

Environmental Management Accounting and Stakeholders Perspective: A Theoretical Perspective

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Abstract

This paper focus on the theoretical perspective of environmental management accounting theory and practices and derive into how this principle can impact on the financial performance of companies particularly in an emerging economy. This study will critically examine the various principles on environmental management accounting and how focus on the Nigerian Oil and Gas Companies in Nigeria because these companies are the major causes of environmental pollution and degradation in the Nigeria's Niger Delta Region.

This paper examined existing literature on the environmental management accounting theory discussions, identified the critical features of the theory that are relevant to this paper and robustly discuss the benefits and advantages of adopting environmental management accounting principles in the accounting processes of the strategic assets, oil and gas in Nigeria.

This study spanned the years 1999 through 2023 where these important tools can be vital to the understanding of the various economic cycle and significant instruments for effective decisions regarding investment, monetary and fiscal policy. The periods experienced critical economic shocks such as credit boom, a financial recession, a rebound, and strong economic expansion. Furthermore, the period covered the increase demand by stakeholders of the environmental management accountability of the Oil and Gas Companies.

In this study piece, a systematic literature review (SLR) was performed, and the research revealed crucial environmental management accounting theory analysis to enable this paper identify suitable articles and journals. A SLR was performed using a sample of 100 research articles chosen from a pool of 400 papers obtained from Scopus, Web of Science, Google Scholar, ABS journal and, among other sources.

As a result of the review, the paper recommended that the rigorous implementation of environmental management accounting in the accounting process of Oil and Gas Companies in Nigeria. Finally, authorities should adopt laws and regulations to ensure that Nigerian oil and gas corporations understand the need of incorporating environmental and operational performance into long-term strategic goals.

Keywords: Environmental Management, Accounting Theory, Stakeholder Theory, Energy Market, Energy Economics.

Introduction

The strategic role oil and gas plays in the Nigerian economy can not overemphasized. Since oil and its exploration activities started in Nigeria, the oil revenues have contributed significantly to the development of the Nigerian economy. However, the development of the oil and gas company's exploration activities have significantly impacted on the environment where the exploration activities took place. The Nigeria Government in the 1950s opened the oil sector to foreign companies to explore and as a consequent, due to significant economic circumstances, the Nigeria oil and gas industry grew astronomically. This made Nigeria to be one of the global leaders in the crude oil exploration. When the Nigeria Government realized the flaws in the oil and gas industry, the Nigeria Government established the Nigerian National Petroleum Company (NNPC) in Nigeria. The aim of this establishment was to provide robust regulations and actively participate in the Nigeria oil and gas business. Today, Nigeria is the top producer of oil in Africa with over eighteen (18) operation pipelines with daily average production of 2.3 million barrels at the peak of its production. Nigeria is now ranked eleventh in the world as top oil producer and the petroleum industry account for nine percent of the Nigeria's Gross Domestic Product (GDP) and more than 91 percent of the total export value in Nigeria (Statista, 2023).

This blessing of the black oil brought a lot of problems to the Nigeria economy and as a consequent, impacted on the wellbeing of the Nigerian.

The exploration of oil and gas in Nigeria has led to Oil pipeline vandalism. This involve damage of oil pipes by drilling into the pipelines to steal the products when not properly sealed could lead to oil spillage. This could lead to environmental pollution and destruction on the environment where land for agriculture and water for drinking and other recreation activities will be practically impossible. Furthermore, the busted pipe can come in contact of flammable substances which could lead to fire outbreaks. These fire outbreaks have led to damage and destruction of lives and properties (Bello and Nwaeke 2023)

In addition to the above, this led to Niger-Delta unrest, many groups were involved in the arm struggle against the Nigeria Government and the multi-national companies as a consequent of the damage of the Environment and lack of local community engagements with the activities of the multi-national companies.

This paper is of the opinion that the problems of Niger-Delta unrest, environmental degradation and oil theft were due to the lack of accountability of the multinational companies.

