'I think it is helping to interact with people by providing information on social media after visiting historical places'.	

Table 2. Convergent validity.

Constructs	Items	Loadings	Alpha	CR	AVE
Eco-organizational Innovation	EO11	0.907	0.887	0.916	0.649
	EO12	0.903			
	EO13	0.663			
	EO14	0.879			
	EO15	0.825			
	EO16	0.603			
Eco-product Innovation	EPI1	0.835	0.933	0.949	0.790
	EPI2	0.944			
	EPI4	0.873			
	EPI5	0.870			
	EPI6	0.919			
	EPRI1	0.923			
Eco-process Innovation	EPRI2	0.946	0.928	0.949	0.824
	EPRI3	0.935			
	EPRI4	0.823			
	ETP1	0.935			
Ecotourism policy	ETP2	0.983	0.961	0.975	0.928
	ETP4	0.972			
	SM1	0.906			
Social media	SM2	0.805	0.832	0.890	0.671
	SM3	0.691			
	SM4	0.860			
	STD1	0.739			
Sustainable tourism growth	STD2	0.661	0.874	0.899	0.599
	STD3	0.662			
	STD4	0.761			
	STD5	0.698			
	STD6	0.672			
	STD7	0.627			
	STD8	0.765			
	STD9	0.757			

Source: Authors' Calculations.

Research findings

The results show that the content validity is examined using factor loadings and values in the results are larger than 0.50. The results exposed the content validity is valid. In addition, the results also show that the convergent validity is examined using AVE, and values in the results are larger than 0.50. The results exposed that convergent validity is valid. Moreover, the results also show that the reliability is examined using CR and Alpha, and values in the results are larger than 0.70 (Table 2).

Moreover, the results also show that the discriminant is examined using Fornell Larcker, and values in the results exposed that the first value in the column is larger than the rest (Table 3).

In addition, the results also show that the discriminant is examined using cross-loadings, and values in the results exposed that the values that exposed the linkage with the variable itself are larger than the values that exposed the association with other variables. These values exposed valid discriminant validity. Table 4 shows these outcomes of the study.

Finally, the results also show that the discriminant is examined using the HTMT ratio, and values in the results exposed that the values are lower than 0.85. These values exposed valid discriminant validity (Table 5).

Table 3. Fornell Larcker.

	EOI	EPI	EPRI	ETP	SM	STD
EOI	0.806					
EPI	0.459	0.889				
EPRI	0.656	0.489	0.908			
ETP	0.421	0.403	0.618	0.963		
SM	0.523	0.431	0.439	0.439	0.819	
STD	0.795	0.610	0.781	0.748	0.653	0.706

Source: Authors' Calculations.

Table 4. Cross-loadings.

	EOI	EPI	EPRI	ETP	SM	STD
EOI1	0.907	0.367	0.608	0.871	0.452	0.733
EOI2	0.903	0.390	0.611	0.977	0.417	0.731
EOI3	0.663	0.460	0.402	0.424	0.489	0.546
EOI4	0.879	0.346	0.610	0.804	0.458	0.699
EOI5	0.825	0.319	0.544	0.856	0.325	0.630
EOI6	0.603	0.382	0.329	0.360	0.422	0.451
EPI1	0.368	0.835	0.383	0.334	0.378	0.495
EPI2	0.422	0.944	0.414	0.381	0.345	0.542
EPI4	0.378	0.873	0.482	0.314	0.385	0.559
EPI5	0.470	0.870	0.482	0.400	0.477	0.591
EPI6	0.391	0.919	0.397	0.354	0.316	0.509
EPRI1	0.598	0.480	0.923	0.559	0.423	0.754
EPRI2	0.616	0.460	0.946	0.593	0.417	0.724
EPRI3	0.570	0.434	0.935	0.524	0.369	0.687
EPRI4	0.599	0.395	0.823	0.566	0.383	0.665
ETP1	0.472	0.381	0.591	0.935	0.417	0.710
ETP2	0.400	0.383	0.601	0.983	0.415	0.725
ETP4	0.489	0.399	0.593	0.972	0.437	0.728
SM1	0.455	0.367	0.401	0.379	0.906	0.592
SM2	0.356	0.389	0.327	0.290	0.805	0.501
SM3	0.487	0.365	0.385	0.421	0.691	0.530
SM4	0.403	0.286	0.314	0.339	0.860	0.502
STD1	0.650	0.428	0.469	0.624	0.384	0.739
STD2	0.490	0.380	0.430	0.466	0.423	0.661
STD3	0.485	0.425	0.434	0.478	0.405	0.662
STD4	0.464	0.416	0.593	0.676	0.477	0.761
STD5	0.588	0.382	0.437	0.549	0.346	0.698
STD6	0.529	0.366	0.402	0.484	0.581	0.672
STD7	0.463	0.416	0.400	0.383	0.691	0.627
STD8	0.595	0.505	0.811	0.549	0.448	0.765
STD9	0.569	0.526	0.835	0.528	0.424	0.757

