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Implementation of sustainable business practices for long-term value creation: Challenges and advancement

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Citation: Iliemena-Ifeanyi, R. O., & Amedu, M. J. (2025). Implementation of sustainable business practices for long-term value creation: Challenges and advancement. *European Journal of Sustainable Development Research*, *9*(3), em0291. https://doi.org/10.29333/ejosdr/16333

ARTICLE INFO	ABSTRACT
Received: 03 Jul. 2023 Accepted: 29 May 2024	Purpose: The aim is to evaluate level of challenges encountered by firms in implementing sustainable business practices, their dimensions, and how those challenges can be combated for long-term value creation.
	Motivation: The pursuit of sustainable development goals (SDGs) has recently changed how businesses are conducted and shifted organizational focus from wealth maximization to value maximization. Now, definition of a successful business is linked to its ability to create long-term value. This pursuit has been reported to yield a different result level over years, which could be due to some challenges that may not be found in annual reports.
	Methodology: As a case study, this study focuses on four leading oil and gas firms in Nigeria, with 20 respondents drawn from each company, making a sample of 80 respondents. Descriptive statistics were used to analyze the primary data gathered, which were further subjected to empirical testing using the Z-test technique.
	Findings: Evidence revealed significant and low challenges in implementing sustainable business practices for long-term value creation. Results from this study also show three basic challenges in implementing sustainable business practices in West Africa: instability challenges, which are mostly external, structural challenges, which are mostly internal, and governance challenges, which are perceived as both internal and external.
	Research implications: Several avenues have been suggested for future studies as a follow-up on this study, including conducting a study to identify extent to which each of challenges identified in this research affects sustainability pursuit and long-term value creation within or outside oil and gas industry and across countries.
	Practical implications: Outcome of this study serves to develop sustainable business practices, policies, and strategies by enhancing an understanding of challenges in implementation and offering advancement options.
	Social implications: The conceptualization provided in this study informs government and international policymakers on the appropriateness of existing governance models for the attainment of sustainable development, the firm-level limitations and areas to focus policy emphasis that would help firms achieve long-term value creation for sustainable development.
	Originality/value: This study is one of the first contemporary studies to evaluate the firm-level challenges to sustainable development and long-term value creation in sub-Saharan Africa. In its uniqueness, this study addresses the challenges identified by offering suggestions for advancement. Also, the focus on oil and gas firms presents a "worst-case scenario" of the implementation challenges of sustainable business practices.
	Keywords: economic practices, social practices, economic practices, SDG, value creation, oil companies' sustainability

INTRODUCTION

In recent decades, corporate activities have been widely recognized to cause significant environmental damage, especially in the least developed economies such as Nigeria, where regulations may be lacking. This has led to various social and ecological problems with detrimental environmental effects, especially in oil-producing countries. Some of the impacts identified include habitat loss, ecological loss, climate change, increased poverty, decline in life expectancy, etc. These activities led to the intervention of global bodies such as the United Nations, which resulted in global goals, including the sustainable development goals (SDGs) and their predecessors, the millennium development goals. This changed the focus of businesses from profit maximization to sustainable development, which emphasizes long-term value creation through appropriate consideration for society and the

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wider business environment. As a result, sustainable business practices have gained popularity over the years as one of the fastest ways to achieve sustainability. However, there is yet to be a universally accepted definition of a sustainable business. Still, some previous studies have labelled it as a business that is "economically viable, socially responsible and environmentally friendly" (Bocken et al., 2014; Daood & Menghwar, 2017; Iliemena, 2020). From another perspective, Bansal and Desjardins (2014) view it as an organization that can manage its multiple trade-offs in strategic decisionmaking by considering each business's short-term and longterm impacts. In his recent study, Wangchuk (2021) stated that business agendas and decisions revolving around sustainable practices still need to be improved. None of the recent literature has attempted to highlight the challenges that are believed to be internal. An outdated study by Schick et al. (2002) as cited in Wangchuk (2021) also highlights that "the challenge in adopting sustainable practice by companies is the lack of organized information." Much research has been done since 2002, and management knows much more than before; therefore, today's focus is on sustainable business performance and long-term value creation. This study examines the challenges of implementing sustainable business practices in West Africa (Nigeria) to create long-term value. By analyzing the facts, the study seeks to understand the barriers to promoting sustainability in region's business environment.