This is because it is crucial to recognize the impact of environmental factors on the economy and stakeholders. The paper of Arong et al (2014) argued about the environmental impact on the stakeholders. They emphasized that the negative environmental impacts can lead to reduced output levels within the economy, loss of earnings and livelihood, lives and properties, the company's abilities to create liabilities thus adversely affects asset values, potentially resulting in future capital expenditure and cash flow challenges.

The oil and gas sector in Nigeria face unique challenges related to managing environmental costs, which can have significant implications for operations and financial performance. Ironkwe and Ordu (2016) argued that many oil and gas companies in Nigeria did not give significant importance to the environment and its contributions to the environmental cost with regards to cleaning the environment. These nonchalant behaviour and rising production costs with the Nigeria context burden on numerous levies and taxes, rising insecurity, and increased operational expenses pose significant challenges within the sector. Olushola (2020) argued that the high level of cost impacted on the financial performance of oil and gas companies and many of those companies did not provide sufficient support for the communities where

their exploration activities are located. Many stakeholders in the communities believed that the environmental degradation is at a great cost to their environment and oil and gas companies did not provide the necessary finance and programme to emulate their sufferings.

Environmental activists have engaged the communities, civil societies, oil and gas companies, governments at all levels on the need for accountability for exploration activities in Nigeria, particularly the Niger-Delta region.

As a consequent, many of the oil and gas Companies operating in the Nigeria, particularly the Niger-Delta have recognized the direct environmental impact on their exploration activities and are increasingly recognizing that their long-term profitability and overall performance can be affected if they do not engage in environmentally friendly activities or address the environmental impacts of their operations. This was argued by Iheduru and Ikechukwu, (2019).

This paper argued that oil and gas companies should embrace and engage in environmental management cost. Furthermore, Bailey (2010) argued that engaging in environmental management cost and accounting activities is crucial for identifying, measuring, reporting, and managing environmental costs and impacts. The study on the relationship between environmental management accounting (EMA) practices and the stakeholders in the Nigeria oil and gas sector has significant implications. It fills a gap in existing literature and enhances understanding in this area.

Furthermore, the adoption of the environmental management accounting (EMA) practices as laws and regulation should ensure that Nigerian oil and gas companies understand the need of incorporating environmental and operational performance into long-term strategic goals.

For policymakers, the findings offer insights to develop effective environmental regulations and policies, promoting the adoption of EMA and enhancing sector sustainability.

Industry practitioners, like oil and gas companies, can benefit from understanding the advantages of EMA adoption. The study highlights its positive impact on financial performance, cost management, risk assessment, and resource allocation, guiding informed decision-making.

Stakeholders, including investors and the public, gain awareness about the importance of environmental management accounting in the oil and gas sector. This helps assess companies' environmental and financial performance, aiding responsible investment decisions.

The study's focus on Nigeria's oil and gas sector provides context-specific insights, enhancing applicability and supporting targeted strategies for sustainable development.

The paper significance lies in its potential to contribute to knowledge, inform policies, guide industry practices, and raise awareness about environmental sustainability's impact in the Nigeria's oil and gas sector. It addresses a crucial research gap and offers valuable insights for sectorial sustainable development.

This paper will critically investigate the following

1. The theoretical relationship between environmental management accounting and the stakeholders
2. Critical understanding of the advantages of the environmental management accounting practices?
3. Does the Nigerian oil and gas corporations understand the need of incorporating environmental and operational performance into long-term strategic goals?
4. Based on the above, proffer the necessary recommendation for the adoption of the environmental management accounting?

The remainder of this paper is structured as follows: The study methodology section was introduced in Section 2. The theoretical perspective was described in part 3, and the empirical literature evaluation to address the study questions are presented in section 4. The conclusion and implications of the paper are presented in Section 5.

