

LEVERAGING ESG-EMBEDDED SERVICE INNOVATION FOR SUSTAINABLE BUSINESS GROWTH IN THE TOURISM INDUSTRY IN RIVERS STATE, NIGERIAMIYENE Charles Tom¹NWANKWO Greg Chigemecha²¹Department of Marketing, Ignatius Ajuru University of Education, Rivers State²Department of Marketing, Rivers State University**Abstract**

Sustainable tourism development that emphasizes a balance between economic, social and environmental considerations has gained prominence in Nigeria, in recent years. Leveraging ESG-embedded service innovation (ESG-E SI) for sustainable business growth (SBG) in the tourism industry in Nigeria, involves integrating environmental, social and governance (ESG) considerations into service innovation strategies to drive SBG. This research examined the influence of ESG-E SI on SBG in the tourism industry in Rivers State. The study adopted quantitative approach and a causal research design, and a survey strategy. A survey of 92 tourism businesses in Rivers State was conducted, and a total of 346 respondents were surveyed using questionnaire as data collection instrument. Data collected was analysed using descriptive statistics for univariate analyses. Linear regression was used to test the influence of dimensions of ESG-E SI on SBG. Statistical Package for Social Sciences (SPSS) version 25 was relied upon for data analyses. The results of test of hypotheses show that sustainable accommodation, cultural heritage preservation, and transparency all have significant influence on SBG in the tourism industry in Rivers State. Thus, the study concluded ESG-E SI has significant positive influence on SBG in the tourism industry in Rivers State, and recommends that tourism businesses in Rivers State that seek SBG should adopt sustainable accommodation, cultural heritage preservation, and transparency as ESG-E SI in their business operations.

Keywords: ESG-embedded service innovation, business growth, tourism industry

Introduction

The tourism industry is a significant contributor to the economic development of nations of the world. It provide employment opportunities, create wealth and promoting cultural exchange. The industry has witnessed significant growth over the years as peoples' earning power increase and their curiosity levels heightens. The growth of tourism however, also comes with sustainability challenges. In Nigeria in recent years, there has been a growing interest in sustainable tourism development, which emphasizes the need to balance economic, social and environmental considerations.

The concept of sustainable tourism development is rooted in the idea that tourism should be managed in a way that minimizes its negative impacts on the environment and local communities, while maximizing its economic benefits (Akpomuvie, 2020). Rivers State has witnessed rapid growth of tourism due to its rich cultural heritage, natural beauty and historic landmarks (Ifejuobi et al., 2021), but has also seen increasing concerns about the environmental, social and governance (ESG) impacts of tourism.

The Federal Ministry of Culture, Tourism and National Orientation (FMCTNO, 2012) posits that sustainable tourism development is a key driver of economic growth, job and wealth creation and poverty reduction in Nigeria. However, low level of sustainable tourism practices can result in environmental degradation and cultural erosion that threaten the long-term sustainability of the industry.

Sustainable tourism development balances economic, social and environmental considerations, hence, minimizes negative impacts and capitalizes on opportunities to drive long-term success (United Nations World Tourism Organization [UNWTO], 2019). This attraction notwithstanding, there is limited research on the nexus between ESG-embedded innovation (ESG-E SI) and sustainable

business growth (SBG) in the tourism industry in Rivers State. Also, existing studies focused primarily on economic benefits of tourism, with little attention to its social and environmental impacts. Thus, this study sought to contribute to knowledge by examining the impact of ESG-E SI on SBG in the tourism industry in Rivers State. The specific objectives of the study are:

1. To investigate the relationship between sustainable accommodation and SBG in the tourism industry in Rivers State.
2. To examine the relationship between cultural heritage preservation and SBG in the tourism industry in Rivers State.
3. To examine the relationship between transparency practices and SBG in the tourism industry in Rivers State.

Concept of ESG-Embedded Service Innovation

According to Metilelu and Adeyinka (2023) ESG-E SI involve developing sustainable tourism experiences, creating environmentally-friendly services or implementing socially-responsible service models. ESG-E SI is critical to tourism businesses it can significantly impact the industry's sustainability. Environmental concerns like climate change, waste management and conservation are particularly relevant to tourism businesses. Also, social considerations, including human rights, labour practices and community engagement are essential and off course, governance considerations, such as transparency, accountability and stakeholder engagement are critical to ensuring that tourism businesses operate responsibly.