LITERATURE REVIEW

Sustainable Business Practices & Value Creation

Sustainable business practices are the activities that companies are expected to undertake to create value for sustainable development. World Commission on Environment and Development (WCED, 1987) defines sustainable development as "meeting the needs of the present without compromising the ability of future generations to meet their own needs." Sustainable business practices are the policies and procedures that a company uses to reduce the impact of its operations on the environment, increase its social impact and maximize long-term value for its stakeholders. For a company to survive in the future, management must implement strategies, make business decisions and manage company resources in a way that causes little or no harm to society (Iliemena et al., 2022a, 2022b). This emphasizes the concept of sustainability, which should be at the center of management to create both short-term and long-term value. Sustainability in business management means that the company's objectives include environmental, social, and economic well-being. Bansal and Desjardins (2014) consider corporate sustainability as "the ability of companies to meet their short-term financial needs without jeopardizing their ability (or that of others) to meet their future needs." In line with this, Karan (2019) has suggested in his concept of sustainable performance that sustainable business practices are those business activities that promote at least environmental, economic and social values. It is no longer a question of whether a company must integrate sustainability into its business practices and performance management system. Long-term value is created when organizations consider sustainability in policy and strategy formulation, risk management based on societal developments, governance and other internal and external areas that impact the business. Coalition for Environmentally Responsible Economies has emphasized the principles of sustainable business practices such as sustainable use of natural resources, protection of the biosphere, the wise use of energy, reduction and disposal of waste, marketing of safe products and services, risk mitigation, loss compensation, disclosure, environmental directors and managers, and assessment and auditing. In assessing the challenges of implementing sustainable business practices, this study assumes that the performance of sustainable companies relates to three key performance areas.

Economic practices

These are the activities associated with the flow of capital in and out of the company and their direct and indirect impacts on local and international stakeholders and economic development. Sustainable economic practices considered in this study are renewable energy, water management, technological innovation, business risks and opportunities management, and infrastructure investment. Ecological practices: These are practices that relate to how companies reduce the negative impact of their operations on living and non-living components of the environment. In this study, practices to manage hazardous waste, reduce greenhouse gas (GHG) emissions, control pipeline leaks, manage impacts on biodiversity and control emissions of ozone-depleting substances (ODS) were considered essential.

Social practices

Socially sustainable business practices integrate the general interests of society or the community into business policy. Social practices for long-term value creation revolve around corporate social responsibility performance that benefits stakeholders and future generations. In this study, we have focused on social practices such as community development initiatives, occupational health and safety practices, oil and gas quality control, employee training and equal opportunity employment. As the organizational focus has recently shifted from the profit motive to the value creation objectives, management strives to incorporate these economic, social and environmental practices into its activities. Bowman and Ambrosini (2000) and Iliemena et al (2022a, 2022b) emphasized that a company creates value when it subjects resources to human intervention through processing in order to generate a more developed product or service, which it offers back to society with little or no harm to the society. However, despite improvements over the years, the efforts so far in these regards still need to meet the expected speed in line with SDG 2030 (seven years away from the estimated year of accomplishment). As it is, Africa is the worst hit by the downside of oil and gas activities like air, land and water pollution, general environmental degradation, infrastructural damages, low human-life span, large deposits of hydrocarbon, etc. (Adedapo et al., 2021). This leaves one in doubts of whether previous efforts to create long-term value by addressing these issues from the organizational perspectives yielded expected results and the magnitude of challenges associated with the implementation of sustainable business practices at firm level. However, no empirical study has so far reported firm level challenges in this regard. Also, Schick et al. (2002) as cited in Wangchuk (2021) opines that "the challenges concerning adopting sustainable practices by businesses are the lack of organized information". In the light of the above, this study therefore set-off with the assumption that there is no significant challenge with implementation of sustainable business practices at firm level. Hence, the justification for the null hypothesis below:

H₀. There is no significant challenge in implementing sustainable business practices for long-term value creation.

