IMPROVING THE FINANCIAL PERFORMANCE OF OIL & GAS INDUSTRY FIRMS IN RIVERS STATE, NIGERIA

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Abstract

This Study examines the impact of Security Management Systems on the Financial Performance of Oil & Gas Industry Firms in Rivers State, Nigeria. The research design utilizes a management tool: Financial Performance and uses it to measure the criterion variable: Organizational Performance. The bulk of financial data analyzed is aggregate company financials and projections collected mainly from open sources; including various local and international journals and Nigerian government declaration of revenue and tax receipts from the Oil & Gas industry. This is so, as the Oil & Gas firms are private Organizations whose financials are not published publicly. Supporting non-financial data analyzed is collected through the issue of questionnaires to respondents selected from amongst staffers of the various firms using random sampling technique. The representative sample population for the Study are 387 staffers randomly selected from six (6) Oil & Gas companies in Port-Harcourt City, Rivers State, Nigeria. These six firms mirror and represent the entire gamut of the industry to a large extent. The representative firms themselves cumulatively have a combined total staff population of some 12,258 persons, or about half the entire workforce of the entire Industry across the country. Spearman's Rank Order Correlation methodology is used in testing the validity of the seven hypotheses proposed. The Major Finding of the Study confirms a significant positive relationship between Security Policy; Internal Monitoring & Audit; and Management Reviews/Evaluation respectively and Financial Performance of Oil & Gas Industry Firms in Rivers State, Nigeria. This Finding leads to a Conclusion that: setting up or embedding an effective security management system within the Organizational structure of an Oil & Gas firm in Rivers State, Nigeria indeed will have a positive moderating effect on the firm's Organizational Performance. The Study thus majorly recommends that: firms in the Oil & Gas Industry in Rivers State, Nigeria should make every effort to ensure they have, or setup a robust, cost-effective security risk management team; in order to have an efficient and effective Organizational structure. They are also to make sure that a cogent Security Policy is put in place for each such Organization. These two actions should then be backed up by frequent internal assessments & audits and periodic management reviews/evaluation of the security management system in place.

Introduction

The Financial Performance of an Organization are a set of measurements (based on financial or pseudo-financial indices) for determining the efficiency and/or effectiveness (Organizational Performance) of the policies, plans and methods put in place by the Management Team in the course of management of the Organization. 'Organizational Performance is typically linked to the successes of a firm' (Brynjolfson, 1993), a significant subject for study in the field of Management Sciences (which is very important for both profit and

non-profit organizations) (Hendry, 2012; Abu et al., 2010).

Over time, several definitions of Organizational Performance have been proposed by various Organizational and Management scholars. These were influenced by the varied and disparate organizational perspectives held by the respective author(s) or proponent(s); and could be financial or non-financial (operational) in nature.

Generally, Organizational Performance may be seen from two distinct perspectives; namely: Financial Performance and Non-Financial Performance. 'The measurement of Financial Performance is typically expressed in monetary terms; such as: revenue; profit; etc. in this respect, financial data can usually be found contained in a Company's Financial Statements such as: its Balance Sheet; its Income Statements; and its Cash-Flow Statements' (Simons, 2000). 'Financial Performance measures are also considered or referred to as 'lagging' indicators; as they usually show the outcome of actions taken by a Manager (after a certain period). Consequently, it is very hard to establish a direct link between a Manager's specific action and the eventual financial results reported' (Dury and El-Shishini, 2005). However, by deploying Non-Financial Performance measures in conjunction with a Financial Performance Evaluation System; the above-mentioned challenges with Financial Performance measures are subtly eliminated. Non-Financial measures are not sourced from the organization's financial statements. Non-Financial measures are sometimes known as qualitative measures typically used for Performance Evaluation and are characterized by greater subjectivity than the corresponding financial measures.

Several variable factors contribute towards 'Organizational Performance' (both financial and non-financial) of firms within the Oil & Gas Industry of the Nigerian economy. The dynamic nature of the Nigerian business environment requires business organizations to constantly perform at an optimal level or risk extinction. To achieve the expected levels of Organizational Performance; the several attendant risk factors need to be effectively and efficiently managed simultaneously. One important operational strategy that Oil & Gas firms in Rivers State, Nigeria tend to deploy to improve their Financial Performance is by providing a platform for holistically managing 'the entire gamut of 'security risks' associated to their businesses by the adoption and deployment of Security Management Systems.

The major Oil & Gas operations in Nigeria are typically implemented as Joint-Venture (JV) partnerships between the Nigerian Government and several multi-national companies including Shell, Total, Chevron, etc. Such multi-national partners typically provide funding, in terms of foreign/external investments. They typically also provide technical expertise and the technological equipment needed to facilitate Oil & Gas exploration and production activities.

However, this participation of foreign partners in the operations of Oil & Gas firms exposes the firms to various other risk factors; some of them specifically targeted at foreigners and/or firms with foreign backgrounds. Some of these risk factors typically arise from differences in practices between the domestic and foreign partners; including policy and political risks; financial risks; legal and jurisdictional risks; security risks, etc. (Anifowose, Lawler, Van der, & Chapman, 2012).

Statement of the Problem

In the aftermath of attainment of Independence from her colonial master, Britain; the Nigerian Oil & Gas industry has been distinctive as the bedrock of the nation's economy. It has accounted for approximately 90% of the country's total foreign exchange earnings annually over the last 40 to 50 years (Ebire, Mukhtar & Onomonya, 2018; Etale & Otuya, 2018). It has also been described as the nation's economic livewire (Adidu & Ogbene, 2005; Adegbulugbe, 2002).

However, despite their criticality, strategic importance and visible contributions to the Nigerian economy; it is evident in recent years that the Performance of Nigerian Oil & Gas firms have been negatively impacted by several variables. Some of these variables are ascribable to factors either internal or external to the Industry.

Table 84: Revenue Performance Summary

Year	Oil Royalty, N	Gas Royalty, N	Gas Flare Penalty, N	Concession Rentals, N	Misc Oil Revenue, N	Total Revenue
2010	694,352,412,710.14	0	2,388,572,351.20	728,308,923.82	951,380,744.23	698,420,674,729.39
2011	1,066,836,980,909.87	14,613,812,392.68	3,482,627,975.15	388,502,293.27	2,077,222,926.87	1,087,399,146,497.84
2012	1,052,043,067,383.93	22,242,285,752.85	3,849,873,091.61	444,535,531.69	1,370,171,171.68	1,079,949,932,931.76
2013	960,540,365,106.84	23,235,123,088.28	3,120,786,665.13	178,630,934.47	3,981,983,109.64	991,056,888,904.36
2014	986,343,364,217.80	21,110,923,948.24	2,930,215,304.51	413,496,723.26	5,983,027,290.84	1,016,781,027,484.65
2015	545,061,446,369.23	22,292,228,906.41	2,590,365,296.82	201,275,922.56	17,489,298,348.58	587,634,614,843.60
2016	437,356,879,889.83	16,298,590,492.52	2,333,879,050.11	342,495,121.25	6,408,509,381.58	462,740,353,935.29
2017	704,431,333,766.93	33,173,790,789.60	2,779,377,359.95	356,894,436.55	6,357,674,731.33	747,099,071,084.37
Total	6,446,965,850,354.57	152,966,755,370.58	23,475,697,094.48	3,054,139,886.87	44,619,267,704.75	6,671,081,710,411.26

Table 1: Nigerian Oil & Gas Revenue Performance Summary (2010 to 2017). Extracted from Table 84 of the Nigerian Oil and Gas Industry Annual Report 2017 (www.dpr.gov.ng)

Considering the vital role of these firms and Industry to the Nigerian economy (being the geese that lay the golden eggs); several scholars have taken it upon themselves to propose varying strategy and means of enhancing the Performance (particularly Financial Performance) of the firms in the Industry (Nwaiwu & Oluku, 2018; Obara & Nangih, 2017). In the process, the numerous and variable elements that actually impact on Performance of the industry have been analyzed; and numerous approaches to solving this Organizational Performance dilemma considered.