Source: Authors' Calculations.

Table 5. Heterotrait Monotrait ratio.

	EOI	EPI	EPRI	ETP	SM	STD
EOI						
EPI	0.516					
EPRI	0.714	0.521				
ETP	0.569	0.424	0.655			
SM	0.620	0.486	0.498	0.490		
STD	0.595	0.667	0.840	0.813	0.770	

Source: Authors' Calculations.

The results of a path analysis revealed that the eco-product innovation, eco-process innovation, eco-organizational innovation, eco-tourism policies, and social media have a positive nexus with sustainable tourism growth in Indonesia (Figures 3 and 4)

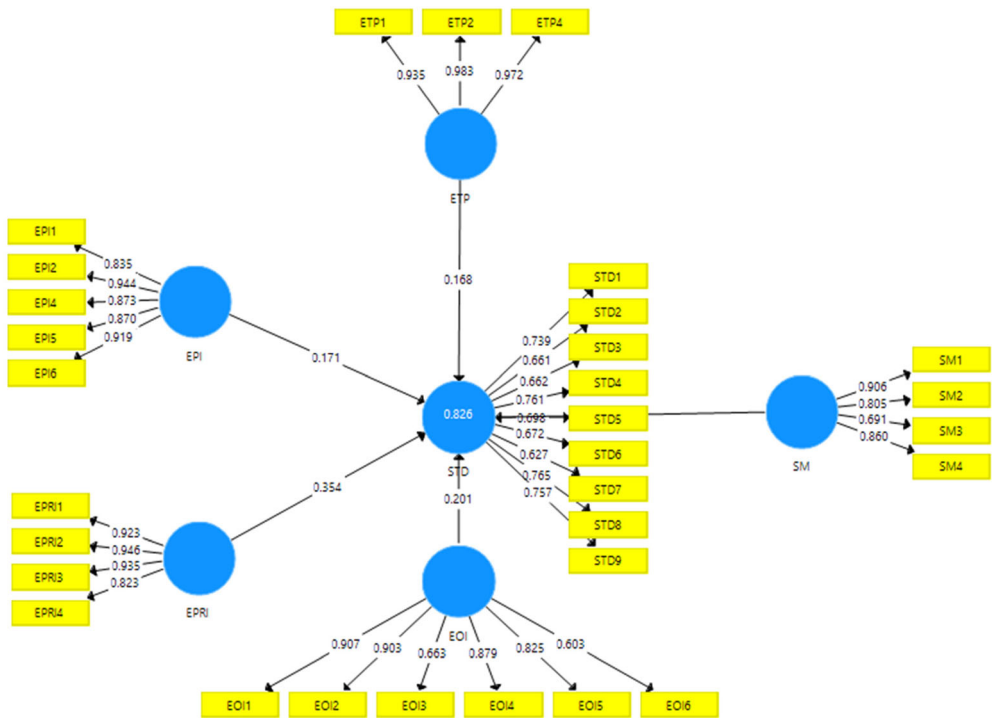


Figure 3. Measurement model assessment.
Source: Authors' Calculations (Smart PLS output).