Stakeholder Theory & Performance Improvement Theory

Stakeholder theory emphasizes concern for the well-being of stakeholders in organizational processes rather than profit maximization. This theory, established by Freeman (1984) as cited in Donaldson and Preston (1995), underpins the relationship between an organization and its stakeholders. The stakeholders of a company are understood as those who can be directly or indirectly (negatively or positively) affected by the company's activities. These include the company's suppliers, employees, customers, management, government, banks, creditors, community, etc. (Iliemena et al., 2023a; 2023b). Stakeholder theory sees a company as having a responsibility to create value for all of its stakeholders, not just its shareholders. It views a successful company as one that can create long-term value for most of its stakeholders. This is in line with the concepts of this study. By applying this theory to sustainable business practices and value creation, companies will achieve long-term sustainability by minimizing the cost of the long-term impact of their operations.

In line with this, performance improvement theory states that a company that cares for its stakeholders will acquire a good reputation and increase its market share, leading to longterm value creation (Iliemena, 2020). Based on this, a company would endeavor to overcome any challenge that may hinder its reputation and market growth. Focusing on a good reputation by implementing a stakeholder-centered management system opens up greater opportunities for the company, helps it reduce marketing costs, attract the best employees, and leads to higher shareholder value (Campbell, 2023; Grunig & Hung, 2002). This emphasizes the importance of good stakeholder relationships for sustainability and long-term value creation.

Empirical Reviews

Previous studies have addressed related concepts, but there must be a gap in understanding companies' specific challenges in implementing sustainable business practices. A notable study by Yin et al. (2023) examined the impact of environmental protection practices on business performance in the circular economy. They reviewed 41 existing literature published between 2005 and 2021 to gain insights into this area. The study results show that the size of the company and the country in which it operates influence the relationship between CE and sustainable business performance. However, this study needs further empirical justification and could be misleading for managerial decision-making. It is also criticized for focusing only on the environmental aspect of sustainable performance. Wangchuk (2021) examined sustainable practices and evaluated their origin, definition, taxonomy, standards, and performance guidelines. The methodology used in their study was the literature review approach using information ratings on a Likert scale as a comparative evaluation of ideas. The results of this study confirmed that more companies have adopted sustainable practices in recent years and that these corporate sustainability agendas and decisions still need to be expanded. This could be due to some internal challenges that necessitate our present study. Saidia et al. (2021) used small and medium-sized enterprises (SMEs) as an example to investigate how strategy at the company level affects value creation. In this study conducted in Africa, the opinions of 689 business owners and managers were collected using a questionnaire. A survey design was chosen for the study, while data analysis was conducted using PLS structural equation modelling. The results show that a company's strategy determines its level of value creation.

Corporate and business-level strategies were the most important factors for value creation. As the study shows, the overall value creation of a company can be achieved if companies actively formulate strategies and measures that focus on the most influential factors. Even though this study recognizes the existence of certain factors with varying degrees of influence, it is criticized for focusing only on corporate strategies. Broccardo and Zicari (2020) conducted a study on the drivers of value creation using a sample of selected SMEs operating in the wine sector in Italy. The data for the study were collected using structured questionnaires to gather primary data from the respondents. The data analysis based on business models revealed, among other things, that corporate sustainability can create value through innovation. The lessons learnt from SMEs may only sometimes be applicable, which poses a challenge for future research. Josefina and Jesus (2018) used an explanatory research methodology to investigate whether social responsibility policies influence value creation for stakeholders (government, employees, and creditors). The method compared the long-term performance of Spanish reporting companies using two different performance metrics (FTSE4 good and IBEX indices). Using a correlated random effects technique for data analysis, the result showed, among other things, that CSR has a significant positive impact on value creation and distribution to determine a negative effect on value creation and distribution for employees.