The Nigerian Oil & Gas Industry is termed under-performing, mainly due to an extremely high rate of deferments' (leading to massive financial loss); high rate of asset vandalization; extensive environmental pollution and degradation; massive reputational damage for the various players in the Industry; and continuing cases of injury/fatalities to personnel engaged and working for the Industry. These plethora of ills are all ascribable to the numerous security incidents arising from different aspects of Oil & Gas operations in the country. The importance of Organizational Performance is further heightened as the Industry is also vital to the global economy. This is because it critically impacts world energy supplies, world trade and world travel, etc. Oil & Gas Exploration and Production remains the primary source of energy for use by both the industrialized and developing economies of the world. This criticality makes the Industry one of the most attractive targets for a growing global Terrorism Industry and maritime piracy threat.

The threat of terrorism and sabotage attacks pervades across the entire value

chain of the Oil & Gas Industry – from oil well sabotage and tampering; to pipeline vandalization; to product adulteration while in transit; to illegal oil bunkering; to refineries/facility picketing; to the threat of piracy which primarily concerns the oil tanker industry, etc. Maritime piracy by Somali pirates might affect a single oil Tanker and result in increased costs for oil transportation globally; which in turn results in higher end prices for energy consumers worldwide. Any major terrorist attack or act of sabotage on any Oil & Gas production facility like an oil rig, offshore platform and/or refinery; will result in automatic loss, or complete stoppage of production which might take several months to restart. The entire supply chain ranging from oil wells and offshore platforms; to pipelines, tankers and refineries can be affected by any of the following security threats: piracy, terrorism, insurgency, organized crime, civil protest, inter-state hostilities, vandalism and internal sabotage. Consequently, any of the above threats can cause severe economic and ecological damage that might negatively affect either the local or international Oil & Gas markets.

The challenges itemized above and many more constitute some of the challenges currently facing the Oil & Gas industry in Nigeria. Despite several attempts by scholars to ensure consistently high Performance of the oil producing firms, the problem of fluctuating Performance persists. In this current Study, we look at management of Security Risks, which is one of the identified key impediments to successful Financial Performance for Oil & Gas firms in Nigeria; by evaluating the impact of effective deployment of Security Management Systems as a predictor to Performance of the Oil & Gas companies. This involves looking into the procedures, policies and equipment deployed in the management of the key Oil & Gas NTR area known as Physical Security Management.

Conceptual Framework

Figure 1 below shows the conceptual framework relied upon for this Study, which represents the proposed links between two primary latent variables (Security Management Systems and Organizational Performance); while the moderating variable is Organizational Structure.
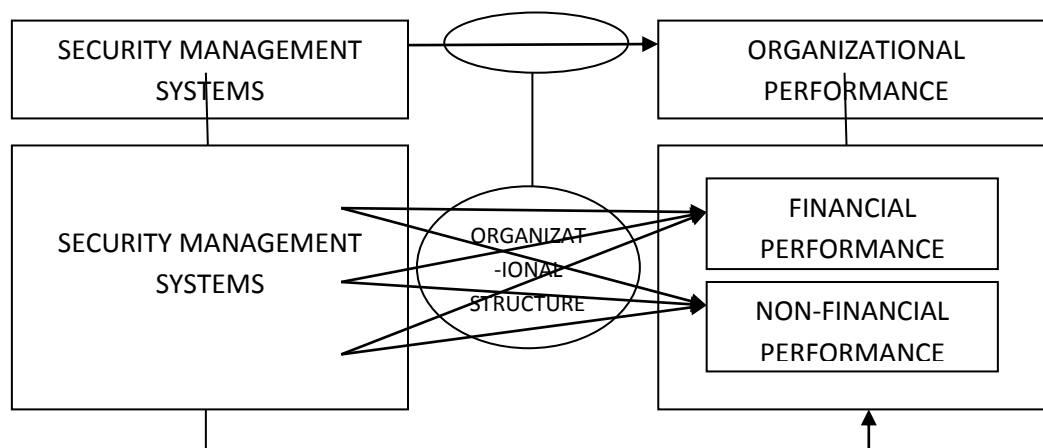
Figure 1: Conceptual Framework
Dimensions used in this Study were developed originally by: Perttu (2017)
Measures used in this Study were developed originally by: Azemina (2018)
Moderating Variable used in this Study was developed originally by: Gholan et al (2016)

Aim and Objectives of the Study

The aim of this Study is to empirically examine the extent to which Security Management Systems affect the Financial Performance of Oil & Gas firms in Rivers State, Nigeria with a view to achieving improved financial performance of the firms. However, the specific objectives are;

- Investigate the extent to which Security Policy affects Financial Performance in Oil & Gas firms in Rivers State, Nigeria
- Investigate the extent to which Internal Monitoring and Audit affects Financial Performance in Oil & Gas firms in Rivers State, Nigeria
- Investigate the extent to which Management Review/Evaluation affects Financial Performance in Oil & Gas firms in Rivers State, Nigeria

Research Questions

- How does Security Policy affect the Financial Performance of Oil & Gas firms in Rivers State, Nigeria?
- How does Internal Monitoring and Audit affect the Financial Performance of Oil & Gas firms in Rivers State, Nigeria?
- How does Management Review/Evaluation affect the Financial Performance of Oil & Gas firms in Rivers State, Nigeria?

RESEARCH HYPOTHESES

HO_1: Security Policy does not affect the Financial Performance of Oil & Gas firms in Rivers State, Nigeria

HO_2: Internal Monitoring and Audit does not affect the Financial Performance of Oil & Gas firms in Rivers State, Nigeria

HO_3: Management Review/Evaluation does not affect the Financial

Performance of Oil & Gas firms in Rivers State, Nigeria

Based on the foregoing, this Study provides a conceptual framework which incorporates the methods the research problem will be dealt with (Liehr & Smith, 1999). According to Ravich & Carl (2016), a conceptual framework is an illustration with arrows that clearly define the linkages between the constructs under investigation, thereby revealing the proposed intent of the Study. Likewise, Fisher (2007) submits that a functional conceptual framework is complemented by a detailed description about the nexus between the Study constructs.