Eja et al. (2019) maintained that the environmental dimension of ESG focuses on conserving natural resources, reducing waste and pollution and promoting eco-friendly practices. The social dimension explores impact of tourism on local communities, including cultural heritage preservation, community engagement and fair labor practices; while the governance dimension examines the role of transparency, accountability and stakeholder engagement in promoting tourism sustainability.

Leveraging ESG-E SI for SBG in the tourism industry in Nigeria, involves integrating ESG considerations into service innovation strategies to drive SBG (Metilelu et al., 2022). This approach recognizes that the tourism industry has a significant impact on the environment, local communities and the economy, and that ESG considerations are essential for long-term sustainability (FMCTNO, 2019).

One key aspect of ESG-E SI is the development of eco-friendly products (Hall, 2019). For example, tourism businesses in Rivers State can introduce eco-tourism packages that promote conservation and sustainability, such as bird-watching tours, nature walks and wildlife conservation programmes (Seetanah et al., 2011). These products not only provide unique experience for tourists but also support the conservation of natural resources and promote sustainable tourism practices.

Another important aspect of ESG-E SI is the incorporation of social considerations into service design and delivery (Olumide et al., 2023). Tourism businesses in Rivers State can develop products that promote social inclusion, cultural heritage preservation and community engagement (Hall, 2019). For example, tourism businesses can partner with local communities to develop cultural tours and experiences that promote cross-cultural understanding and appreciation.

Effective governance is also critical to ESG-E SI in the tourism industry in Rivers State. Tourism businesses must adopt transparent and accountable governance practices that promote sustainability and responsible business practices (UNWTO, 2019). This includes adopting policies and procedures

that promote environmental sustainability, social responsibility and transparency, as well as establishing mechanisms for stakeholder engagement and feedback (Metilelu et al., 2022).

By leveraging ESG-E SI, tourism businesses in Rivers State can drive SBG, promote environmental sustainability and support social and economic development (Metilelu et al., 2022). This approach requires a holistic and integrated approach to service that considers the ESG impacts of tourism products. ESG-E SI is inherently multidimensional. In this study, we use sustainable accommodation, cultural heritage preservation (CHP) and transparency practices to represent ESG-E SI.

Sustainable accommodation

Sustainable accommodation is a critical dimension of ESG-E SI and sustainable tourism development, as it provide tourists with comfortable eco-friendly place lodging. Sustainable accommodation incorporate eco-friendly practices like energy-efficient lighting and heating systems, waste reduction and recycling programmes and sustainable water management practices (UNWTO, 2019). For instance, hotels can adopt sustainable practices like using solar panels to generate electricity, reducing water consumption through low-flow showerheads and toilets and implement recycling programmes to reduce waste (World Travel & Tourism Council, 2020). Furthermore, sustainable accommodation also promote cultural heritage preservation by incorporating local architecture, decor, and traditions into their design and operations.

Cultural heritage preservation

CHP is another essential dimension of ESG-E SI and sustainable tourism development that promote cross-cultural understanding and appreciation. CHP involves protecting and promoting cultural heritage sites, traditions and practices like historic monuments/buildings, museums, festivals and traditional crafts (Hall, 2019). For example, tourism businesses can partner with local communities to develop cultural heritage tours and experiences that promote cross-cultural understanding and appreciation. Additionally, tourism businesses can also incorporate local cultural heritage into their operations, such as by using local artwork and decor in their accommodations and restaurants.

Transparency practices

According to Dodds (2019), transparency and accountability are critical dimensions of ESG-E SI and sustainable tourism development that ensure responsible tourism businesses operations. Transparency and accountability involve providing stakeholders with accurate and timely information about a tourism business's operations, including its environmental, social and economic impacts. For instance, tourism businesses can publish annual sustainability reports about their environmental, social, and economic performance. Also, tourism businesses can establish protocols for stakeholders to provide feedback and complaints, such as through online review platforms or customer feedback forms. According to Saarinen (2019), transparency practices are essential to building trust and credibility with stakeholders, including local communities, tourists and investors.

