

TECHNOLOGICAL INNOVATION AND CORPORATE SUSTAINABILITY OF FOUR STAR HOTELS IN RIVERS STATE

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ABSTRACT

This study investigated the relationship between technological innovation and corporate sustainability of four star hotels in Rivers State. Specifically, the objectives of the study were to ascertain the extent to which technological innovation relate with corporate sustainability, of four star hotels in Rivers State. The population of the study consists of 8 four star hotels firms in Rivers State. The study was a consensus study and 33 respondents provided primary data that were used to ascertain the relationship between the variables. The primary data were collected through a questionnaire that was designed in Likert scale of very low extent to very high extent. 3 research hypotheses were tested using Pearson Product Moment Correlation with the aid of Statistical Package for Social Sciences to establish the relationships between the variables. Results of the test showed that technological innovation has significant and positive relationships with collaboration, corporate governance and continuous improvement– the measures of corporate sustainability. Therefore, the study concluded that that technological innovation positively relates with corporate sustainability of four star hotels in Rivers State. Therefore, the study recommends that managers of four star hotels in Rivers State should leverage on technological innovation to improve their corporate sustainability.

INTRODUCTION

A comprehensive knowledge of hotels is essential for any company that provides or plans to provide services to the hospitality industry. This comprehension is highly significant as hotels are rapidly increasing their revenue, attracting investors, and serving as channels for job creation (Backman, Klaesson, & Öner, 2017). Hotels continuously analyse the evolving business environment and the factors that drive these changes in order to establish customer relationships and achieve long-term corporate sustainability. Corporate sustainability refers to the aptitude of a company to promote the sustainable development of the organisation by considering the environmental, social, economic, and ecological impacts of the hospitality industry.

Corporate sustainability incorporates the examination of the current state of society and its prevailing patterns. Given the likelihood of increasingly negative social and environmental situations in the future, corporate sustainability plays a crucial role in redefining our understanding of social equity, environmental justice, and business ethics (Elkington, 1999). Also, corporate sustainability ensures the long-term viability of the company, taking into account the needs of the shareholders, who are the future marketing managers (Bansal & Desjardine, 2014). Again, corporate sustainability refers to the obligation of companies to not only generate income, but also to actively promote beneficial outcomes in the social and environmental aspects of their operations (Costa, Curi, Bandeira, Ferreira, Tomé, Joaquim, Santos, Góis, Meira, Azevedo, et al., 2022). Therefore, it is necessary to develop, attain, sustain, and execute a product that is focused on delivering value and satisfying the demands and desires of the intended market of four star hotels.

Four star hotels are typically known for offering a high level of comfort and quality and the often feature well-appointed rooms, a range of amenities such as on-site dining, fitness centers, and business services. These services are usually attentive and professional. Again, four star hotels encounter intense competition within the market. Therefore, it is crucial for them to differentiate themselves from their rivals by consistently enhancing their product design, making changes, and introducing innovative features (Backman, Klaesson, & Öner, 2017). Therefore, it is imperative for these four-star hotels to uphold sustainability. Sustainability refers to the ability to create, analyse, and maintain adaptive capabilities (Silvestre, Antunes, & Filho, 2018). Again, sustainability in the business environment should be inherent in three aspects, which collectively foster economic and social progress without causing harm to the environment (Elkington, 1999). Furthermore, anecdotal research indicates that sustainability activities may simply be seen as a necessary expense in conducting business due to imitation (Ioannou & Serafeim, 2021). Thus, to reduce these necessary expense in conducting business due to imitation there is need for technological innovation.

Technological innovation in the industry refers to the development of a new or improved product or method that has distinct technological features compared to previous versions. Technological innovation is the board's tasks and actions (Baumgartner & Rauter, 2010). Technologies play a crucial role in helping hospitality firms achieve their ultimate goal of sustainability. Furthermore, the rate at which technological innovation, market dynamics, social transformations, and economic shifts are occurring is increasing. Technology is the most influential and impactful force that shapes people's lives. There have been remarkable advancements in the discovery of penicillin, the development of open-heart surgery, and the creation of the birth control pill as a result of Technology. Every technology has significant long-term repercussions that are not always predictable. These predictable features of technologies enable a wide range of innovations, including mini computers, mobile phones, and making hotel reservations online. Therefore, new items should be primarily influenced by technological innovations, with great consideration for the market to serve. The market to serve, need identification, customer satisfaction among others is the primary responsibility of marketing and to establish a market and effectively promote the things that are manufactured. This perspective is characterised by the extensive utilisation of technology and the implementation of streamlined operational modifications. By conducting extensive research and development activities and implementing efficient operations, we are able to produce high-quality products that possess inherent competitive advantages in the market with a view to maintain corporate sustainability.