In contrast, there was no influence on other stakeholders. The negative impact and mixed results concerning the different stakeholders could be due to the measurement index used and the country analyzed. Adams (2017) assessed the complexity of organizational relationships that influence value creation for stakeholders; this the researcher referred to as integrated thinking. The relationships were examined under environmental, social, and governance (ESG) performance metrics, corporate strategies, non-financial reporting and board oversight. A survey research approach was adopted, while primary data were generated using the interview approach. The respondent groups were the board chairmen and non-executive directors of listed companies in Johannesburg and the Australian stock exchanges. The correlation analyses revealed a significant relationship between ethical, governance, and social models, crucial components of sustainable business practices. These factors

Table 1. Response rate

Questionnaire	Frequency (n)	Percentage (%)
Well-filled questionnaire	66	82.5
Invalidly filled questionnaire	14	17.5
Total	80	100

Table 2. Educational level

Educational level	Frequency (n)	Percentage (%)
Doctorate degree	8	12.1
HND/BSc	30	45.5
Master's degree	26	39.4
ND/NCE	2	3.0
Total	66	100

Table 3. Years of work experience

Years of work experience	Frequency (n)	Percentage (%)
Zero to five years	20	30.3
Six to 10 years	16	24.2
11 to 15 years	15	22.7
Above 15 years	15	22.7
Total	66	100

Table 4. Management level

Management level	Frequency (n)	Percentage (%)
Low level	14	21.2
Middle level	35	53.0
Top level	17	25.8
Total	66	100

were instrumental in navigating business complexities and achieving sustainable long-term performance and stakeholder value. However, further research is necessary to explore the challenges of implementing these practices, particularly in underdeveloped economies like Africa, where local regulations may be lacking. We address this gap and provides valuable insights into implementing ESG practices in such regions.

METHOD

This study used a survey design to gain insights into implementing sustainable business practices. Data was collected through online interviews and paper questionnaires from managers, accountants and other key personnel involved. The questionnaire contained structured and unstructured questions to obtain comprehensive responses. Primary data were collected from 80 respondents working in managerial, accounting and other positions in four Nigerian oil and gas companies. A scaling system was used to score the responses, with five representing "very much", four representing "much", three representing "indifferent", two representing "little", and one representing "very little". To assess the significance of the results, the researchers applied the Z-test technique with a threshold of 3.00.

Analysis of Questionnaire Responses

The first section of the research instrument asked the participants to provide their personal data, while the following part contained structured questionnaires addressing different aspects related to the research constructs. The last section of the instrument consisted of two open-ended questions. The analysis of the response rate is presented below:

Table 1 shows the response rate of the survey. A questionnaire was used for the survey, and 80 responses were received. Of these, 66 (82.5%) were considered well-completed, i.e., they were filled in correctly and could be used for the analysis. The remaining 14 (17.5%) were considered invalidly completed, i.e., they had to be completed or contained errors that made them unusable for the analysis.

Table 2 shows the distribution of respondents' education. There were a total of 66 respondents, of whom 8 (12.1%) had a PhD degree, 30 (45.5%) had an HND/BSc degree, 26 (39.4%) had a master's degree, and two (3.0%) had an ND/NCE degree.

Table 3 shows the distribution of the respondents' years of professional experience. There were a total of 66 respondents of which 20 (30.3%) had zero to five years of work experience, 15 (22.7%) had 11 to 15 years of work experience, 16 (24.2%) had six to 10 years of work experience, and 15 (22.7%) had more than 15 years of work experience.

Table 4 shows the distribution of respondents by management level. There were 66 respondents in total, of whom 14 (21.2%) were at the lower management level, 35 (53.0%) were at the middle management level, and 17 (25.8%) were at the upper management level.

Of the total of 66 respondents, 20 respondents (30.3%) stated that they were accountants, 24 respondents (36.4%) indicated that they were managers, and 22 respondents (33.3%) stated that they were neither accountants nor managers (**Table 5**).