Literature Review
Concept of Organizational Performance

Organizational Performance; also known as a firms' Performance, is an indicator stating the extent to which the company runs its business successfully and is an important measurement for estimating the success, or possibility of survival of the company. This Study considers both Financial and Non-Financial Performance as the pertinent 'Dimensions' for use in the evaluation of a firm's performance. 'While Financial Performance for most firms can be evaluated using indicators such as: sales; growth; profitability; and earnings per share amongst many other indicators. Non-Financial Performance typically relates to measures such as: good will; product quality; and value-added (in manufacturing) amongst others' (Silva & Ferreira, 2017).

Ensuring and sustaining high Performance is essential and paramount to the survival and continuity of any firm; the absence of which, lands the firm in a state of jeopardy. Organizational Performance is seen as a bedrock that helps sustain a firm

in a hostile environment. In alignment with the above assertion, Gavrea, Ilies and Stegerean (2011) opined that 'continuous Performance is the focus of any firm; because it is only through Performance that Organizations can grow and maintain competitiveness'. Over the years, Performance of a firm is where the focus of management and shareholders are more often than none placed. This is essentially so; as investors in a firm are fundamentally looking forward to increased/sustained return on their investments; consequently, the management of the firm is compelled at the same time to strive to deliver the expected level of returns to shareholders. In striving to achieve better firm Performance, certain activities and efforts are put in place for success to be attained in product quality and operational efficiency. Hence, the sustained/improved Performance of a firm is what every stakeholder of the firm would always look forward to. Organizational Performance is usually the top-most priority of the managers of Organizations; because they need to deliver on the confidence the owners have reposed on them.

According to Mahapatro (2013), 'Organizational Performance is the capability of a firm to accomplish its objectives and goals, with the help of good governance and talented administration'. Organizational Performance is a sign which shows with how well a firm has accomplished its goals. 'In an attempt to measure a firm's Performance, several scholars have proffered different measures such as: customer satisfaction, product quality, employee satisfaction, Organizational reputation, customer loyalty, competitive advantage, perceived image, capacity utilization, employee morale, operational efficiency, product innovations, inventory turnover and timeliness' (Richard,

Devinney, & Yip, 2009). Previous researchers such as Azemina (2018), Dreher and Dougherty, (2005) have also used financial and non-financial metrics to measure Organizational Performance. The financial measures they used included: profit; sales; and market share. Non-financial measures used by them included: quality; efficiency; and attitudinal and behavioural measures such as: commitment, intention to quit and satisfaction.

The issue of Performance of Oil & Gas firms has become more critical in recent times due to the high rate of dynamism of the business world; coupled with the un-precedented influence of the international market. As such, enhancing and sustaining high levels of Performance, has become a dire need for Oil & Gas firms that want to survive the turbulent moment.

In this Study, we adopt the view of Azemina (2018), who proposed both financial and non-financial measures for measuring Organizational Performance.

Financial Performance

Financial Performance measures are usually expressed in monetary terms such as revenue, profit, sales, etc. Financial data can usually be found contained in financial statements such as Balance Sheets, Income Statements and Cashflow Statements (Simons, 2000). When determining the type of financial measure that will be used for Performance Evaluation of an Organization, it is very important to consider the type of activities undertaken by the given firm. In the particular instance of the firms in the Oil & Gas Industry of Rivers State, Nigeria; a more pertinent set of Financial Performance measures may be: quantum of production deferments per annum; number of shut-in wells per annum; demurrage

payments to international tanker vessels due to delays in loading for export; total value of lost earnings attributable to 'force majeure' declarations per annum; etc.

Financial Performance evaluation involves measuring the results of a firm's policies and operations in monetary terms. These results are often reflected in the firm's return-on-investment, return-on-assets and value-added. Adesola and Okwong (2009) define Financial Performance 'as the ability to operate efficiently, profitably, survive, grow and react to the environmental opportunities and threats.' In agreement with this, Abu-Rub, (2012) asserts that Performance is measured by how efficient the enterprise is in use of its resources in achieving its objectives. Davies et al. (2014) further believes that many firms' low Performance is the result of poorly performing assets. Return-on-assets (ROA) is an indicator of how profitable a company is, relative to its total assets. ROA gives an idea as to how efficient management is, at using its assets to generate earnings. Calculated by dividing a company's annual earnings by its total assets, ROA is displayed as a percentage (Chartered Accountant, 2003).

In the Oil & Gas Industry of Nigeria, majority of the largest firms like SPDC, Total and NLNG are run as Joint Venture (JV) or Production Sharing (PSC) enterprises between the Federal government of Nigeria and a few IOCs. Such JVs or PSCs typically are not publicly listed. Hence, their financial statements are not made public. However, financial data about such JVs and PSCs are still available through examination of government financial receipts from these firms (which are paid in form of various taxes and royalty payments). As a rule, all government income is public record and hence available for scrutiny. Financial data about the JVs are also available through scrutiny of the partnering IOCs financial statements which typically include details of majority of their expenditure on their various JVs. A final set of smaller and Nigerian-incorporated Oil & Gas firms typically prepare and publish their Annual Financial Statements in compliance with the relevant regulations governing their operations.

Further Financial Performance data about Oil & Gas firms in Nigeria are available by scouring production deferment; shut-in fields; and revenue performance summary statistics publicly released by these firms and the regulatory authorities. This type of data typically shows 'lost' or 'potential' volumes of oil or gas production which relate directly with revenue that is not available to the firms typically due to security threats and incidents they have faced during their operations. These types of data are collated and published annually in the 'Nigeria Oil and Gas Industry Annual Report' by the Department of Petroleum Resources (DPR) and is available publicly.

Table 15: 2017 Fields Summary

Company	Producing Fields	Shut-In Fields	Remarks
Addax	14	8	Contractual Reasons and operational issues
AENR	1	O	
Allied Energy	1	O	
Amni	2	O	
Aiteo	3	1	
Atlas	1	O	
Brittania-U	1	O	
Chevron	28	6	Operational Reasons
Stardeep	1	O	
Consolidated	2	O	
Continental	1	O	
Dubri	1	O	
Total E & P	10	8	Operational reasons and sabotage
Total Upstream	1	O	

Energia	1	0	
Express	1	0	
Esso	2	0	
Midwestern	1	0	
Mobil	20	15	QIT 48" Trunk Line was down
Moni Pulo	1	0	
NAE	1	0	
NAOC	25	13	Facilities sabotage
NDPR	1	0	
NPDC	10	14	TFP leak & Operational issues
Oriental	1	0	
Pan Ocean	1	7	
Platform	1	0	
Pillar	1	0	
Seplat	4	0	
SPDC	35	25	TFP & TNP down
SEEPCO	2	0	
Eroton	5	2	
SNEPCO	1	0	
Waltersmith	1	0	
Network	1	0	
Yinka	1	0	
Frontier	1	0	
Excel	1	0	
Enageed	2	0	
Green Energy	1	0	
Newcross	3	0	
Neconde	4	0	
Belma	4	0	
Universal	1	0	
Total	184	101	
		285	

Table 2: Nigerian Oil & Gas Shut-In Fields Summary (2017). Extracted from Table 15 of Nigerian Oil and Gas Industry Annual Report 2017 (www.dpr.gov.ng).