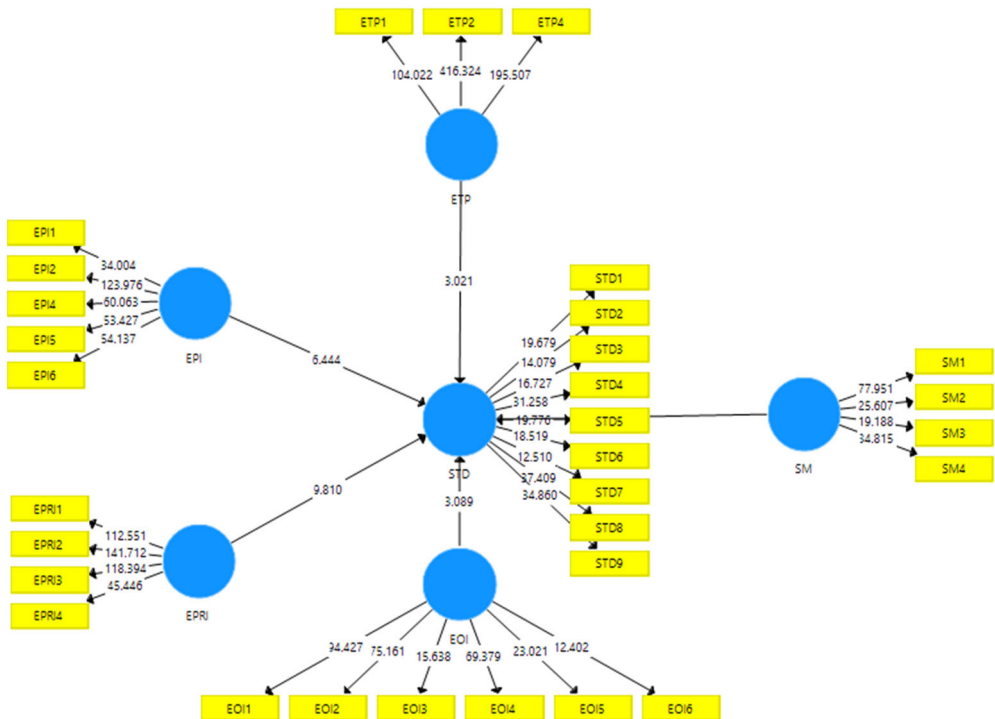


Figure 4. Structural model assessment.
Source: Authors' Calculations (Smart PLS output).

Table 6. Path analysis.

Relationships	Beta	S.D.	T statistics	<i>p</i> values	L.L.	U.L.
EOI -> STD	0.201	0.065	3.089	0.003	0.078	0.318
EPI -> STD	0.171	0.027	6.444	0.000	0.117	0.212
EPRI -> STD	0.354	0.036	9.810	0.000	0.287	0.422
ETP -> STD	0.168	0.056	3.021	0.003	0.068	0.277
SM -> STD	0.245	0.047	5.212	0.000	0.145	0.315

Source: Authors' Calculations (Smart PLS output).

and accept H1, H2, H3, H4 and H5. The results also indicated that with the one percent rise in EOI, the STD would also rise by 0.201 percent and vice versa. In addition, the results also exposed that with the one percent change in EPI, the STD will also change by 0.171 percent in the same direction. Moreover, the results also indicated that with the one percent rise in EPRI, the STD would also rise by 0.354 percent and vice versa. In addition, the results also exposed that with the one percent change in ETP, the STD will also change by 0.168 percent in the same direction. Finally, the results also indicated that with the one percent rise in SM, the STD will also rise by 0.245 percent and vice versa (Table 6).