Table 5. Job category

Job category	Frequency (n)	Percentage (%)
Accountant	20	30.3
Manager	24	36.4
Neither	22	33.3
Total	66	100.0

Table 6. Tabular breakdown/summary of responses

S/N	Questions	SA	Α	U	D	SD	Μ	Remark
Econ	omic performance practices							
5	Energy efficiency (use of renewable energy) is more costly in practice.	8	28	6	17	7	3.20	Accepted
6	Water management leads to decline in output quality when not properly supervised.	7	20	2	19	18	2.68	Rejected
7	Organizational norms & rules are not aligned to enhance technological innovations towards green economy.	7	14	8	17	20	2.56	Rejected
8	Implicit costs of investments in infrastructure outweigh long-term benefits & value creation.	3	12	10	16	25	2.27	Rejected
Envi	ronmental performance practices							
9	Hazardous waste management is such a hard one to handle due to associated incremental costs or any other reason.	16	21	5	14	10	3.29	Accepted
10	Insufficient institutional arrangements inhibit GHG emission reduction, like carbon dioxide & nitrous oxide.	26	30	4	5	1	4.14	Accepted
11	Inadequate financing jeopardizes Biodiversity impact management.	23	32	4	7	0	4.08	Accepted
12	ODS emission control might not create values to our organization due to certain constraints.	8	13	12	12	21	2.62	Rejected
Socia	al performance practices							
13	Intra- & inter-communal disputes, lack of stakeholder involvement and differences in priorities are part of hindrances to community development initiatives.	25	24	12	3	2	4.02	Accepted
14	Occupational health and safety policies and practices are not so easy to implement.	10	17	7	19	13	2.88	Rejected
15	Good communication between teams & management pose little or no obstacle in oil & gas quality control.	11	26	6	12	11	3.21	Accepted
16	Found opportunity employment does not enhance value maximization due to challenges that							
Mate	M. Moon & CD. Standard deviation							

Note. M: Mean & SD: Standard deviation

Table 7. One sample Z-test technique

Degree of challenges	Test mean	Difference	OBS	Pr(Z > z)
2.7424	3	2576	66	0.0364

Table 6 shows the results of a survey focusing on economic, environmental and social performance practices. To determine the acceptance or rejection of each practice, a mean score of more than 3.00 is categorized as "accepted," while a mean score of less than 3.00 is considered "rejected".

In terms of economic performance, respondents admitted that the use of renewable energy to increase energy efficiency incurs higher costs, which led to its rejection. However, the remaining statements were rejected, suggesting that water management requires adequate monitoring to prevent production quality degradation, that organizational norms and rules do not encourage technological innovation for a green economy, and that the implicit costs of infrastructure investments outweigh their long-term benefits and value creation. In the environmental performance assessment, hazardous waste management was accepted with a mean score of 3.29, mainly due to the challenges and additional costs of handling this waste. Inadequate institutional arrangements that hinder the reduction of GHG emissions and insufficient funding for managing impacts on biodiversity were also accepted, as indicated by mean scores of 4.14 and 4.08, respectively. However, the control of ODS emissions was rejected with a mean score of 2.62, suggesting that it does not add significant value to the organization due to certain limitations. In terms of social performance practices, the mean score for intra- and inter-community disputes, lack of stakeholder involvement and different priorities as part of the barriers to community development initiatives reflects the respondents' belief that intra- and inter-community disputes, lack of stakeholder involvement and different priorities hinder community development initiatives. Implementing labor protection measures and practices was rejected with a mean score of 2.88, indicating that respondents believe this is a challenge to social performance practices. In contrast, respondents generally agree that good communication between teams and management is not a major barrier to quality control in the oil and gas sector. Finally, with a mean score of 2.29, respondents disagreed that equal employment opportunity does not contribute to value maximization due to the challenges involved.

HYPOTHESIS TESTING & RESULTS

 H_0 . There is no significant degree of challenges in implementing sustainable business practices for long-term value creation.