2.0 Research Methodology

This paper focused on extensive and comprehensive literature review (SLR). In line with Owoeye (2023) he argued that the systematic literature review method was used to identify, select, and critically assess research to address a specific question. Furthermore, Owoeye (2023) emphasized that the systematic literature review established a well stated approach or plan before conducting the review, with the criteria clearly outlined. The author summarized the primary sources of literature for each of the study areas given using the above identified method. The authors used a sample of 100 research papers to perform an SLR. These articles were chosen from a pool of 400 papers obtained from Google Scholar, Web of Science, and Scopus. The publications were chosen based on the number of citations in Google Scholar and Scopus, as well as the impact factor of the journals in Scopus. The paper is grounded on the stakeholder's theory and environmental management accounting theory and practices. The discussion will critically review environmental management accounting adoption by oil and gas companies and how the stakeholder theory will embed the theory. Based on the synthesis of the established literatures, the paper tends to establish the theoretical relationship between environmental management accounting and the stakeholder theory. After the review, the paper will proffer the necessary recommendation for the adoption of the environmental management accounting.

Due to the theoretical nature of this piece of work, the authors chose relevant papers from 2003 to 2023 which are well cited by many academics globally. The review is then carried out in five steps: locating relevant literature, screening for inclusion, grading the quality, extracting data, and analysing and synthesising the findings. Ultimately, the review is reported on, with a summary of the findings (Xiao & Watson, 2019).

The next section will provide a detailed discussion on the theoretical perspective of this study which was focused on stakeholder's theory and critically discuss how this is relevant to the environmental management accounting for this paper.

3.0 Theoretical Perspective

The theoretical framework of the study aims to explore the relationship between Environmental Management Accounting (EMA) practices and stakeholder perspective which will be grounded on the Nigerian Oil and Gas sector.

Owoeye (2023) argued that Environmental Management Accounting is a robust management tool designed to integrates environmental information into an organization's accounting systems to support decision-making related to sustainable practices and cost optimization. This paper argued that the potential environmental impact on the Oil and Gas companies is significant to its contribution to the Nigerian economy. Such a significant income generating sector of the economy needs to be properly investigated and analyzed in relations to stakeholder's perspective.

Environmental Management Accounting System

Burritt and Schaltegger (2000), Owoeye (2023) provided a detailed definition of Environmental Management Accounting (EMA) system. They argued that the system is a comprehensive system that integrates environmental considerations into accounting and decision-making processes. It acknowledges the environmental consequences of company actions and emphasises the importance of accounting for these consequences in financial and operational plans in order to attain sustainability.

The Environmental Management Accounting theory calls for combining environmental costs, revenues, and investments into standard accounting to provide a more realistic picture of a company's financial performance that considers both economic and environmental factors. Life cycle thinking is emphasised as critical in analysing the whole life cycle of products and services in order to successfully control environmental costs (Burritt and Schaltegger, 2000, Owoeye, 2023).

Moneva et al (2003) and Owoeye (2023) argued further on Environmental Management Accounting as the integration of financial and environmental data in EMA enables organizations to make informed decisions that account for environmental consequences. A methodology is provided to enable EMA implementation, which involves identifying major environmental cost drivers, establishing relevant performance indicators, and integrating environmental data with financial reporting systems (Burritt et al., 2002, Owoeye, 2023). This approach emphasises the significance of data gathering and reporting in making sound environmental decisions.

Environmental Management Accounting theory advocates for the incorporation of environmental considerations into traditional accounting in order to achieve a more holistic view of organisational performance, allowing businesses to make informed decisions that balance economic prosperity with environmental sustainability (Owoeye, 2023)

Stakeholders' Theory

Stakeholder theory is a well-known and prominent concept in business and management that focuses on understanding the relationships and interactions between various stakeholders in an organisation. According to this idea, Owoeye (2023) argued that organisations should consider the interests and concerns of all stakeholders, not just shareholders, in their decision-making processes and operations.

