Performance Management and Organizational Productivity at The Nigerian National Petroleum Corporation (NNPC)

ISA ISMAILA[1], BASHIR GARBA IBRAHIM[2], AMEER MOHAMMED[3]
[1] *Nigerian National Petroleum Corporation*
[2] *Center for Defence Procurement, Logistic and Supply Chain Management, Air Force Institute of Technology, Kaduna*
[3] *Mechatronics Engineering Department, Air Force Institute of Technology, Kaduna*

Abstract- ***The success of every system is defined on how effectively every employee's performance is assessed and managed. Performance management is an important part of every organization, and it has developed it in to a useful element for any company who wants to succeed. Organizational culture, often referred as productivity, applies to a company's real results as measured. The Nigerian National Petroleum Corporation (NNPC) was set up by Act No. 33 of 1977 with the core mandate to carry out exploration and production of hydrocarbon resources, refining, distribution and marketing of petroleum products nation-wide for the benefit of all Nigerians and other stakeholders. Therefore, this study will investigate whether there is performance management in NNPC and offer suitable performance management model for the organization. The study adopted multiple research designs where structured questionnaires were administered to three hundred and sixty-seven (367) staff of the Corporation. Data obtained from the field survey were statistically put to test using descriptive and inferential statistics. The results show that there is performance management at NNPC; however, it is ineffective to drive its productivity. Also, it is discovered that there exists a positive relationship of 74% between the Performance Management Model and Organizational Productivity. The result is significant as the p-value (of 0.000<5%, the criterion significance level). Besides, it is found that there is a suitable performance management model for NNPC. The study concludes that performance management is a panacea for enhancing/improving the productivity of the NNPC. Consequently, the study recommends, that management of NNPC should set-the-stage accurately by defining employee's goals and aligning them with the corporate strategy. Also, to get the maximum support from employees, management should, from-time-to-time, conduct appraisal process including listening, observing, constructive feedback, and provision recognition, constructive analysis of employee's performance.***

Indexed Terms- ***Performance Management, Organizational Productivity, Nigerian National Petroleum Corporation (NNPC)***

I. INTRODUCTION

There is an old saying, "you cannot improve what you cannot measure". Performance management processes have risen to prominence in recent years as a means of providing a more integrated and continuous performance appraisal system than previous separate and usually inadequate merit rating of performance appraisal schemes. The success of any organization is dependent on how well the performance of every employee is effectively appraised and managed. This is achieved through the deployment of an effective performance management system. The important role of performance management in an organization has become indispensable for any organization willing and intending to succeed. Management can be characterized as "a strategic and integrated approach to maximizing the efficiency of companies by improving the employees' performance and developing the capabilities of teams and individual contributors" [1]. As per [2,] performance management is a holistic procedure that sheds new light on an organization's overall performance. It also focus on the process to provide products or services in

the organization. Previously [3] proposed the change of Performance Management from organization structure to the employees for better performance. Productivity is anything that makes an organization function better and everything private and public sector organizations do or want to do and relate to productivity, for there is not one top priority that cannot be tracked back to the search for productivity. Therefore, organizational productivity as defined by [4] is "the strength of an organization, institution, or business to produce desired results with a minimum expenditure of energy, time, money, personnel, material, etc.". Organizational performance or productivity comprises the actual output or results of an organization as measured against its intended outputs (or goals and objectives). An organizational performance concerns the three specific areas of firm outcomes: (a) financial performance (profits, return on assets, return on investment, etc.); (b) product-market performance (sales, market share, etc.); and (c) shareholder return (total shareholder return, economic value added, etc. [5]. Onyeukwu and Fatih (2006) reported that proper models like 540-degree approach and people plus approach are not being adopted by Nigerian organizations. The "360-degree feedback" "540-degree feedback" and "People plus approach" will be discussed and recommended for the Corporation.

The Nigerian National Petroleum Corporation was set up by Act No. 33 of 1977 with the core mandate to carry out exploration and production of hydrocarbon resources, refining crude oil, distribution finished products and marketing of petroleum products nation-wide for the benefit of all Nigerians and other stakeholders. Browsing through the scorecard of NNPC shows that the corporation is still far away from the targets set by the stakeholders and also far below expectation to compare it with other related industries. The operational and financial indicators show a negative trend over the years. To this end, this research investigates whether there is performance management at the NNPC and whether there is a suitable performance management model for the organization. The findings of this study will primarily be subject to our data collection from NNPC Corporate Headquarters. The following are research hypothesis;

i. H01- There is no relationship exists between performance management model and productivity.
   HA1- There exists a relationship between performance management model implementation and productivity.
ii. H02- There is no performance management model operated in NNPC
   HA2- There is a performance management model operated in NNPC
iii. H03- There is no performance management model suitable for NNPC
   HA3-There is performance management model suitable for NNPC

II. METHODOLOGY

2.1 Research Design

This study is conducted to examine the problems of Performance Management Model and the company Productivity in NNPC; therefore, Case Study, Relational and Survey research designs are used.

2.2 Data Collection Method

Only the primary method of data collection is used in this study for data generation on research questions through administering questionnaires.

2.2.1 Questionnaire Design and Administration

The questionnaires used in this study are designed to conform to both open-and-closed ended questions and are distributed to the sampled staff of the NNPC both at the Strategic Business Units and Corporate Business Units of the NNPC. The close-ended questions are the questions which can be answered by a simple "yes" or "no," (other derivatives) open-ended questions are those which require more thought and more than a simple one-word answer. According to [6] a good questionnaire should be in three parts, namely, the introduction, the biodata section and the material research question sections (divided into Close-ended and open-and-close ended sections). Thus, this study adopted the format of the questionnaire mentioned and a copy of the questionnaire has been attached as Appendix.