Concept of Sustainable Business Growth

Metilelu and Adeyinka, (2022) opined that SBG refers to strategies and practices that promote long-term economic viability, social responsibility and environmental sustainability. This approach recognizes that SBG and profitability are inextricably linked to social and environmental well-being. SBG involves integrating sustainability practices into business operations, reducing environmental impact and promoting social responsibility. It also means investing in sustainable technologies and innovations like adopting technologies and innovations that promote efficiency. In addition, SBG imply developing sustainable products that meet the needs of customers while minimizing

environmental impact and promoting social responsibility; promoting sustainable supply chain management by working with suppliers that adopt sustainable practices, reducing waste and emissions, and promoting fair labor practices; and fostering a culture of sustainability including, educating and training employees on sustainable practices and encouraging stakeholder engagement (FMCTNO, 2019).

ESG-Embedded Service Innovation and Sustainable Business Growth

Metilelu et al. (2022) examined socio-economic impact of tourism, employing a quantitative research design. The population consisted tourism businesses and local communities in Nigeria, from which a sample of 100 tourism businesses and 300 local community members was drawn using simple random sampling and stratified sampling techniques. The study found that tourism has a significant impact on economic growth and vice versa, and recommends that investors should establish more nature-based recreational centers to meet the demand for sustainable tourism development.

Similarly, Olumide and Metilelu (2023) investigated challenges of sustainable tourism development in Nigeria. This qualitative study involved in-depth interviews with 30 tourism stakeholders, policymakers and local community leaders. The study used snowball sampling technique to select participants. The findings identified poor funding, low publicity, poor quality of personnel, lackluster transport service and security as major constraints to sustainable tourism development in Nigeria, and canvassed for public-private partnerships, increased publicity, improved security and provision of good accommodation and transportation.

In another study, Seetanah et al. (2011) probed tourism infrastructure and economic growth in Mauritius. The study surveyed 150 tourism businesses. The study used simple random sampling and stratified sampling techniques to select participants. The findings revealed that tourism infrastructure has positive impact on local and international tourist arrivals, and concluded that investment in tourism infrastructure can contribute to economic growth.

The foregoing studies show that sustainable tourism practices promote eco-friendly, socially-responsible and economically-viable tourism development. Thus, we hypothesize that:

Ho₁: Sustainable accommodation has no significant influence on SBG in the tourism industry in Rivers State.

Ho₂: Cultural heritage preservation has no significant influence on SBG in the tourism industry in Rivers State.

Ho₃: Transparency practices has no significant influence on SBG in the tourism industry in Rivers State.

Theoretical Framework

This study on ESG-E SI and SBG is anchored on Triple Bottom Line (TBL) Theory (Elkington, 1994), which posits that organizations should focus on people, planet and profit (3Ps) as key dimensions in their operations. People in TBL theory encompasses social impacts of tourism development, including community engagement, cultural heritage preservation and fair labor practices; planet focuses on environmental impacts of tourism development, including conservation of natural resources, reduction of waste and pollution and climate change mitigation; while profit examines the economic impacts of tourism development, including revenue generation, job creation and local economic development.

TBL theory suggests that tourism development initiatives should prioritize needs of local communities (people) by conserving natural resources, protecting the environment (planet), and

generating economic benefits (profit) for stakeholders. By adopting a TBL approach, tourism developers and policymakers can ensure that tourism development is sustainable, equitable and beneficial to all stakeholders. For example, tourism developers could implement sustainable tourism practices such as eco-friendly accommodation, waste reduction and recycling programmes and cultural heritage preservation initiatives. These practices would not only reduce the environmental impact of tourism but also generate economic benefits for local communities and promote cultural exchange.

Furthermore, TBL theory emphasizes the importance of stakeholder engagement and participation in tourism development decision-making processes. This would ensure that needs and concerns of local communities, tourists and businesses are addressed; and that tourism development is aligned with the sustainable development goals. Overall, TBL theory provide a useful framework for understanding the complex relationships between economic, social and environmental factors in sustainable tourism development.

By adopting TBL approach, tourism stakeholders can work towards creating a more sustainable and equitable tourism industry that benefits all. In the context of sustainable tourism development in Rivers State, Nigeria, TBL theory is particularly relevant. The state's tourism industry has the potential to generate significant economic benefits, but it also poses social and environmental challenges. For instance, the development of tourism infrastructure can lead to the displacement of local communities, loss of cultural heritage, and environmental degradation.