Corporate sustainability is assessed based on teamwork, collaborations and continuous improvement. Collaboration is the act of partnering with individuals or organisations to create something. Continuous improvement is a lean methodology that aims to optimise workflows. The arena of literature contains numerous studies that seek to establish connections between technical innovation and corporate sustainability. For instance, Malerba and Orsenigo (1997) conducted research on technology regimes and sectorial patterns of creative activities. Diaconu (2011) conducted a study on technological innovation, exploring its concept, method, typology, and repercussions in the economy. Once again, Backman, Klaesson, and Öner (2017) conducted a study on innovation inside firms or locations in the hotel business. Adeyeye (2014) examined the influence of technological innovation on the performance of organisations. Nevertheless, none of these studies made an effort to establish a connection between technical innovation and corporate sustainability. The main objective of this study is to establish the correlation between Technological innovation and corporate sustainability in four star hotels in Rivers State's. This will be achieved by evaluating collaboration, corporate control, and continuous improvement as indicators of corporate sustainability.

- H₀₁:** Technological innovation does not significantly relate with collaboration corporate sustainability of four star hotels in Rivers State
- H₀₂:** Technological innovation does not significantly relate with Corporate Governance of corporate sustainability of four star hotels in Rivers State.
- H₀₃:** Technological innovation does not significantly relate with continuous improvement of corporate sustainability of four star hotels in Rivers State

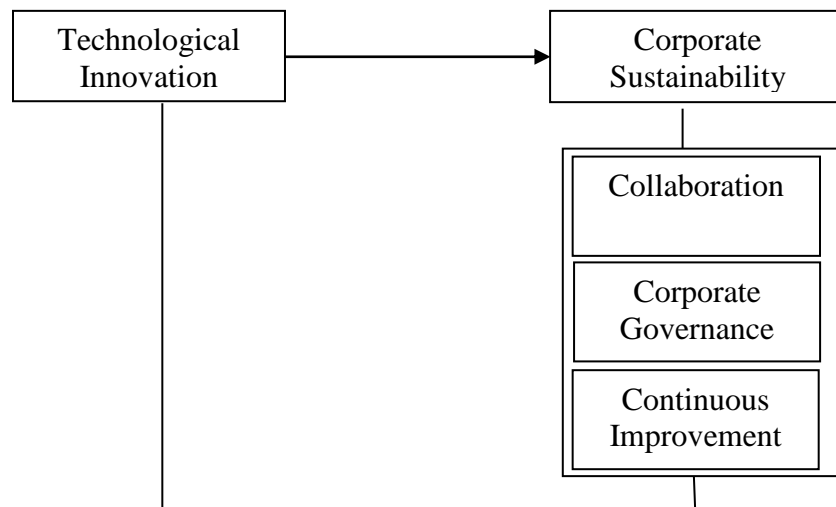


Figure 1.1:Conceptual framework of the relationship between technological innovation and corporate sustainability of four star hotels in Rivers State

Source: Researchers conceptualization (2024)

THEORETICAL FOUNDATION\DIFFUSION OF INNOVATIONS THEORY

The diffusion of innovation hypothesis posits that all novel approaches are beneficial and efficient, and hence should be embraced and implemented. The theory aims to comprehend the mechanism by which knowledge is transmitted to individuals or entities over a period of time, potentially resulting in the adoption of an innovation (Bass, 1969; Rogers, 1983). The most proficient managers do not passively wait for innovations to come to them; instead, they actively pursue innovations and other novel solutions that could assist them in resolving their issues or enhancing their performance. Diffusion refers to the transmission of an innovation through communication channels over a period of time to individuals within a social system. Communication entails individuals exchanging and producing knowledge that leads to mutual understanding on innovation. When discussing innovations, communication typically involves a two-way exchange of information between individuals, rather than a one-way transmission from a sender to a receiver (Rogers & Kincaid, 1981).