Discussions

The results showed that eco-organizational innovation has a positive influence on sustainable tourism growth. These results are supported by Buijendijk et al. (2018), which examines eco-organizational innovation's role in sustainable tourism growth. The study posits that in the tourism industry, the ecological friendly innovation in business management tools, organizational practices, the eco-friendly changes in the work environment, and eco-friendly improvement in social relations with the stakeholders help to generate sustainable tourism growth. These results are also in line Kuo et al. (2022) with, which reveals that the eco-organizational innovation improves the ecological friendly quality of traveling, accommodation, and recreational services, leaving no adverse impact on the health of tourists, and thereby sustains tourism growth for it wins the hearts of tourists and maintains the tourism growth. These results also agree with Sharma et al. (2020), which highlights that eco-organizational innovation, with the overall management of tourism practices on ecological friendly bases, saves the natural environment from getting polluted, protects the natural resources, and maintains the health of the workers who provide services to the tourism industry. Hence, the availability of a natural environment, quality natural resources, and healthy & active employees lead the tourism industry towards sustainable growth.

The results showed that eco-product innovation has a positive influence on sustainable tourism growth. These results are supported by Sun et al. (2021). This study implies that the tourism industry is very large, and it depends on other economic sectors as they provide many products and services which are used as resources in the tourism industry. The quality of these products and services has a great significance for the tourism industry as it affects the environmental, social, and economic development of tourism growth. If in an economy, firms that provide products to the tourism industry maintain eco-innovation in products through the utilization of eco-friendly materials, manufacturing processes, and development of eco-friendly features

in product designs. The tourism industry, by improving environmental performance, can have high social and economic development. These results are also in line with Walton et al. (2020), which highlights that the firms which are engaged in providing tourism services take care of the quality of products presented to tourists, and bring ecological friendly innovation in the product's design features and quality, the products while being utilized during the whole life-cycle, do not affect the health of the users and while being disposed of, do not destroy the environmental quality. The eco-product innovation enhances sustainability in tourism growth.

The results showed that eco-process innovation has a positive influence on sustainable tourism growth. These results are in line with Wu et al. (2019), which throws light on eco-process innovation and achievement of sustainability in tourism. The study posits that tourism is the combination of several practices or processes like information management, traveling system, providing infrastructure at accommodation or recreation destinations, food preparation, and other accessories, and arranging for products for tourists. The innovation in these practices or processes with the aim to reduce the environmental impacts with the satisfaction of the tourists from residents or foreigners, develop sustainability in tourism growth. These results also agree with Aboelmaged (2018), which shows that tourism firms that apply eco-process innovation reduce air pollution, water pollution, and soil erosion, encourage energy efficiency, and tend to transit from fossil fuel consumption to renewable energy consumption. Hence, by improving the environmental quality and social welfare, they succeed in arranging for the recreational environment, natural resources, and human services to better serve the tourists even in the future. These results are also in line with Wang et al. (2020), which states that the environment, natural sceneries, living creatures, and natural resources used as food are essential resources for the tourism industry. The tourism industry can make sustainable tourism only when these resources are protected for future use, and this is possible by eco-process innovation.

The results showed that eco-tourism policy has a positive influence on sustainable tourism growth. These results are supported by Shasha et al. (2020), which reveals that when eco-tourism policy is established, environmental and cultural awareness is created among individual tourists so that they must know how their activities can affect the environment of the destinations they visit and what are the consequences. This awareness creates consciousness in tourists to protect the environment, and environmental health protection assures sustainable tourism development. These results are in line with Fennell and Garrod (2022), which highlights that when eco-tourism policy is implemented, the tourism firms are motivated to design or operate the tours or other related facilities which have minimum impact on the environment, and out of the earnings generated from tourism must provide financial benefits for conservation of natural resources. The increased environmental performance contributes to sustainable tourism growth.