Methodology

This study employed a mixed-method research approach, combining both quantitative and qualitative methods to collect and analyze data. The population of the study consisted 120 tourism businesses including recreational centers, hotels, restaurants and amusement gardens/parks in Rivers State (National Bureau of Statistics, 2023). The sample size consisted 92 firms based on Krejcie and Morgan (1970) Table for sample size determination. The simple random sampling technique was used to select the 92 firms. However, a total of 368 subjects made up of 4 staff of each of the 92 tourism firms provided data for the study. Data was collected using a structured questionnaire, which was designed to elicit information on ESG-E SI and SBG. The questionnaire was validated using expert judgment, while its reliability was ascertained using the Cronbach's alpha test. The test of reliability produced coefficients that surpassed the 0.07 threshold established by Nunally (1975). The data generated were analyzed using mean and standard deviation to at the univariate level of analysis, while linear regression was used to test the relationship between dimensions of ESG-E SI and SBG. The Statistical Package for Social Sciences (SPSS) version 25.0 was relied upon for the data analyses.

Result of Findings

Table1: Analyses of responses to items on sustainable accommodation

Items on Sustainable Accommodation	N	Mean	Std. Deviation	Std. Error Mean
Our tourist centre has implemented sustainable accommodations practices to reduce energy consumption.	346	3.85	.477	.031
We adopt energy efficiency measures such as use of LED bulbs, installing solar panels, implementing energy-efficient HVAC systems etc.	346	3.84	.363	.024
Our hotel/resort has reduced water consumption through efficient practices including implementing rainwater harvesting systems, installing low-flow showerheads and toilets.	346	3.81	.473	.031
We have implemented waste reduction and recycling programs in our recreational centre and parks.	346	3.09	.801	.052

Source: SPSS version 25.0 output (2025)

Analysis in Table 1 showed that all questionnaire items have mean score above the criterion mean of 2.50 indicating an acceptance of sustainable accommodation by tourism businesses in Rivers State. In summary, with a grand mean of 3.64, the respondents confirmed that tourism businesses in Rivers State adopt sustainable accommodation.

Table 2: Analyses of Items on Cultural Heritage Preservation

items on Cultural Heritage Preservation	N	Mean	Std. Deviation	Std. Error Mean
Our hotel/resort/parks has implemented cultural heritage preservation practices to promote local culture.	346	3.76	.562	.036
We collaborate with local communities to preserve cultural heritage sites.	346	3.85	.477	.031
Our hotel/resort has incorporated local art and craftsmanship into our design and operations.	346	3.86	.362	.023
We provide training and support to local staff to promote cultural heritage preservation.	346	3.80	.467	.030

Source: SPSS version 25.0 output (2025)

Table 2 showed that all questionnaire items had mean scores surpassing the criterion mean of 2.50 indicating an acceptance that cultural heritage preservation contribute to SBG in the tourism industry in Rivers State. In summary, with a grand mean of 3.81, the respondents confirmed that the cultural heritage preservation contribute to SBG in the tourism industry in Rivers State is to a very high extent.

Table 3: Analyses of Items Transparency Practices

Items Transparency Practices	N	Mean	Std. Deviation	Std. Error Mean
Our hotel/resort/park provides transparent information about our sustainability practices.	346	2.44	.480	.031
We regularly disclose our environmental and social impact to stakeholders.	346	2.23	.417	.027
Our hotel/resort/park has implemented transparent supply chain management practices.	346	2.21	.473	.031
We provide stakeholders with regular updates on our sustainability performance.	346	2.16	.804	.052

Source: SPSS version 25.0 output (2025)

Table 3 showed that all questionnaire items have mean score below the criterion mean of 2.50 indicating rejection or decline on transparency practices in tourism industry in Rivers State. In summary, with a grand mean of 2.26, the respondents confirmed that the impact of transparency practices on SBG in the tourism industry in Rivers State is to a low extent.