The Nigeria Oil and Gas Industry Annual Report 2017, page 31 specifically states: 'The average production deferment for 2017 was 725,859 bopd. Deferments are attributed to shut down arising mainly from pipeline vandalism and some operational issues.'

Table 16: 2017 Summary of Production Deferments

MONTH	DEFERMENTS	
	Average Daily Deferment, BOPD	Monthly Deferred Volume, Barrels
January	1,106,852	34,312,407
February	669,333	18,741,313
March	875,975	27,155,214
April	756,245	22,687,364
May	627,167	19,442,180
June	543,031	16,290,944
July	603,329	18,703,193
August	642,271	19,910,410
September	740,896	22,226,880
October	742,214	23,008,643
November	687,295	20,618,839
December	704,557	21,841,275
Total Deferment (BBLS)		264,938,662
Average Deferment (BOPD)		725,859

Table 3: Nigerian Oil & Gas Summary of Production Deferments (2017). Extracted from Table 16: Nigerian Oil and Gas Industry Annual Report 2017 (www.dpr.gov.ng)

Table 68: 2017 Spill Incidence Report

Month	Natural Accident[1]	Corrosion[2]	Equipment Failure[3]	Sabotage[4]	Human Error[5]	YTBD[6]	Mystery[6]	Erosion / Wave / Sand	Operational / Maintenance	Sunken Barge	Total number of Spills	Volume spilled(BBLs)
											Spill Incidents	
January		4	6	20	0	5	2	0	3		40	91.98425
February		2	7	20	0	6	2	3	0		40	177.96
March		1	7	23	1	13	1	1	1		48	229.3399
April		5	3	8	0	8	0	1	0		25	768.36289
May		1	5	14	1	7	2	2	1		33	699.5554
June		3	6	26	0	4	3	2	3		47	712.88651
July		3	1	29	0	3	5	1	1		43	2036.1519
August		1	2	17	0	4	4	0	1		29	300.57284
September		1	2	20	0	2	6	1	1		33	1511.36831
October		0	3	12	0	2	5	1	0		23	234.31556
November		1	1	33	0	4	9	0	0		48	2249.354
December		2	0	3	0	10	4	1	0		20	85.2009
Total		**24**	**43**	**225**	**2**	**68**	**43**	**13**	**11**		**429**	**9097.05239**

1 Spills caused by natural disasters/events such as flooding, extreme weather conditions etc.
2 Spills caused by corrosion of pipelines, vessels, tanks and other crude oil handling installations.
3 Spills caused by preventable failure of oil and gas installations/equipment
4 Spills caused by third party intervention. This also includes cases of vandalism and crude oil theft that may not have resulted to hydrocarbon release to the environment.
5 Spills caused by operational errors involving a human interface.
6 This means "Yet-to-be-determined". The cause(s) of the spill(s) were not reported in the submitted oil spill reporting forms. Usually indicative that the Form B was not submitted, or the Joint Investigation Visit (JIV) was either not carried out or was inconclusive. Often, the quantity spilled for this category of spills may also not have been reported.
7 Spills identified or reported by operators who assert that the spill did not originate from their facilities. The origin of the spill is thus said to be inconclusive. Usually the operator is expected to take reasonable steps to respond to the spill in addition to the reporting of same.

Table 4: Nigerian Oil & Gas Spill Incidence Report (2017). Extracted from Table 68: Nigerian Oil and Gas Industry Annual Report 2017 (www.dpr.gov.ng)

Performance in the Oil & Gas Industry of Nigeria

The Performance (Organizational Performance) of Oil & Gas firms and that of the entire Oil & Gas Industry in Nigeria in general, is critical and pivotal to the success of the Nigerian Government and ultimately the economy of the Federal Republic of Nigeria (Odularu, 2008; Azaiki & Shagari, 2007). The criticality of these firms to the Nigerian Government and Economy as averred above, has warranted this empirical Study. This is premised on the basis that a deep and thorough understanding of the subject matter, complimented by careful management of the various aspects and dimensions of Organizational Performance (which can be achieved through effective moderation of the various elements of the Security Management Systems put in place by these firms) will ultimately bring about the desired Organizational Effectiveness required from an industrial sector as central to the nation's economic interests as the Oil & Gas Industry.

(Mihalicz, 2012) states that: 'Performance Management is a management system that evaluates how well work is done – i.e. doing things right. It gauges whether employees are meeting Organizational Objectives; measures achievements and Performance; provides feedback to employees; and is also tied to employee compensation. Effectiveness Management on the other hand, has all the components of Performance Management but goes a step further. Effectiveness Management focuses on what work is being done and ensures that all work is helping to meet the Organization's strategic objectives – i.e. doing the right things'. The above assertions indicate that optimal Organizational Performance should ultimately lead to Organizational

Effectiveness, which is what guarantees maximization of the needed cashflow from Oil & Gas firms to the coffers of the Government of Rivers State, Nigeria in form of taxes and royalties. If we stretch these assertions further, we may infer: that continuous top quartile Performance is needed of each of the Oil & Gas firms in order to spur Organizational effectiveness of the individual firms and ultimately the collective Performance and effectiveness needed of the Oil & Gas industry particularly due to its perceived role of being 'cash cow' for the economy of the country. This is so, as top-quartile Organizational Performance effectively leads to exceptional Organizational effectiveness; thereby guaranteeing increased output including increased profits; greater market share; etc.

With this empirical work, the intention is to establish a basis for validating the above assertions with a view to postulating an appropriate Theorem on: How to enhance 'Organizational Performance' with a view to meeting Organizational objectives by optimizing the outputs of the Organization as desired. These assertions are important, as their application will consequentially determine what quantum of revenue is accruable and available to the government of Nigeria; for running its various organs, political apparatus and also for providing the necessary physical and administrative infrastructure needed for the effective and smooth functioning of the country. This is more so, as the '2020 Annual Report' by the International Monetary Fund (IMF) and the World Bank both estimate that: the revenue accruable to the Nigerian Government from Oil & Gas Export will be 80% of its total foreign-exchange denominated revenue received.

The Nigerian Government can be rightly described as being mono export-commodity reliant for its funding. This is because it depends almost entirely for its funding on the royalties and taxes obtained from the production, export and sale of hydrocarbon products by the Oil & Gas Industry. This fact places a very heavy premium and burden on the Oil & Gas firms and Industry to ensure the achieve optimal Organizational Performance and effectiveness. The '2020 Annual Report' by the International Monetary Fund (IMF) and the World Bank also further asserts that the 'Oil & Gas' sector of the Nigerian Economy clearly makes the highest singular contribution (10%) to the economic and social development of Nigeria's bustling economy which is currently rated as the largest economy on the African continent with approximately $446.543 Billion in 2020. These figures and rating are based on GDP figures; calculated using re-based comparative metrics adopted by the Nigerian Government authorities in 2014.