The average response to the questionnaire was compared with the perception that companies must avoid significant challenges when implementing sustainable business practices to create long-term value (**Table** 7). The results showed a mean difference of -.2576, meaning that most respondents agreed there are at least some challenges in this process. These challenges were significant because Pr(|Z|>|z|)=0.0364 is less than 0.05.

S/N	Nature of challenge	Dimension	Advancement
1	Insecurity	External	Respondents reported incidences of kidnap during environmental assessment tours. This can be curtailed by the provision of adequate security around 'troubled regions' and communities by the government. This would also help to reduce pipeline vandalization. Furthermore, firms should try to build proper communication and understanding with the community so they could
			win their trust and confidence which will give an edge in achieving long term value creation.
2	Societal norms	External	It was gathered that there are some communities that do not permit certain sustainable business practices that have been approved for implementation. To resolve this, business organizations should properly understand their operating environment and the societal needs and then articulate these into their business policies and strategies. This will ensure that the policies are in line with societal norms.
3	Conflict of interest	Internal/external	This could have emanated from the differences in objective of managers and the formulated policy on sustainable business practices. This could also emanate from the varied interest of government in imposition of fines and penalties on environmental violation and the objective of management in maintaining certain level of sustainable performance.

Table 8. Instability challenges in implementation of sustainable business practices

Therefore, we rejected the null hypothesis, stating that there are no significant challenges and accepted the alternative hypothesis that there are significant but minor challenges in implementing sustainable business practices for long-term value creation.

DISCUSSION

The finding is that challenges to implementing sustainable business practices for long-term value creation are significant, and few are important. It suggests that organizations can achieve long-term success and value creation through sustainable business practices with relatively few challenges. One reason could be that sustainable business practices are becoming more mainstream and accepted as an important factor for long-term success. In recent years, importance of environmental and social sustainability has been increasingly recognized and companies are increasingly expected to integrate sustainability into their business practices.

As a result, a wealth of resources and tools is available to help companies implement sustainable business practices, contributing to a low level of challenge. Another reason could be that companies are beginning to recognize the benefits of sustainable business practices, not only in terms of improving their environmental and social impact but also in terms of creating long-term value. Sustainable business practices can lead to cost savings, increased efficiency, better brand reputation and improved stakeholder relationships, all of which can contribute to long-term value creation. Companies that adopt sustainable business practices are likely to better adapt to changing market conditions and new trends, further enhancing their long-term value-creation potential.

But it should be noted that there are still challenges in implementing sustainable business practices, particularly for companies just beginning their journey to sustainability or in industries traditionally associated with strong environmental or social impacts, such as oil and gas companies. These challenges include issues related to supply chain management, access to capital, regulatory compliance and stakeholder engagement. Companies also face cultural or behavioral barriers, such as resistance to change or a lack of understanding of benefits of sustainable business practices.

While it is encouraging that challenges to implementing sustainable business practices for long-term value creation are few, companies must remain vigilant to anticipate potential challenges. By taking a proactive and strategic approach to sustainability, companies can gain a competitive advantage and create long-term value for their stakeholders. Most respondents shared their current and past experiences of the challenges hindering sustainable business practices and value creation. According to the responses, challenges that impede sustainable business practices and value creation include poor economic conditions, inconsistency in policy implementation, uncertainty; delays in approvals, excessive government interference, lack of adequate funding, poor communication between policy and administration, organizational and other challenges include inadequate financial resources, corruption and lack of sustainable policies. These challenges can be grouped into instability challenges, structural challenges, and governance challenges. To effectively address these challenges, it is essential to increase investment in cuttingedge technology, foster better communication between stakeholders and show a higher level of consideration for all stakeholders. Survey respondents also provided several valuable recommendations for government agencies, companies and other concerned entities to facilitate the development and implementation of sustainable business policies in organizations. Suggestions included tax incentives for companies that adhere to sustainability standards, the integration of sustainability as a fundamental guiding principle and the active involvement of the community in decision-making. The crucial role of government in policy formulation and implementation, ensuring security and creating a favorable business environment were also key elements in this endeavor. Table 8 shows instability challenges in implementation of sustainable business practices. Table 9 shows structural challenges. Table 10 shows governance challenges.