Corporate sustainability allows four-star hotels to differentiate themselves from fierce competition in established industries and establish a new market niche for successful expansion. Many hospitality firms are engaging in imitation and benchmarking of one another. In order to establish corporate sustainability, hospitality organisations need to transition away from the conventional techniques prevalent in the industry. This aligns with the premise of the diffusion of innovation, which posits that all new approaches are beneficial and effective, and hence should be accepted. Consequently, it was suitable to utilise the dynamic capacities theory as a foundation for this research. The study variables are depicted in the conceptual framework presented below. The dimensions of product innovation include product design, technological innovation, and development process. The predictor variables for corporate sustainability are measured through collaboration, corporate governance, and continuous improvement. Hence, it was fitting to employ the diffusion of innovation theory as the foundation for this investigation.

THE CONCEPT OF TECHNOLOGICAL INNOVATION (TI)

Technological innovation is a component of the broader field of innovation. The focus of innovation is on how to effectively incorporate it into products, services, and processes new improvement to already existing ideas or conceptions. Technological innovation plays a fundamental role in research, design, development, manufacturing, and marketing and it involves the development and creation of novel solutions based on scientific and technological knowledge. It pertains to an actual or imagined necessity. Again, technological innovation refers to the process of transforming a solution into a practical and feasible product. The objective is to effectively present and provide an entity to fulfill an actual or projected requirement. Technological innovation is a multifaceted process consisting of various stages, each requiring particular focuses and management tactics for sustainable development.

The current widespread focus of sustainable development is compelling four star hotels to conduct self-assessments in order to determine their position in terms of marketing sustainability. Particularly, they are seeking to identify technological innovations that will help them achieve their objectives. Technology is the practical utilisation of scientific knowledge demonstrated in various industries. Technological advancements arise from improvements in technical processes that boost the productivity and efficacy of marketing operations. Innovation is the process of taking an invention and using it in a way that can be bought and sold. This happens when the invention is integrated into economic and social activities (Malerba & Orsenigo, 1997).

Innovation facilitates economic growth by enabling industrial firms to acquire technological advancements, leading to enhanced productivity and competitiveness (Shane, 2001). Technological innovation enhances transparency in all activities to improve relationships with stakeholders (Baumgartner & Rauter, 2010). Thus, providing comprehensive analysis of pertinent data; adhering to regulations governing corporate control in stock markets

Technological innovation offers organisations the chance to differentiate themselves from intense competition within their industry and establish a unique position for themselves. In order for an organisation to achieve wellness and create an entrepreneurial marketing paradigm, it must adopt a *modus operandi* that allows it to be strong, agile, and adaptable in a dynamic environment. Thus, it seemed fitting to employ the dynamic capacities theory as a foundation for this investigation. Technological advancements, the replacement or adjustment of non-renewable products, efficient management, and the optimisation of environmental performance can potentially reduce the environmental impact of industrial production (Srebrenkoska, Fidancevska, Jovanov & Angusheva, 2013). The advancement of technology has the potential to greatly benefit poor countries, particularly in the context of four-star hotels. Furthermore, technology is expected to have a significant impact on shaping global events.

Technology refers to the use of scientific information in the most optimal manner within the industrial sector. Technology frequently undergoes globalisation, and rivalry in a particular product is typically restricted to a small number of prominent corporations (Mulder, Ferrer & Van Lente, 2011). The duties of technological designers are immense, and as a result, their designs have significant impacts on different parts of our societies, both in the short and long term. Conducting research and development focused on sustainability to minimise the environmental effects of new goods and corporate operations. According to Srebrenkoska, et al (2013) the primary focus of hospitality firms is the development of sustainable technology. These firms aim to achieve a competitive position in the market and prioritise corporate sustainability by formulating a technology strategy.

The three stages together pertain to technical changes. Despite potential disapproval, sustainable development cannot be achieved with a straightforward technological solution. Institutions and systems, as well as personal lives, will need to undergo changes. This is not solely due to the pursuit of answers through a more restrained lifestyle, but also because technology and society consistently develop in tandem. Technological advancements will lead to societal transformations by presenting novel possibilities, while societal transformations will generate fresh demands and circumstances for technology. Technology innovation emphasises a new paradigm that could, among other things, strive to connect existing collaborative efforts both within and beyond the hospitality sector. Technology is a harbinger of business sustainability.