Consequently, the Organizational Performance and resultant effectiveness and growth of Oil & Gas firms and the entire Oil & Gas Sector; has a direct impact and ultimately affects the economic condition and financial standing of Nigeria. This importance of the Oil & Gas Sector to the development and well-being of Nigeria as a nation, is further alluded to in the following hyperbole construct, where it is referred to as: 'the symbolic goose that lays the golden eggs' for the nation's economy; as well as 'supreme foreign exchange earner' for the country. From the early 1960's when commercial oil exploration, production and export commenced in Nigeria; revenues obtained by the government from Oil & Gas proceeds have helped in funding the fiscal

development of Nigeria's critical national infrastructure and many other industries important to the national economy (Anya, 2002; Chukwu, 2002). Thus, Oil & Gas production can be said to be 'as important to the Nigerian economy as oxygen is to human life'.

Nigeria is currently the leading Oil & Gas producer and exported in Africa (NNPC, 2004). The country is also ranked 13th largest oil producer in the world and 6th largest oil producer among the Organization of Petroleum Exporting Countries (OPEC). Nigeria currently ranks 5th in the world with proven gas reserves; which makes the country more of a gas-producing, rather than an oil-producing country (CBN, 2002). Indeed, Nigeria is often described as a gas zone with some oil in it (Assael, 2000; Ekpu, 2004). Currently, Nigeria's crude oil production is about 2.3 million barrels per day; and it is expected to rise to 2.5 million soon (NNPC, 2004). The major international Oil & Gas firms operating in Nigeria include: Shell, Exxon-Mobil, Chevron, Total and Agip. Some others like Texaco have sold their assets and locked up shop. Some visibly smaller indigenous Oil & Gas firms have emerged, and these include: Seplat, Aiteo, Addax, Pan Ocean, etc. There are numerous other firms operating in Nigeria that provide support, supplementary and/or complimentary products or services to the Oil & Gas firms itemized above. These firms are classified as 'Oil-Service' companies. Some firms in this classification include: Schlumbeger, Halliburton's, NestOil, Setraco, Daewoo, etc. Due to the close working relationships 'oil-service' firms have with Oil & Gas firms and the fact that their own personnel oftentimes typically work/reside within/off the premises of the Oil & Gas firms; these 'support' firms typically face and manage similar risks, as the core Oil & Gas

firms and are thus generally also classified as part of the larger Oil & Gas industry in Nigeria.

Production and export of Oil & Gas products in Nigeria is dependent on the efficient and effective management of numerous risk factors. These risk factors may succinctly be categorized under the two broad groupings: 'Technical' and 'Non-Technical' risks. The Technical Risks (TR) facing the industry are categorized as those risks arising from the techniques, processes and procedures involved in the use of technology for drilling, or production of hydrocarbons and several other similar risks specifically associated with the variabilities of the earths sub-surface composition of hydrocarbon reservoirs beneath the crusts of the earth. The Non-Technical Risks (NTR) on the other hand, are typically risks arising from Health, Safety, Security & Environmental (HSSE) challenges and other similar risks arising from Social-Performance (SP) issues associated with the host, nearby, or other communities impacted in one form or the other by the extractive mineral mining activities carried out by the Oil & Gas firms.

Security related NTRs are numerous and typically arise from one, or a combination of the following threat agents: criminality, organized crime, activism, civil/community unrest, armed conflict, terrorism, militancy, etc. Many other security NTRs like the 'the likelihood of Oil & Gas workers being kidnapped for ransom' have arisen from peculiar challenges which have developed over time within the areas where the mineral resources are located and have become prevalent within the area where these hydrocarbons are usually prospected for in Nigeria; known as the Niger-Delta area of the South-South geographical region. Some other security NTR such as petty stealing and other minor

criminality challenges typically arise from socio-economic problems which cut across the entire country and the entire globe.

The Niger-Delta corridor has for many decades now, been beset with a myriad of socio-economic and political issues; ranging from the destruction of its aqua-infrastructure and environment by pollution from oil spills, perceived marginalization of its citizens in terms of employment and participation in oil-mining activities, human capital losses arising from agitation for resource-control and under-development of the entire region, etc. Another very common set of NTRs are those that arose because of security challenges which are peculiar to our modern society; like: burglaries, robberies, kidnappings, sabotage, etc. These security threats have however been exacerbated and aggravated in the Niger-Delta region of Nigeria due to the prevailing peculiarities of the region.

Other NTRs arise simply from the nature of human beings. Man is a social animal that collectively lives in communities. Every human community or activity has fundamental challenges that are usually tackled collectively. One of such challenges is the need to protect lives and properties in the community, due to security challenges which leave these assets at risk. In fact, philosophers like John Locke and Thomas Hobbes drew attention to the need for security in human society and argued that it was the insecurity in the 'state of nature' that necessitates the emergence of the 'State' because life in the 'state of nature' was short, nasty and brutish. More so, security is multi-faceted and all-encompassing; which can be viewed from the point of view of the individual, group, country or globally. No one human being can experience perfect security; because individuals, or states, are not perfectly

secure, or completely insecure; but, experience varying degrees of security, or insecurity, at various times. At the state level, security has so much to do; both with the perceptions that members of the community have about their environment and the actual state of security, or insecurity, in the community (Nkoli, 2016). Indeed, the issue of insecurity has become a recurring global challenge that is not restricted by boundaries, economies, or legal jurisdiction.

Methodology
Research Design

Research design shows the blueprint for conducting a Study (Burns & Grove, 2003). Similarly, conducting research in the social sciences can proceed by several methods depending on different philosophical assumptions. This Study adopts a mixed approach of both positivist and anti-positivist philosophy.

Population of Study

The population of this Study consists of personnel selected from six (6) Oil & Gas firms in Rivers State, Nigeria. These firms are: Shell Petroleum Development Company (SPDC), Rivers State, Nigerian Agip Oil Company (NAOC), Saipem Nig. Ltd, Elf/Total, Chevron and Nigeria Liquified Natural Gas (NLNG).

Sample Size Determination

The decision to use just a sample rather than the entire population, is based on the fact that collecting, collating and analyzing data from the whole Sampling Frame consisting of staff (permanent and contract) of the Oil & Gas firms in Rivers State, Nigeria (currently estimated at about Twelve Thousand, Two Hundred & Fifty Wight (12,258) personnel) would be unwieldy and almost impossible; as well as the fact that the researcher has a good idea

of the composition of the target population and can easily identify what a good representative sample should consist of. For this Study, the sample size of 387 was determined using Taro Yamane's formula.