The results showed that social media has a positive influence on sustainable tourism growth. These results match with Hysa et al. (2021), which analyzes social media's role in sustainable tourism growth. Social media is an effective source of information, education, and communication, and these advantages help the tourism firms to make social, environmental, and economic performance high, so it assures

sustainability in tourism growth. These results are also in line with Sarkar and George (2018), which highlights that through social media, the tourism firms keep in contact with the stakeholders, can have information, and share their own ideas with them. In this way, they can keep their tourism practice innovative and according to the requirements of stakeholders. This enhances the social welfare of the stakeholders and environmental performance, so it leads to sustainable tourism growth within the country. These results are also supported by Seok et al. (2020), which shows the significance of social media in achieving sustainable tourism growth.

Conclusion

The main objective of the study was to examine the influences of eco-organizational innovation, eco-product innovation, eco-process innovation, eco-tourism policy, and social media on sustainable tourism growth. The questionnaire distribution technique was applied to collect data for eco-organizational innovation, eco-product innovation, eco-process innovation, eco-tourism policy, and social media and their role in achieving sustainable tourism growth in the tourism industry of Indonesia. After the analysis of data collected, the results showed that eco-organizational innovation, eco-product innovation, eco-process innovation, eco-tourism policy, and social media have a positive relation to sustainable tourism growth. The results revealed that the ecological friendly innovation in different organizational departments and their resources removes the environmental influences and develops sustainability in tourism growth. Similarly, the ecological-friendly improvement in the durability, material quality, design features, and disposal of the products reduces the environmental impacts of products used in tourism and leads tourism towards sustainable growth. The ecological-friendly improvement in processes applied to mitigate their influence on the environment protects the resources and destination quality. So, there is sustainable tourism growth. The results showed that effective implementation of eco-tourism policy, on one side, reduces the influences while, on the other side, improves the quality of tourism services. Hence, the tourism industry can make sustainable development. The study also concludes that social media in tourism removes the distance and enhances information and communication. This leads to sustainable tourism development.

Implications & limitations

The present article has both theoretical and empirical implications. This study has theoretical significance on account of its contributions to tourism literature. It examines the role of eco-organizational innovation, eco-product innovation, eco-process innovation, eco-tourism policy, and social media in achieving sustainable tourism growth. Many authors in prior literature have examined the influences of eco-innovation, eco-tourism policy, and social media on sustainable tourism growth in different research. So, the present study is a great contribution to literature as it examines all these factors simultaneously for assessing sustainable tourism growth. Moreover, this study, with the analysis of three dimensions of eco-innovation like eco-organizational innovation, eco-product innovation, eco-process innovation for sustainable tourism growth, and the

selection tourism industry of Indonesia for research purposes, also adds to the literature. The present study has great significance in emerging economies that want to promote the tourism industry. The tourism industry is a great source of earnings, job creation, and cultural and political development. But, it may also cause environmental and social issues, which can ultimately affect tourism growth. This article guides the regulators to develop effective policies that improve sustainable tourism growth using eco-innovation and eco-tourism policies. The present study provides a guideline on how to achieve sustainable tourism growth by removing these issues. This study guides the tourism firms and concerned entities that they must focus on eco-organizational innovation, eco-product innovation, and eco-process innovation while making policies for achieving sustainable tourism growth. It guides the government that eco-tourism policy must be formed and executed as well as social media must be promoted for the achievement of sustainable tourism development.

Many limitations are linked to the present study, and these limitations must be filled by authors in the future. The present study examines only three factors, eco-innovation, eco-tourism policy, and social media, and their role in achieving sustainable tourism growth. There are many other factors like green finance, ICTs, and inertial and external administration, which have a strong influence on the achievement of sustainable tourism growth, but there is no description of these factors. The future authors should examine the factors along with eco-innovation, eco-tourism policy, and social media for sustainable tourism growth. The tourism sector of Indonesia is a focal center of analysis for the authors for examining eco-organizational innovation, eco-product innovation, eco-process innovation, eco-tourism policy, and social media's role in achieving sustainable tourism growth. So, the study validity may not be equal in all economies. In the future, multiple tourism industries must be selected for empirical analysis of the nexus among these factors.

Disclosure statement

No potential conflict of interest was reported by the authors.

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