THE CONCEPT OF CORPORATE SUSTAINABILITY

Corporate sustainability encompasses the adoption of socially responsible, ecologically conscious, and economically viable practices in the long run inside a corporation (Akani, et al., 2024). Corporate Sustainability has become increasingly prominent across various industries in the past two decades. The perception of sustainability may differ. Corporate sustainability offers a substantial strategic advantage. Strategic advantage pertains to the capacity of stakeholders to exert influence on how others perceive the company (Akani, et al, 2024). The notion was initially introduced in the field of general management in 1995 by Gladwin, Kennelly, and Krause. They

defined sustainable development as a method of attaining human growth in a comprehensive, interconnected, fair, cautious, and secure manner. Baumgartner and Ebner (2010) argue that corporate sustainability has long-term beneficial impacts on society. A sustainable organisation is an ethical and genuinely profitable entity that implements suitable frameworks and strategies to effectively accomplish the objectives set at the economic, environmental, and social levels. Corporate sustainability allows organisations to implement sustainable practices in order to take advantage of a valuable industrial position that has not been completely utilised or has been underutilised (Akani et al, 2024).

Sustainability refers to the ability to create, analyse, and maintain adaptive capabilities (Silvestre, Antunes, & Filho, 2018). A sustainable organisation is an institution that is both ethical and financially successful. It employs appropriate frameworks and tactics to efficiently achieve its goals across economic, environmental, and social dimensions (Akani, et al, 2024). Several endeavours have been made to establish a more exact definition of sustainability within the realm of business. The concept of sustainability encompasses a broad spectrum of actions that span the environmental, social, and governance domains. These actions can vary significantly across industries, as the same action may provide a competitive advantage in certain industries but not in others (Ioannou & Serafeim, 2021).

Corporate sustainability hinges on the capacity to engage in perpetual and timeless trading, and will be compromised by short-term thinking if strategic management neglects the element of time. Corporate sustainability is a marketing approach that seeks to enhance the worth of a product and mitigate risks linked to economic, environmental, and social elements (Akani et al, 2024). Time was regarded as a crucial factor in differentiating sustainability from other ideas like corporate social responsibility. Herein, corporate sustainability refers to the development that fulfills the current requirements while ensuring that future generations can accomplish their own needs without any hindrance.

Collaboration

Collaboration is the act of individuals, groups, or companies joining forces in a partnership to create, oversee, and exchange information, ideas, and knowledge with the aim of providing a product or service (Akani, et al, 2024). Collaboration is a deliberate and mutually beneficial relationship in which all parties involved work together towards a common outcome or objective (Gülbahar & Madran, 2009). Collaboration can yield advantages such as variations in views, including information, techniques, and problem-solving abilities (Lozano, 2007). cooperation is crucial for organisations - including civil society, corporate, and public sector entities - to contribute to sustainability. However, there has been insufficient study on the various aspects of cooperation, such as its parts, benefits, and obstacles (Lozano, Barreiro-Gen, & Zafar, 2021). Collaboration provides hospitality organisations with added advantages in comparison to functioning as independent entities (Akani, et al, 2024). Collaboration enhances the process of working together in shared programmes and networks to develop new and advanced products and technologies (Baumgartner & Ebner, 2010). Collaboration has a crucial role in facilitating the progress of organisations towards sustainability. It is vital in the development of corporate enterprises that prioritise sustainability (Lozano, Barreiro-Gen, & Zafar, 2021).

Corporate Governance

Corporate governance (CS) refers to the system of rules, practices, and processes by which a company is directed and controlled. It encompasses the relationships between a company's

management, board of directors, shareholders, and others. Corporate governance refers to the framework and processes that guide the direction and management of a corporation. It encompasses the decision-making structure and mechanisms that ensure the organisation operates in line with its objectives and purpose. Corporate Governance pertains to the manner in which a firm is managed and controlled (Das & Mishra, 2020). Corporate governance is the process of creating rules and regulations to govern the management and control of firms. Its purpose is to ensure that investors' resources are managed in a way that maximises profitability and efficiency. Castrillón and Alfonso (2021) conducted a study. Castrillón and Alfonso (2021) argue that the primary objective of effective corporate governance is to enhance the value of the firm and enable those who contribute to its success, whether directly or indirectly, to partake in the value appreciation. It refers to conducting business in accordance with the preferences of the stakeholders (Das & Mishra, 2020).