Table 4: Influence of sustainable accommodation on sustainable business growth

SBG	B	Beta	t-value	R	R ²	Adjusted R ²	Std. Error	Sig	Hypothesis
SA	.817	.886	29.355	.886 ^a	.785	.784	.028	.000	Rejected

Source: SPSS version 25.0 output (2025)

The results from the linear regression analysis in Table 4 provide support for rejecting the hypotheses that sustainable accommodation has no significant influence on SBG in the tourism industry in Rivers State. The R value of .866 shows that sustainable accommodation has very strong relationship with SBG; while the coefficient of determination ($R^2 = .785$) indicates that about 79% of SBG in the tourism industry in Rivers State is due to sustainable accommodation.

Table 5: Influence of cultural heritage preservation on sustainable business growth

SBG	B	Beta	t-value	R	R ²	Adjusted R ²	Std. Error	Sig	Hypothesis
CHP	.764	.799	20.440	.799 ^a	.639	.637	.037	.000	Rejected

Source: SPSS version 25.0 output (2025)

The results from the single linear regression analysis in Table 5 provide support for rejecting the hypotheses that cultural heritage preservation has not significant influence on SBG. The R value of .799 suggests a strong relationship between cultural heritage preservation and SBG; while the coefficient of determination ($R^2 = .637$) indicates that cultural heritage preservation accounts for about 64% change in SBG in the tourism industry in Rivers State.

Table 6: Influence of transparency practices on sustainable business growth

SBG	B	Beta	t-value	R	R ²	Adjusted R ²	Std. Error	Sig	Hypothesis
TP	.778	.861	26.034	.861 ^a	.742	.741	.030	.000	Rejected

Source: SPSS version 25.0 output (2025)

The results from the linear regression analysis in Table 6 provide support for rejecting the hypotheses that transparency practices do not significantly influence SBG in the tourism industry in Rivers State. The R value of .861 shows that transparency practices has very strong relationship with SBG, while the coefficient of determination ($R^2 = .742$) indicates that about 74% of change in SBG in the tourism industry in Rivers State is attributable to transparency practices.

Discussion of Findings

This study examined the influence of ESG-E SI on SBG in the tourism industry in Rivers State. The empirical tests conducted in the study showed that ESG-E SI has strong, positive and statistically significant influence on SBG in the tourism industry in Rivers State. These findings support reports of previous studies that ESG practices foster natural resource conservation and waste and pollution reduction (Eja et al., 2019).

The current findings also support the view that hotels that implement sustainable practices such as energy-efficient lighting and water conservation measures experienced significant cost savings and improved brand reputation (Bohdanowicz et al., 2013). Our findings also support the findings of Metilelu et al. (2022) that sustainable tourism has significant impact on economic growth and vice versa.

In addition, our findings corroborate that of Seetanah et al. (2021) that tourism infrastructure has positive impact on local and international tourist arrivals; McKercher and du Cros (2017) that tourism businesses that incorporate cultural heritage preservation practices into their operations experienced increased customer satisfaction and loyalty; and Sampaio et al. (2019) that tourism businesses that practiced transparency in their operations experienced improved customer trust and loyalty.

Conclusion and Recommendations

This study investigated the influence of ESG-E SI on SBG in the tourism industry in Rivers State, Nigeria. The study's findings suggest that ESG-E SI significantly influences SBG in the tourism industry in Rivers State. The study's results show that sustainable accommodation, cultural heritage preservation, and transparency are significant influencers of SBG in the tourism industry in Rivers State. Thus, the study concludes that ESG-E SI in term of sustainable accommodation, cultural heritage preservation, and transparency informs SBG in the tourism industry in Rivers State, and recommends as follows:

1. Tourism businesses in Rivers State that seek SBG should adopt sustainable accommodation, such as energy-efficient lighting and heating systems, waste reduction and recycling programmes, and sustainable water management practices. This can be achieved by investing in green technologies, implementing sustainable operations and maintenance practices, and promoting sustainable behaviors among guests.
2. Policymakers and tourism stakeholders in Rivers State should prioritize cultural heritage preservation by protecting and promoting cultural heritage sites, traditions, and practices. This can be achieved by developing and implementing cultural heritage preservation policies, providing funding and support for cultural heritage preservation initiatives, and promoting cultural heritage preservation practices among tourism businesses and local communities.
3. Tourism businesses in Rivers State should prioritize transparency by providing accurate and timely information about their operations, including their environmental, social, and economic impacts. This can be achieved by publishing annual sustainability reports, establishing mechanisms for stakeholder feedback and complaints, and promoting transparent practices throughout the supply chain.

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