Freeman (1984) emphasized that the importance of the stakeholder theory. He argued that stakeholders are any person or group who may influence or is influenced by the success of the organization's goals. According to Freeman (1984) and Owoeye (2023) these groups the followings: shareholders, employees, customers, suppliers, communities, government bodies, and other entities with a vested interest in the organization's work.

Types of Stakeholders

This paper argued that there are two types of stakeholders: which includes Primary and Secondary Stakeholders. According to Owoeye (2023) and Donaldson and Preston (1995), Employees, customers, suppliers, and shareholders are examples of major stakeholders since they are actively involved in transactions or have a strong relationship with the organization are primary stakeholders.

Secondary stakeholders include communities, environmental groups, and regulatory organizations that may not directly contact with the organisation but can nonetheless influence or be affected by its actions. These includes the followings investors, media, communities, trade unions, Government agencies and NGOs.

The activities of the above stakeholders can significantly affect the Oil and Gas companies and impact on the adoption of the environmental management accounting practice. The paper argued that many companies should benefit from the activities of stakeholders if it was embraced. When engaging the stakeholders properly, this can reduce waste of financial and material resources. Furthermore, proper engagement with the stakeholders should reflect the long-term goals and strategies for sustainable development particularly, for the oil and Gas companies in the Niger-Delta region of Nigeria.

What are the benefits of engaging Stakeholders

There are many advantages of the benefits of engaging stakeholders, particularly in the paper, in relation to the Oil and Gas companies' activities includes the followings.

Firstly, engaging with stakeholders gives businesses competitive advantage. This is because there are direct communications with stakeholders to learn and understand their perspectives. This will enable the business to obtain valuable feedback on how to improve and encourage with their communities.

Secondly, this will enable the Oil and Gas Companies to make better decisions. The relationship and proper engagement with the stakeholders should enable oil and Gas companies get opinions which enable them to avoid costly mistakes and improve effective decision making.

Thirdly, it encourages cost savings. Proper engagement with the stakeholders ensures cost and money savings. This is because the Oil and Gas Companies will understand which programmes and projects can improve their living standard and environmental concerns.

Fourthly, proper engagement with the stakeholders can lead to effective risk management. This will enable the Oil and Gas Companies to identify potential risk within the community and thus, save material, financial resources and time management.

Stakeholder Management

Mitchell et al (1997) argued about the necessity of successful stakeholder management and emphasized by stakeholder theory. They emphasized that organisations should identify their stakeholders, comprehend their interests, requirements, and expectations, and devise ways for engaging with them in a mutually beneficial manner. This method promotes trust, improves reputation, and reduces possible disputes.

Stakeholder Salience Model

Mitchell et al (1997) proposed a robust model called the stakeholder salience model. According to them, the framework within stakeholder theory should three main factors. Firstly, it is Power. According to the Mitchell et al (1997) argued the stakeholders should have the ability to influence the organization's decisions and actions. Secondly, it is legitimacy. They argued that the extent to which a stakeholder's interests and demands are accepted as suitable by society's norms and values. Thirdly, it what was termed urgency. They argued that the importance and timeliness of a stakeholder's claims and complaints.

Stakeholders with a stronger mix of power, legitimacy, and urgency are regarded as more important and should receive more attention in an organization's decision-making processes.

Critiques of Stakeholder Theory

While stakeholder theory has received extensive attention, it has also been criticised. Some argue that the term stakeholder is too wide and inclusive, making it difficult for companies to manage opposing stakeholder interests. Furthermore, implementing stakeholder theory may be complex and costly since

organisations must invest in stakeholder participation and monitoring activities (Friedman and Miles, 2006). This paper argued that for the stakeholder theory to be effective, it should be applied on continuous basis with the corporations and multinational companies (Oil and Gas Companies). Without the continuous nature, the theory will not achieve its objectives. Furthermore, this theoretical perspective could be subjective. This is because it is practically impossible to satisfy all the stakeholder's interest at the same time.