Corporate governance is the practice of directing and managing companies (Das & Mishra, 2020). Corporate governance refers to the framework and processes by which business corporations are managed and overseen. Corporate governance can be examined through various approaches, including the shareholder value approach, stakeholder approach (pluralist approach), enlightened shareholder approach, and integrated approach. These approaches are useful for studying the concept of corporate governance, which can be influenced by sources such as common and legislative law, best practice codes, and books. Corporate governance is the key in achieving equilibrium between individual and societal objectives, as well as economic and social objectives. The field of corporate governance has been supported by various theories, with the agency theory being the most commonly utilised in research. Corporate governance policies are crucial for establishing and preserving public trust and confidence in the star hotel, which are vital for the effective operation of the four-star hotel and the whole economy.

Continuous Improvement (CI)

Continuous improvement (CI) is a cultural strategy that prioritises the continuing refinement of all systems and processes within a firm to eliminate inefficiencies (Akani, et al, 2024). The concept of Continuous Improvement emerged in Japan following the conclusion of the Second World War. It was during this time that it began to be employed as a comprehensive approach and philosophy for enhancing performance, rather than being limited to isolated efforts (Cardenas, Monticolo, Muller, & Lhoste, 2021). Continuous improvement is crucial for four-star hotels to maintain competitiveness, retain market share in the global economy, and meet the needs of both external and internal customers. Similarly, in the manufacturing sector, continuous improvement of system processes has become essential. Four-star hotels must continuously develop to be competitive, keep market share in the global economy, and meet the demands of both external and internal consumers (Akani, et al, 2024).

TECHNOLOGICAL INNOVATION AND CORPORATE SUSTAINABILITY

A study by Akani, Ogan, Damian-Okoro, and Ude (2024) investigated the relationship between cross-functional integration and corporate sustainability in hospitality companies located in Rivers State. The study aimed to determine whether cross-functional integration could predict corporate sustainability in four-star hotels in the region. The researchers focused on assessing the correlation between the predictor variable, cross-functional integration, and the corporate sustainability of these hospitality enterprises. The study encompassed a population of eight four-star hotel establishments in Rivers State. Original data were collected from participants across all these hotels to examine the relationship between the variables. The primary data collection tool was a structured questionnaire designed on a five-point Likert scale, ranging from a high extent to a low extent. The study utilized Pearson Product Moment Correlation analysis, employing the

Statistical Package for Social Sciences (SPSS), to analyze the data and test two research hypotheses. The findings revealed that cross-functional integration had significant and positive correlations with collaboration and continual improvement, both of which are key indicators of corporate sustainability. These results suggest that enhancing cross-functional integration within four-star hotels in Rivers State can lead to better collaboration and continual improvement, thereby contributing to the overall sustainability of these hospitality companies

Srebrenkoska, Fidancevska, and Jovanov (2018) examined the correlation between sustainable technology and the natural environment in their research. The development and evaluation of complex, integrated management systems and sustainable development are typically associated with sustainable technology. It is a critical area of emphasis in the field of environmental science and the development of global economies. The primary environmental objectives are the reduction of material and energy inputs and the minimization of waste. The environmental impact of industrial output is not entirely eliminated by the implementation of sustainable technical development and innovations. A critical component that appears to have a substantial influence on the long-term implementation of cleaner production is technological innovation. The incorporation of sustainable technology and cleaner production into the strategies of businesses can improve their environmental performance and lead to the production of environmentally responsible products. Subsequently, this may enhance the organization's market position. Baumgartner and Ebner (2010) conducted a study on business sustainability strategies, with a particular emphasis on sustainability profiles and maturity levels. The purpose of this paper is to mitigate this disparity by developing precise aspect profiles for sustainability plans. In order to effectively accomplish established sustainability objectives, it is necessary to incorporate essential sustainability concerns that are identified in the attributes of various sustainability strategies. Additionally, the report aids organisations that have already pledged to prioritise sustainability in evaluating their effectiveness in executing a particular sustainability strategy. In accordance with the preceding explanations, the overall corporate sustainability of the company will be enhanced by enhancing the efficiency and corporate sustainability of hospitality companies in Port Harcourt.