Copies of questionnaire were distributed as follows:

Organization	Staff strength	% distribution	No of questionnaire
SHELL	3,301	27%	105
CHEVRON	2,477	20%	77
AGIP	1,080	9%	35
NLNG	1,500	12%	46
ELF TOTAL	2,700	22%	85
SAIPEM	1,200	10%	39
TOTAL	**12,258**	**100%**	**387**

Table 5: Distribution of Questionnaires

Table 58: 2017 Gas Production and Utilization by Company

Company	Gas Production AG	NAG	Total Gas Produced	Fuel Gas	Gaslift Make-Up	Re-Injection	NGL/LPG (Feed Stock)	Gas To NLPP	Gas Sold Local	Export	Total Gas Utilised	Gas Shrinkage	Total Gas Flared	%Flared
SPDC	46,219,889	668,953,156	715,173,045	11,374,473	5,892,991			22,551,192	7,269,603	642,231,303	689,319,562		25,853,484	3.61
SNEPCO	45,624,287		45,624,287	3,518,118						35,029,952	38,548,070		7,137,824	15.64
Chevron Nigeria	115,335,828	117,586,786	232,922,614	19,439,742	23,917,225		10,677,237		107,778,404	61,029,746	222,842,355		16,410,467	7.05
Star Deep	149,390,060		149,390,060	6,670,932		105,998,832					112,659,764		36,730,296	24.59
Mobil	397,548,179		397,548,179	32,907,077	16,253,292	270,120,768	22,288,801				341,569,937		45,980,099	11.71
Esso	175,426,866		175,426,866	12,161,782	2,698,650	141,973,174	496,768				157,330,374		20,278,259	11.56
NAOC	109,366,075	203,169,629	312,535,704	30,856,523	612,961	1,401,649	14,699,797	15,123,447	42,428,116	171,268,059	276,390,552	20,877,434	17,041,377	5.45
TEPNG	162,715,345	97,358,666	260,074,010	12,516,671		90,432,004				144,514,411	247,463,086		12,610,925	4.85
TUPNI	211,877,000		211,877,000	6,406,000		77,543,000				125,921,000	209,870,000		2,007,000	0.95
AENR	1,654,319		1,654,319	109,800							109,800		1,544,519	93.36
NAE	16,170,600		16,170,600	1,567,750		13,126,690					14,694,440	145,200	1,330,960	8.23
Addax	37,099,343		37,099,343	2,410,244	10,620,044	4,273,392					17,303,680		19,415,041	52.33
Pan Ocean	5,562,591		5,562,591	137,916					3,276,364		3,414,280		2,148,311	38.62
NPDC	128,621,081		128,621,081	1,507,248					90,878,200		92,385,448		36,235,633	28.17
AMNI	7,347,070		7,347,070	153,730		1,880,510					2,034,240		5,336,910	72.64
Atlas	743,850		743,850	175,700							175,700		568,150	76.38
Monipulo	158,422		158,422	4,425							4,425		153,996	97.21
Niger Delta	1,010,493	13,317,032	14,327,525	143,770					272,487	13,754,017	14,170,274		157,251	1.1
Continental	2,118,427		2,118,427	102,427							102,427		2,016,000	95.16
Consolidated	319,770		319,770	55,821							55,821		263,949	82.54
Express	1,156,900		1,156,900	19,500							19,500		1,137,400	98.31
Dubri	2,036,334		2,036,334	25,659							25,659		2,010,675	98.74
Platform	9,339,304		9,339,304	25,185					1,327,508		1,352,693		7,986,611	85.52
Walter Smith	241,313	231,489	472,802		372,585	100,217					472,802			99.97
Mid Western	2,169,413		2,169,413	653							653		2,168,760	99.97
Pillar	234,050		234,050	26,135							26,135		207,915	88.83
Allied Energy	2,380,230		2,380,230	19,310							19,310		2,360,920	99.19
Energia	7,610,396		7,610,396	144,479			364,315				508,794		7,101,602	93.31
Britania-U	316,193		316,193	253,178							253,178		63,015	19.93
Seplat	14,923,620	87,914,790	102,838,410	362,565	1,284,299				92,810,590		94,457,454		8,380,956	8.15
Oriental Energy	2,007,497		2,007,497	564,248		299,843					864,091		1,143,406	56.96
SEEPCO	2,141,407		2,141,407	1,215,330	706,071						1,921,401		220,006	10.27
Frontier	53,016	30,583,125	30,636,141	160,632					30,361,321		30,521,953		114,188	0.37
New Cross	5,842,046		5,842,046	45,737							45,737		5,796,309	99.22
Prime Exploration														#DIV/0
EROTON	11,174,264	17,893,360	29,067,624	423,179					16,337,580	1,752,900	18,513,659		10,553,965	36.31
Universal Energy	634,250		634,250	3,880							3,880		630,370	99.39
Ateo	15,060,043		15,060,043	290,893						1,954,584	2,245,477		12,814,566	85.09
Network	750,076		750,076	7,300							7,300		742,776	99.03
Belema Oil	4,960,814		4,960,814	144,105							144,105		4,816,709	97.1
Yinka Folawiyo	2,044,800		2,044,800		873,560						873,560		1,171,240	57.28
Green Energy	1,643,920		1,643,920										1,643,920	100
Excel	12,127		12,127										12,127	100

Table 6: Sampling Frame (1). Extracted from Table 58: Nigerian Oil and Gas Industry Annual Report 2017 (www.dpr.gov.ng)