Despite its shortcomings, stakeholder theory is a valuable framework for understanding and managing complex relationships inside organisations and their broader societal context. Recognising the importance of various stakeholders and their related interests allows organisations to make better informed and sustainable decisions that lead to long-term success.

The next section will discuss the Environmental reporting and Disclosure, which is critical to this paper.

4.0 Environmental Reporting and Disclosure

This paper argued the importance of environmental management accounting (EMA) as a tool that combines environmental and financial data to help organisations make better decisions about environmental performance and resource management. Researchers, politicians, and corporations worldwide have been interested in the link between environmental management practises and corporate financial success.

Having said that, the role of environmental reporting and disclosure is critical to this paper.

Burritt et al., (2019) argued that in recent years, environmental reporting and disclosure have become critical components of corporate responsibility and sustainability. With increased environmental concerns, stakeholders including as investors, consumers, workers, and communities are interested in learning how organisations are tackling their environmental consequences. Environmental Management Accounting (EMA) emphasises the need of communicating an organization's environmental performance to its stakeholders in a transparent manner (Owoeye, 2023)

Furthermore, Environmental Management Accounting (EMA) defines the process of generating and distributing environmental reports that give complete information on an organization's environmental impacts, environmental goals, and progress towards attaining sustainability targets is known as environmental reporting. The process of generating and distributing environmental reports that give complete information on an organization's environmental impacts, environmental goals, and progress towards attaining sustainability targets is known as environmental reporting (Burritt et al., 2019). These reports usually contain information on greenhouse gas emissions, water usage, garbage creation, and other environmental indicators. Organisations may demonstrate their commitment to environmental sustainability and transparency by making this information available to stakeholders.

Burritt et al., (2019) and Owoeye (2023) argued that environmental reporting critical role is to promote accountability. When an organisation disclose its environmental performance, it becomes more accountable for its activities and environmental repercussions. The method helps organisations to identify areas for improvement and to execute solutions to decrease their environmental impact. This increased sense of responsibility may result in improved environmental management practises and more sustainable businesses.

Benefits of Environmental Management Accounting

The contributions of Environmental Management Accounting (EMA) as a useful tool cannot be overemphasized. This is because it enables organizations to incorporate environmental costs and impacts into their accounting systems. It assists firms in understanding the financial consequences of their environmental performance, identifying cost-cutting options, and improving sustainable practises.

Cost savings and increased efficiency

Cost reduction and efficiency improvements are critical areas of company management that organisations work for in order to improve competitiveness, profitability, and sustainability. Cost reduction entails developing and executing solutions that reduce operating expenditures while preserving or increasing product or service quality. Efficiency improvements, on the other hand, pertain to optimising processes and resource allocation to obtain higher output with the same or lower input levels (Owoeye, 2023).

Process optimisation is a significant method for cost reduction and efficiency benefits. Businesses may increase productivity and save operating costs by simplifying workflows, reducing redundancies, and automating operations. Thun and Hoenig (2011) discovered that process optimisation played a substantial effect in decreasing manufacturing enterprises' production costs and lead times.

Adoption of technology and digital transformation is another excellent strategy. Artificial intelligence (AI), machine learning, and robotic process automation (RPA) can lead to significant efficiency advantages in a variety of sectors. According to Owoeye (2023), organisations who embraced digital transformation saw considerable cost savings and gains in operational efficiency.

Environmental Regulation Compliance

Environmental regulatory compliance is a vital component of sustainable development and environmental preservation. Environmental laws are intended to manage and minimise the environmental effect of human activities, guaranteeing the protection of natural resources and the well-being of both ecosystems and human populations.

Compliance with environmental standards is critical for a number of reasons. First and foremost, it aids in the prevention of environmental deterioration and the reduction of harmful consequences on air, water, and soil quality. Industries and enterprises may lower their carbon footprint, emissions, and waste output by following to these standards, supporting sustainable practises (Kumar and Ramanathan, 2021).