Eccles, Ioannou, and Serafeim (2014) conducted a study to investigate the impact of corporate sustainability on the operations and performance of organisations. A selection of 180 corporations from the United States was chosen and matched. The research revealed that corporations that voluntarily implemented sustainability policies by 1993, which are referred to as "high sustainability companies," exhibited distinct organisational processes by 2009 in comparison to a similar group of firms that implemented very few of these policies, which are referred to as "low sustainability companies." Furthermore, the boards of directors of these organisations are more likely to have a formal responsibility for sustainability, and the incentives for the compensation of senior executives are more likely to be based on sustainability criteria. Furthermore, organisations that prioritise sustainability are more likely to have well-established procedures for engaging with stakeholders, emphasise long-term objectives, and exhibit greater transparency in the measurement and disclosure of nonfinancial data. Lozano, Barreiro-Gen, and Zafar (2021) conducted a study on the limits to the development of organisational sustainability in the context of cooperation. They created a framework that pinpoints the factors, advantages, and challenges that are linked to this partnership. A survey was developed with the specific objective of analysing the components, advantages, and challenges of collaboration in the context of organisational sustainability. The study received a total of 253 responses. Friedman

tests, correlations, and multivariate statistical analysis were implemented by the researchers to analyse the collected data. The multivariate statistical studies demonstrated that organisations improve their collaboration based on two distinct criteria: business-oriented and society-oriented. The research revealed a framework for organisational sustainability cooperation that is contingent upon a variety of elements, benefits, and issues that arise from collaborative endeavours. This framework has the potential to help organisations understand and improve collaboration, thereby maximising benefits and reducing obstacles. Also, Silvestre, Antunes, and Filho (2018) investigated the typology of corporate sustainability, identifying factors that drive sustainability and promote its implementation in businesses. Their study highlighted the lack of diversity in expressions related to corporate sustainability and proposed a new typology. They developed a framework for corporate sustainability by analyzing the factors that drive it and the interactive elements within its context. The study outlined various sustainable practices adopted by organizations and the corresponding levels of corporate sustainability, potentially leading to the creation of a new classification framework.

METHODOLOGY

The present study employs an explanatory research design. Explanatory research aims to elucidate the relationship between two variables, as is the case in the present study. Explanatory research explores various issues, such as the nature of the link between two variables and the theoretical model that could be constructed and examined to clarify the correlation (Lomax, 2007). The researcher would not modify or tamper with the study variables. The survey encompasses a total of eight (8) four-star hotels located in Rivers State. Nevertheless, each of these hotels will receive five copies of the questionnaires. Consequently, the respondents consist of 40 staff members from each hotel, including General Managers, Administrative Managers, Marketing Managers, Food and Beverage Managers, and Supervisors. Due to the limited population, the study was conducted as a consensus study. This study utilised primary data to address the research challenge. The respondents were surveyed using a structured questionnaire to collect primary data. The questionnaire consisted of a Likert scale with five points, ranging from "Very high extent (VHE)" to "No extent (NE)". The survey was conducted as a cross-sectional study. Reliability refers to the extent to which the findings acquired from an investigation remain consistent and stable over a period of time. Objectivity refers to the extent to which the investigator minimizes any sort of prejudice, ensuring that all human and subjective inclinations are truly eradicated. By adopting the positivist paradigm in this study, it is not possible to encompass all forms of human and subjective thoughts.

Table 3.1 Reliability Test - Cronbach's Alpha Analysis

S/N	Variables	Number of Items	Cronbach's Alpha Coefficients
1	Technological Innovation	4	0.738
4	Collaboration	4	0.899
5	Corporate Governance	4	0.910
6	Continuous Improvement	4	0.829

Source: SPSS Output form field data

The Cronbach's alpha analysis in Table 3.1 indicated that all variables in the study exhibited strong Cronbach's Alpha coefficients. This is evidence that demonstrates the presence of inter-item consistency among the variables in the study.

Ho₁: Technological innovation does not significantly relate with collaboration corporate sustainability of four star hotels in Rivers State

Ha₁: Technological innovation significantly relate with collaboration corporate sustainability of four star hotels in Rivers State

Table 4.10: Relationship between technological innovation and collaboration of four star hotels in Rivers State

		Technological innovation	Collaboration
Technological innovation	Pearson Correlation	1	.797**
	Sig. (2-tailed)		.000
	N	33	33
Collaboration	Pearson Correlation	.797**	1
	Sig. (2-tailed)	.000	
	N	33	33

** . Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS output from field survey, 2022

Table 4.10 indicates that there is a positive, strong, and significant association between technical innovation and collaboration. This is supported by the correlation coefficient ($r = 0.797$) and the probability value ($p = 0.000 < 0.05$), with a sample size of 33 ($N = 33$). Thus, the researcher refutes the null hypothesis that posits no significant relationship between technological innovation and collaboration among hospitality enterprises in Port Harcourt.

Ho₂: Technological innovation does not significantly relate with Corporate Governance of corporate sustainability of four star hotels in Rivers State.