Table 37: Status of Licensed Refinery Projects

S/N	Licensee	Plant Location	Capacity (BSPD)	Refinery Type	License Granted	License Validity
1	Waltersmith Refining & Pet. Co. Ltd	Ibigwe, Imo State	5,000	Modular	ATC	Valid
2	Clairgold Oil & Gas Ltd.	Koko, Delta State	20,000	Modular	ATC	Valid
3	Niger Delta Petroleum Resources	Ogbele, Rivers State	10,000	Modular	ATR	Valid
4	Dee Jones	Calabar Port, Cross River State	6,000	Modular	ATC	Valid
5	RG Shinjin Petrochemicals Limited	Koko, Delta State	10,000	Modular	ATC	Valid
6	OPAC Refineries	Umuseti, Delta State	7,000	Modular	ATC	Valid
7	Dangote Oil Refinery Company Limited	LFTZ, Lagos State	500,000	Conversion	ATC	Valid
8	Resource Pet. & Petrochem Int. Inc	Ibeno, Akwa Ibom State	100,000	Conversion	ATC	Valid
9	JIL – Amber Consortium	PHRC, Rivers State	100,000	Conversion	ATR	Valid
10	Azikel Petroleum Limited	Obunagha, Bayelsa State	12,000	Modular	ATC	Expired
11	Hi Rev Oil Limited	Utapate, Akwa Ibom State	50,000	Modular	ATC	Expired
12	Amakpe International Refinery Inc.	Eket, Akwa Ibom State	12,000	Modular	ATC	Expired
13	Southfield Petrochemical & Refinery Limited	Owanoba, Edo State	20,000	Modular	LTE	Valid
14	Don Mac Limited	Oben, Edo State	10,000	Modular	LTE	Valid
15	Kingdom Global Trading Pet & Gas Nig. Ltd	Okwagbe, Delta State	12,000	Modular	LTE	Valid
16	Platinum Hydrocarbon Resources Limited	Sapele, Delta State	10,000	Modular	LTE	Valid
17	Mondonat Nigeria Limited	Okpaka, Delta State	20,000	Modular	LTE	Valid
18	Ikwe-Onna Refinery Limited	Ikwe, Akwa Ibom State	5,000	Modular	LTE	Valid
19	Shepha Pet. & Petrochem. Co. Ltd	Ovrode, Delta State	30,000	Modular	LTE	Valid
20	Bua Refinery & Petrochemicals Ltd.	Ntaikang, Akwa Ibom State	150,000	Conventional	LTE	Valid
21	Conodit Refinery Nigeria Limited	Umukwata, Delta State	20,000	Modular	LTE	Valid
22	Duport Midstream Co. Limited	Orhionmwon, Edo State	10,000	Modular	LTE	Valid
23	Gazingstock Petroleum Company Limited	Abalagada, Delta State	5,000	Modular	LTE	Valid
24	Petrolex Oil & Gas Limited	Ijebu, Ogun State	250,000	Conversion	LTE	Valid
25	Energia Limited	Kwale, Delta State	20,000	Modular	LTE	Expired
26	Kainji Resources Limited	Oguta, Imo State	24,000	Modular	LTE	Expired
27	Eko Petroleum Refining Company Limited	Tomaro Island, Lagos	20,000	Modular	LTE	Expired
28	Frao Oil Nigeria Limited	Uzere, Delta State	12,000	Modular	LTE	Expired
29	Masters Energy Oil & Gas Limited	Rumuolumeni Rivers State	30,000	Modular	LTE	Expired
30	Cross Country Oil & Gas Limited	Obile, Imo State	20,000	Modular	LTE	Expired
31	Grifon Energy Limited	Ipoke, Ondo State	10,000	Modular	LTE	Expired
32	All Grace Energy Limited	Ubima, Rivers State	5,000	Modular	LTE	Expired
33	Green Energy International Limited	Otakikpo, Rivers State	5,000	Modular	LTE	Expired
34	Fresh Energy Limited	Igbomotoru, Bayelsa State	10,000	Modular	LTE	Expired
35	Chyzob Oil & Gas Limited	Obuzor, Abia State	10,000	Modular	LTE	Expired
36	Associated Worldwide Company Limited	Eket, Akwa Ibom State	20,000	Modular	LTE	Expired
37	Starex Petroleum Refinery Limited	Onne Oil & Gas FTZ	100,000	Conversion	LTE	Expired
38	Epic Refinery & Petrochem. Ind. Ltd	Oporoma, Bayelsa State	107,000	Conversion	LTE	Expired
39	Sifax Oil & Gas Company Limited	Snake Island, Lagos State	120,000	Conversion	LTE	Expired
40	Capital Oil & Gas Industries Limited	Snake Island, Lagos State	100,000	Conversion	LTE	Expired
41	Aiteo Energy Resources Limited	Ajagbodudu, Delta State	100,000	Conversion	LTE	Expired

Table 7: Sampling Frame (2). Extracted from Table 37: Nigerian Oil and Gas Industry Annual Report 2017 (www.dpr.gov.ng)

Methods of Data Analyses

Since our data is collected on ordinal scale, Spearman's Rank Order Correlation will be used for testing our hypotheses to see the level of association. This will be achieved by converting the ordinal data to intervals in order to enable parametric tests such as regression. Partial correlation will also be used to analyze the effect of the moderating variable.

Data Analyses and Findings
Respondents
Table 8: Distribution of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Shell	91	27.5	27.5	27.5
	Agip	63	19.0	19.0	46.5
	Saipem	34	10.3	10.3	56.8
	Elf'/Total	41	12.4	12.4	69.2
	Chevron	65	19.6	19.6	88.8
	NLNG	37	11.2	11.2	100.0

	Total	331	100.0	100.0

Table 8 above reveals the distribution of valid research instrument used for our analyses. It shows that 91 respondents work for SPDC. which represents 27.5% of total respondents; 63 respondents work with Agip, which represents 19% of total respondents; 34 respondents work with Saipem, which represents 10% to total respondents; while Elf /Total, Chevron and NLNG have 41, 65 and 37 respondents respectively. These represent 12.4%, 19.6% and 11.2% respectively.

System of Analysis

Table 9: Univariate Analyses for Internal Financial Performance

	N	Minimum	Maximum	Mean	Std.	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
FF_I	331	1	4	2.79	.853	-.360	.134
FP_2	331	1	4	2.79	.703	-.047	.134
FP_3	331	1	4	2.78	.808	-.057	.134
FP_4	331	1	4	2.49	.791	.072	.134
FP_5	331	1	4	3.16	.669	-.315	.134
Valid	N	331					

Similarly, in table 9, the univariate analyses for the construct 'Financial Performance' reveals a minimum entry of 1 which represents 'strongly disagree' and a maximum of 4 which represents 'strongly agree'. The output also reveals a mean for items greater than 2.0 and it was also realized that these items were negatively skewed. This was the premise for the use of a non-parametric statistical tool like Spearman.

Test of Hypotheses

Table 10: Correlation Matrix for Test of Hypotheses 1-3

Correlations

			SECURITY_POLICY	INTERNAL_MONIT_AND_AUD	MGT_REVIEW	FIN_PERFORMANCE	NON_FIN_PERFORMANCE
Spearman's rho	SECURITY_POLICY	Correlation Coefficient	1.000	.427**	.216**	.277**	.293**
		Sig. (2-tailed)	.	.000	.000	.000	.000
		N	331	331	331	331	331
	INTERNAL_MONIT_AND_AUD	Correlation Coefficient	.427**	1.000	.664**	.580**	.626**
		Sig. (2-tailed)	.000	.	.000	.000	.000
		N	331	331	331	331	331
	MGT_REVIEW	Correlation Coefficient	.216**	.664**	1.000	.702**	.607**
		Sig. (2-tailed)	.000	.000	.	.000	.000
		N	331	331	331	331	331
	FIN_PERFORMANCE	Correlation Coefficient	.277**	.580**	.702**	1.000	.470**
		Sig. (2-tailed)	.000	.000	.000	.	.000
		N	331	331	331	331	331
	NON_FIN_PERFORMANCE	Correlation Coefficient	.293**	.626**	.607**	.470**	1.000
		Sig. (2-tailed)	.000	.000	.000	.000	.
		N	331	331	331	331	331

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

From the correlation matrix in Table 10, we realize that a significant relationship exists amongst all the dimensions to the measures of our criterion variable. This led to the rejection of all the stated hypotheses. They are further explained below.

H0₁: **Security Policy does not affect the Financial Performance of Oil & Gas firms in Rivers State, Nigeria**

Correlations

		SECURITY_P	FIN_PERFOR
Spearman's	rhc Correlation	1.000	.277"
	Sig. (2-tailed)		.000
	N	331	331
FIN_FERFORMANCE	Correlation	.277"	1.000
	Sig. (2-tailed)	.000	
	N	331	331

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

Test of hypothesis one reveals that a significant relationship exists between Security Policy and Financial Performance with a correlation coefficient of 0.277 and a p-value of 0.000 which is less than alpha of 0.05. with this result, we reject the stated null hypothesis and accept the alternate.