Furthermore, compliance promotes responsible business conduct, which improves a company's reputation and brand image. According to Liu et al. (2018), organisations who voluntarily implement environmental management practises that go above and beyond legislative standards receive a competitive advantage and enhanced stakeholder confidence.

Meanwhile, noncompliance with environmental standards can have serious implications for both businesses and ecosystems. The Deepwater Horizon oil disaster in 2010, for example, led in the discharge of millions of barrels of oil into the Gulf of Mexico, inflicting massive environmental harm. This incident brought to light the importance of stronger enforcement and compliance monitoring in the oil and gas business (Rabalais et al., 2010).

Better Decision Making

Environmental Management Accounting gives useful data and insights to aid in making educated decisions. Businesses may examine the long-term effects of their choices on both financial performance

and the environment by including environmental information into financial reporting. This broad view enables managers to make more sustainable and socially responsible decisions.

This viewpoint is founded on the concept that decision making is a fundamental activity that influences all aspects of life, from personal preferences to corporate tactics. Making good judgements can lead to good outcomes, whilst making bad ones can lead to bad outcomes.

Certainly, integrating multiple viewpoints and ideas is an important aspect in enhancing decision making. Page (2007) discovered that groups made up of people with diverse experiences and perspectives make better judgements than homogeneous ones. The interplay of different points of view encourages creativity, improves problem-solving abilities, and minimises the possibility of cognitive biases.

Improved Corporate Reputation

Environmental concerns have grown in importance among stakeholders, putting pressure on businesses to manage their environmental effect. Environmental Management Accounting (EMA) is one strategy that has gained popularity due to its ability to improve a company's corporate brand and image by displaying excellent environmental management practises. This excellent reputation may result in a variety of advantages, such as enhanced customer loyalty, stronger investor relations, and a competitive edge in the marketplace.

According to Arena and Azzone (2009) study, businesses that use EMA practises are more likely to have increased trust and reputation among stakeholders (Arena & Azzone, 2009). According to the study, companies can signal their commitment to sustainability and responsible environmental stewardship by incorporating environmental considerations into their accounting practises, which resonates positively with various stakeholders such as customers, investors, and regulators. Transparency and accountability in environmental reporting are two significant ways EMA contributes to a company's better corporate reputation. Companies that use EMA are more likely to assess, track, and publish their environmental impacts, giving stakeholders critical information about their environmental performance. This transparency fosters confidence among stakeholders, who can evaluate a company's efforts to reduce its environmental impact and mitigate environmental hazards.

Risk Management and Long-term Sustainability

Risk management and long-term sustainability are critical factors for modern firms, particularly as environmental concerns become more prominent in the corporate scene. Environmental Management Accounting (EMA) is important in assisting businesses in identifying possible environmental hazards and opportunities linked with their activities. Organisations may build effective risk mitigation measures and make educated decisions that match with sustainability goals by knowing these risks.

EMA entails incorporating environmental data and concerns into a company's standard accounting and decision-making processes (Burritt & Schaltegger, 2010). This method enables businesses to measure, monitor, and analyse the environmental consequences of their operations, goods, and services. It offers a complete framework for accounting for numerous environmental costs and advantages, like as emissions, resource consumption, waste creation, and possible liabilities. Companies may obtain a better knowledge of the environmental consequences of their business operations through EMA, allowing them to detect and manage possible hazards more efficiently.

Furthermore, implementing EMA practises can result in operational improvements, cost savings, and improved environmental performance. Companies can find possibilities for waste reduction, energy

efficiency, and resource conservation as they become more conscious of their environmental implications. Implementing sustainable practises can lead to better resource utilisation and long-term financial benefits (Juras & Gucwa, 2018).

Stakeholder Perception and Reputation

Environmental Management Accounting may favourably affect stakeholder perceptions and improve the reputation of Nigerian oil and gas firms. Amaeshi, Osuji, and Nnodim (2019) investigated the relationship between EMA adoption and business reputation in Nigeria's oil and gas sector. According to the findings, organisations that use EMA practises are seen more positively by stakeholders, which may lead to higher investor confidence and significant financial rewards.