Ha₂: Technological innovation significantly relate with Corporate Governance of corporate sustainability of four star hotels in Rivers State

Table 4.11: Relationship between Technological Innovation and Corporate Governance of four star hotels in Rivers State

		Technological Innovation	Continuous improvement
Technological innovation	Pearson Correlation	1	.866**
	Sig. (2-tailed)		.000
	N	33	33
Corporate Governance	Pearson Correlation	.866**	1
	Sig. (2-tailed)	.000	
	N	33	33

** . Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS output from field survey, 2024

Table 4.11 indicates that there is a positive and extremely strong association between Technological innovation and customer corporate governance. The correlation coefficient is 0.866, and the probability value is 0.000, which is statistically significant ($r = 0.866$, $N = 33$, $p = 0.000 < 0.05$). Thus, the researcher refutes the null hypothesis that posits no significant relationship between technological innovation and continuous improvement of four-star hotels in Rivers State.

H₀₃: Technological innovation does not significantly relate with continuous improvement of corporate sustainability of four star hotels in Rivers State

H_{a3}: Technological innovation significantly relate with continuous improvement of corporate sustainability of four star hotels in Rivers State

Table 4.12: Relationship between technological innovation and continuous improvement of four star hotels in Rivers State

		Technological innovation	Continuous improvement
Technological innovation	Pearson Correlation	1	.851**
	Sig. (2-tailed)		.000
	N	33	33
Continuous improvement	Pearson Correlation	.851**	1
	Sig. (2-tailed)	.000	
	N	33	33

** . Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS output from field survey, 2024

The SPSS output in Table 4.21 indicates that the correlation coefficient between technological innovation and continuous improvement is 0.851, which suggests a positive and extremely strong link. Additionally, the probability value of 0.000 indicates that this association is statistically significant ($r = 0.851$, $N = 33$, $p = 0.000 < 0.05$). Thus, the researcher refutes the null hypothesis

that posits no significant correlation between technical innovation and the continual improvement of four-star hotels in Rivers State.

DISCUSSION OF FINDINGS

The analysis revealed a favourable, strong, and significant link ($r = 0.797$, $N = 33$, $p = 0.000 < 0.05$) between technical innovation and teamwork. Thus, the researcher refutes the null hypothesis that posits no significant relationship between technological innovation and collaboration among four-star hotels in Rivers State. Moreover, the findings indicated that there is a positive, very robust, and statistically significant correlation ($r = 0.866$, $N = 33$, $p = 0.000 < 0.05$) between continuous improvement and corporate governance. Consequently, the researcher refutes the null hypothesis that posits no significant correlation between technological innovation and continuous improvement in four-star hotels in Rivers State. Similarly, the research revealed a favourable, highly robust, and statistically significant link ($r = 0.851$, $N = 33$, $p = 0.000 < 0.05$) between technological innovation and continuous improvement. Thus, the researcher refutes the null hypothesis that posits no significant relationship between technical innovation and continual improvement of four-star hotels in Rivers State.

These findings are consistent with the results of earlier empirical research that were analysed. Relating to the measures of corporate sustainability, key sustainability issues were determined, which have to be implemented in order to reach defined sustainability goals efficiently. Therefore, it is asserted technological innovation relates with corporate sustainability which in line with previous studies like that (Akani, Ogan, Damian-Okoro & Ude2024; Srebrenkoska, Fidancevska, & Jovanov, 2018; Eccles, Ioannou, & Serafeim, 2014; Lozano, Barreiro-Gen, & Zafar, 2021; Silvestre, Antunes, & Filho, 2018).

CONCLUSION

In view of the findings of this study, will improve the existing body of literature on technological innovation and corporate sustainability and will improved the assisting knowledge of researchers and students in this area of study. The study concludes that technological innovation relates with corporate sustainability of four star hotels in Rivers State.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations are made:

- i. Four star hotels in Rivers State should use technological innovation in terms of product innovation, market innovation, and product design that will improve corporate sustainability of four star hotels in Rivers State.
- ii. Management of four star hotels in Rivers State should collaborate to enhance corporate sustainability of four star hotels in Rivers State
- iii. Four star hotels should be maintain corporate governance to heighten corporate sustainability in term of partnership, networking and information sharing of four star hotels in Rivers State
- iv. Management four star hotels should always work with other firms to create synergy to sustain corporate sustainability of four star hotels in Rivers State

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