H0₂: **Internal Monitoring and Audit does not affect the Financial Performance of Oil & Gas firms in Rivers State, Nigeria**

Correlations

		INTNL_MONIT_A	FIN_PERFOR
Spearman's	rhc Correlation	1.000	.580
& AUDIT	Sig. (2-tailed)		.000
	N	331	331
FIN_PERFORMANCE	Correlation Coefficient	.580	1.000
	Sig. (2-tailed)	.000	
	N	331	331

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

Test of hypothesis two reveals that another significant relationship exists between Internal Monitoring and Audit and Financial Performance with a correlation coefficient of 0.580 and a p-value of 0.000 which is less than alpha of 0.05. with this result, we reject the stated null hypothesis and accept the alternate.

H0₃: **Management Review does not affect the Financial Performance of Oil & Gas firms in Rivers State, Nigeria**

Correlations

		MGT .REVIEW	FIN_FERFOR
Spearman's rho	MGT_REVIEW Correlation	1.000	.702

Sig. (2-tailed)		.000
N	331	331
Correlation	.702	1.000
Sig. (2-tailed)	.000	
N	331	331

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

Test of hypothesis three also reveals that a strong relationship exists between Management Review and Financial Performance with a correlation coefficient of 0.702 and a p-value of 0.000 which is less than alpha of 0.05. with this result, we reject the stated null hypothesis and accept the alternate.

Discussion of Findings

This Study has empirically diagnosed the extent to which security management systems can bring about the much-needed Performance in the Oil & Gas industry. The Study adopted Spearman's Rank Order Correlation as a statistical tool for testing the stated null hypotheses. This was because the data generated through our research instrument were ordinal in nature. Another significant justification for the use of a non-parametric tool for testing the hypotheses is the fact that each of the statement items were negatively skewed.

The Findings below arise after testing each proposed Hypotheses in order to satisfy the following Objectives:

Appendix A. Investigate the extent to which Security Policy affects Financial Performance in Oil & Gas firms in Rivers State, Nigeria

Testing to verify Objective 1 above led to the following Findings:

From the test of relationship between Security Policy and Performance, the Study revealed that Security Policy has a relationship with Financial Performance. This signifies that without an adequate Security

Policy in place, Organizations may be affected by activities of those who do not mean well for the Organization such as kidnappers and cyber criminals. These actions could affect the expected Performance of such Organization.

Appendix B. Investigate the extent to which Internal Monitoring and Audit affects Financial Performance in Oil & Gas firms in Rivers State, Nigeria

Testing to verify Objective 2 above led to the following Findings:

The test of relationship between Internal Monitoring and Audit also reveals a significant relationship. This was evident in the correlation coefficient and the associated p-values. This implies that when effective monitoring of Organizational activities is in place and when there is strict audit when it comes to technical and non-technical activities; the Organization would always experience effective Financial Performance.

Appendix C. Investigate the extent to which Management Review/Evaluation affects Financial Performance in Oil & Gas firms in Rivers State, Nigeria

Testing to verify Objective 3 above led to the following Findings:

The third group of tests were between Management Review/Evaluation and Performance. Again, this test result reveals that a significant relationship exists with positive correlation coefficients and p-values less than 0.05. This means that the

role of Management as a decision-making body in Organizations can never be underestimated. The attention of Management must be drawn to every activity within the Organization and any activity that is unfavorable should be discontinued or disallowed. Again, this can bring about effective Financial Performance.

Summary, Conclusion and Recommendations

The Study examined the relationship between Security Management Systems and the Organizational Performance of Oil & Gas Industry firms in Rivers State, Nigeria. Management theory, concepts and constructs; such as: Security Policy; Internal Monitoring & Audit; as well as Management Reviews/Evaluation were used as 'dimensions' in evaluating the predictor variable (Security Management Systems). Similarly, Management concepts and tools such as: Financial and/or Non-Financial Performance are used as measures of the criterion variable (Organizational Performance). Spearman's Rank Order Correlation methodology was used in testing the validity of the three respective hypotheses proposed. The data used for analyses was obtained using random sampling technique. The representative sample population for the Study were 387 staffers who were randomly selected from six (6) Oil & Gas companies based in Port-Harcourt City, Rivers State, Nigeria. The responses obtained from staffers of these six firms are taken to mirror and represent the opinion of the entire industry. The Oil & Gas Industry in Rivers State, cum Nigeria itself has an estimated combined total staff of 12,258 persons.

Major Findings

The major findings from the Study are:

i.   Security Policy has a significant relationship with the Financial Performance of the Oil & Gas Industry firms in Rivers State, Nigeria. This means having a Security Policy is essential for Organizational Performance of an Oil & Gas firm in Rivers State, Nigeria.

ii.   Internal Monitoring and Audit also has a significant relationship with the Financial Performance of the Oil & Gas Industry firms in Rivers State, Nigeria. This means continuous audit and monitoring of security plans, processes and operations is essential to achieve Organizational Performance for an Oil & Gas firm in Rivers State, Nigeria.

iii. Management Reviews/Evaluation have a significant relationship with the Financial Performance of the Oil & Gas Industry firms in Rivers State, Nigeria. This means instituting a periodic Management Review of security operations is key to achieving Organizational Performance in an Oil & Gas firm in Rivers State.

Summary of Findings

The product of our findings is testimonials that security management systems are very relevant to the achievement of Financial Performance in the Oil & Gas sector of the Rivers State, Nigerian economy. It revealed the fact that with a combination of Security Policy, Internal Monitoring and Audit and management review, Oil & Gas can achieve the much needed Financial Performance. The findings further revealed that all the tested hypotheses were significant, and all the p-values were less than an alpha of 0.05. This implies that all things being equal, security

management systems would always be a catalyst in achieving the much-needed Financial Performance within the Oil & Gas Industry in Rivers State, Nigeria.

Conclusions

The findings from this Study generally confirm that the presence of an effective Security Management System that includes a robust Security Policy complimented with regular Internal Monitoring and Audit processes and reinforced by periodic Management Reviews/Evaluation will help guarantee Organizational Performance of Oil & Gas Industry Firms in River State, Nigeria.

It also helps clarify that such Organizations need to have an Organizational structure that has a security management system embedded inherently within the Organization. It is believed that with such a system in place and aided with other functional systems within the firm; Oil & Gas firms in Rivers State, Nigeria can achieve the much desired Financial Performance. This achievement would be of benefit to the Organization, its employees, host communities and the entire country.

Recommendations

i.   The Management of all Oil & Gas firms in Rivers State, Nigeria should as soon as possible institute a Security Policy for their Organization. The Security Policy should be reviewed annually, or any time there is a significant change in the security threat rating of the firm.

ii.   The Management of all Oil & Gas firms in Rivers State, Nigeria should as soon as possible inaugurate and set-up a Security Monitoring & Audit Committee; with the committee having the specific function of identifying any activity with mis-alignment with Organizational

objectives with a view to correcting any such actions or intending actions appropriately.

iii.   The Management of all Oil & Gas firms in Rivers State, Nigeria should as soon as possible institute policy that mandates the reviews of security plans, procedures and policies every 2 years.

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