Environmental Management Accounting (EMA) is critical in the Nigerian oil and gas business because it assists enterprises in successfully managing their environmental impacts while also favourably affecting their financial performance. Companies may uncover cost-saving possibilities, increase efficiency, manage risks, and improve stakeholder perception by integrating environmental and financial data through EMA practises. As the importance of sustainability grows in the corporate world, EMA is expected to grow much more in the Nigerian oil and gas sector and beyond.

Based on the various benefits discussed, this paper of the view that environmental management accounting should be embraced by the stakeholders. The next section focused on the challenges of environment management accounting.

Accounting for Environmental Management: A critical discussion of the Challenges.

Environmental Management Accounting (EMA) is a method that has gained popularity in recent years as a result of increased concerns about environmental issues and sustainability. It is critical in integrating environmental concerns into corporate decision-making processes, allowing organisations to assess and manage the environmental costs and consequences associated with their operations. This section examines the environmental management accounting difficulties and prospects.

Challenges of Environmental Management Accounting

a. Data Collection and Measurement

Owoeye (2023) argued that the collecting and measuring environmental data is one of EMA's major difficulties. This procedure necessitates the collection of trustworthy and accurate data on resource use, waste creation, emissions, and other environmental effects. Organisations may have challenges getting this data, especially when working with complicated supply chains and varied sources of environmental data (Moneva et al., 2015).

b. Cost Allocation

Fayissa et al., (2018) and Owoeye (2023) emphasized that It might be difficult to assign environmental costs to specific products or processes. The right allocation approach must be determined since it influences the accuracy of cost accounting and decision-making. The lack of globally acknowledged cost allocation rules complicates the procedure even more (Fayissa et al., 2018).

d. Financial Accounting Integration

Burritt and Schaltegger (2018) and Owoeye (2023) argued that the integrating EMA data with typical financial accounting systems is another challenge. Environmental data may not be easily accommodated

by different accounting systems and standards. This integration is required to present a complete picture of an organization's total performance, including environmental implications

d. Organizational Culture and Sensitivity:

Implementing EMA necessitates a cultural shift towards sustainability and environmental awareness. Employees and management who are inexperienced with EMA principles may be resistant to its implementation (Zhu & Sarkis, 2007).

In conclusion, it presents obstacles in data collecting, cost distribution, integration, and organisational culture. Overcoming these obstacles and seizing chances can lead to more sustainable and profitable enterprises in the long term.

Summary and Conclusion

This paper argued that there is significant relationship between environmental management accounting and the stakeholders. The paper emphasized that stakeholder relationships with the Oil and Gas companies should improve with the adoption of environmental management accounting. The paper provided a robust discussion on the advantages of adopting environmental management accounting to include the cost-saving possibilities, increase efficiency, manage risks, and improve stakeholder perception by integrating environmental and financial data through EMA practises. As the importance of sustainability grows in the corporate world, EMA is expected to grow much more in the Nigerian oil and gas sector and beyond. Despite advantages identified, many constraints were discussed on adoption of environmental management accounting. These include data collecting, cost distribution, financial integration, and organisational culture. Based on these, it could prevent the Oil and Gas companies from incorporating environmental and operational performance into long-term strategic goals.

The paper recommends the Oil and Gas should focus on the creating a robust stakeholder framework should be pursued. This is particularly important because it will reduce significantly the pipeline vandalism, crude oil theft, pollution, inadequate pipeline infrastructure and fire outbreak. The unrest in the Niger-Delta should be significantly reduced if a robust stakeholder framework is pursued.

Furthermore, the Oil and Gas companies imbed the stakeholder framework in their environmental and operational performance long-term strategic goals. The Oil and Gas companies used environmental management accounting to gather more data collecting, cost distribution, financial integration, and organisational culture.

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