CONCLUSIONS & RECOMMENDATIONS

The challenges in implementing sustainable business practices for long-term value creation are large and small. From this, we derive the recommendations, as follows:

Table 9. Structural challenges in implementation of sustainable business practices

S/N	Nature of challenge	Dimension	Advancement
Inconsistency in 1 policy implementation	Inconsistency in		The management should properly re-align new policies on sustainable business practices with
	policy	Internal	old ones. Also, all employees involved should be well informed on developments relating to
	implementation		existing policies and changes in processes.
	Lack of adequate		A static percentage of annual earnings should be mapped out annually for the implementation
2	funding	Internal	of sustainable business practices. Implementation levels should be properly in line with the
			available fund to avoid project abandonments which may cause more harm to the stakeholders.

Table 10.	Instability	<i>i</i> challenges	s in im	plementation	of sustainable	business practices
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S/N	Nature of challenge	Dimension	Advancement
1	Poor economic conditions	External	This bothers on high interest rates, low exchange value in foreign exchange market, high level of inflation, high level of tax, high cost of production materials, etc. As companies in Africa, more specifically Nigeria, strive to maintain good sustainability scores, government can help speed up achievement of goals by installing appropriate structure to promote business performances.
2	Delay in approvals	Internal	The processes of authorizing certain actions that would aid sustainable business performances should be moderate enough to prevent unnecessary delays in times of emergencies but prudent enough to curtail excesses.
3	Excessive government interference	External	Government should ensure it does not directly or indirectly impose certain rules on business entities that may affect sustainable business performance.
4	Poor communication between policymakers and administrators	Internal	The management should ensure proper communication of its field men while Board decisions and policies on sustainable business practices should be clearly understandable by every party involved in the implementation.
5	Organizational and management challenges	Internal	This could be related to leadership crises or conflict management. Management should first address fundamental issues in the organization to level the ground for proper delivery of the sustainable business policies, strategies and practices.

- 1. Companies should prioritize sustainable initiatives that positively impact operating cash flow, such as energy efficiency and waste reduction measures, and invest in technologies and practices that increase efficiency and reduce costs.
- 2. Companies should consider implementing a sustainability strategy that balances social and environmental impact with financial stability and regularly monitor and evaluate the impact of their sustainability initiatives on financial performance.
- 3. Corporate management should take a proactive and strategic approach to address the instability and structural and governance challenges that stand in the way of sustainability. This will help companies build a competitive advantage and create long-term value for their stakeholders.

Limitations & Future Research

The evidence presented in this study is from West Africa, and it is important to realize that the results could be different in other parts of Africa and could even give different results compared to Asia, Europe and the Americas. To gain a comprehensive understanding, future research should compare the results in different regions of Africa and even on different continents. The scope of this study was limited to identifying challenges and their dimensions and proposing solutions. Subsequent studies should look more closely at assessing the specific impact of these challenges on sustainability and long-term value creation within the oil and gas industry and beyond across multiple countries.

Author contributions: Both authors have been involved in all stages of this study while preparing the final version. Both authors agreed with the results and conclusions.

Funding: This study was funded by IMA Research Foundation.

Acknowledgements: The authors would like to thank IMA Research Foundation. The authors would also like to thank staff and management of Oando PLC, Total Nig PLC, Conoil PLC, and Ardova PLC.

Ethical statement: The authors stated that the study does not require approval from an ethics committee. The authors stated that the research work did not involve the study of persons or disclosure of sensitive information but reflected opinions of anonymous individuals. Therefore, ethical considerations were not required ab initio. Written informed consents were obtained from the participants.

Declaration of interest: No conflict of interest is declared by the authors.

Data sharing statement: Data supporting the findings and conclusions are available upon request from corresponding author.

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