2.2.2 Reliability and Validity of the Questionnaire

Using the work of [7] [8, the validity of this concept was argued. The questionnaires are interviewed by the Supervisor to make inputs on the exploration instrument (questionnaires) before they are distributed

to respondents in order to make sure face and content validity of the instruments. As a result, the researcher was able to identify if the instrument filled the entire content region or whether it was reliable. This allows the study to assess that the instrument secured the breadth of the content region and to additionally find out if the instrument contains a delegate test of the content being evaluated. The study affirmed whether the organization is a stakeholder as a part of designing the instrument and the suitability of the instrument. This is also guaranteed that the instrument is fit for the purpose and the obliged information from different respondents.

This allowed the researchers to ascertain whether the instrument covered the entire content region or whether it would include a delegate test of the content being evaluated. It should have been noted that the study also ascertained whether or not the organization that used design the instrument was appropriate.

2.3 Population of the Study

The population of this study comprised the entire staff of Strategic Business Units (SBU) and Corporate Service Unit (CSU) of the NNPC. This study relied on the information given by the Minister of State for Petroleum Resources and Group Managing Director of the NNPC, Mr Ibe Kachikwu as quoted by Vanguard (February 4th, 2016) and Punch (February 5th, 2016) that the total staff strength at the organization is less than 5,000. This is the latest information on NNPC staff-strength; thus, this study relies on this data and therefore adopts a study population of 4,500 staff. The Yaro Yamene technique was adopted for this study work to evaluating the sample size. Therefore, the sample size of this study is 367 staff.

2.4 Method of Data Analysis

This study adopts both vivid and inferential method to analyze the data. Descriptively, simple percentages, frequency distribution tables and charts were used to analyze the data. Inferentially, correlation and chi-square models were used. While the correlation analysis is used to validate the hypothesis one since it seeks to maximum the relationship between performance management and organizational productivity. The Chi-square (x^2) analysis is used to determine the second and third hypotheses. The Chi-Square (x^2) test was conducted to determine if there is a significant difference between the expected frequencies and the detected frequencies in one or more categories.

2.5 Model Specification

Two models – Correlation and Chi-Square (x^2) – are adopted in this study consequent upon the structure of the study hypotheses. They are stated as follows:

Pearson product-moment Correlation Technique:

$$r_{xy} = \frac{\sum x_i y_i - n\underline{x}\underline{y}}{(n-1)S_x S_y} = \frac{n\sum x_i y_i - \sum x_i \sum y_i}{\sqrt{n\sum x_i^2 - (\sum x_i)^2}\sqrt{n\sum y_i^2 - (\sum y_i)^2}} \quad (1)$$

where: r = correlation co-efficient

n = number of observations

x = independent variable (regressor) = Performance Management Model (PMM)

y = dependent variable (regression) = Organizational Productivity

Testing for the significance of the correlation coefficient, '*r*':

The t-test for the consequence of 'r' will be used to test the statistical significance of the result. The formula is:

$$t = r\sqrt{\frac{n-2}{1-r^2}} \quad (2)$$

The hypothesis will be tested at a 5% level of significance.

The formula for calculating Chi-Square (χ^2) is given as follows:

$$x^2 = \sum \frac{[Observed_{ij} - model_{ij}]^2}{model_{ij}} = \sum \frac{[O-m]^2}{m} \quad (3)$$

where; χ^2 = Pearson's chi-square – employee productivity.

Σ = Summation.

O = Observed value of each variable.

m = Expected value of each variable.

$$m = \frac{Row\ total \times Column\ total}{Total} \quad (4)$$

Thus, the degree of freedom [*df*] is given as;

df = [r-1] [c-1]

where; *df* = Degree of freedom

r = Number of rows
c = Number of columns

Decision and Rule

1. If χ^2-calculated > χ^2-critical value, reject H_0 and accept H_1. That is, if calculated chi-square is more than the critical value of chi-square $\chi^2_{0.05}$[df] in the table, reject the Null hypothesis and accept the alternative hypothesis.
2. If χ^2-calculated < χ^2-critical value, accept H_0 and reject H_1. That is, if calculated chi-square is lower than the critical value of chi-square $\chi^2_{0.05}$[df] in the table, accept the Null hypothesis and reject the alternative hypothesis.

2.5.1 Model Justification

In statistics, the Pearson product-moment correlation coefficient (referred to as the PPMCC or PCC or Pearson's *r*) is a portion of the linear correlation (dependence) between two variables *X* and *Y*, giving a value between +1 and −1 inclusive, where 1 is a total positive correlation, 0 is no correlation, and −1 is a total negative correlation. It is commonly used in the sciences as a measure of the degree of linear dependence between two variables. Simply put, Pearson Product-Moment Correlation is one of the measures of correlation which enumerates the strength as well as the direction of such a relationship. This coefficient is used if two conditions are satisfied the variables are in the interval or ratio scale of measurement and a linear relationship between them is assumed such as in the present study where performance management model is in the ratio scale measurement and linearity is expected between the performance management model and organizational productivity.

Also, this study adopts the use of Chi-Square (χ^2) as the method of data analysis. The Chi-Square statistic is most regularly used to evaluate Tests of Independence when using a cross-tabulation. Cross tabulation grants the distributions of two categorical variables simultaneously, with the intersections of the categories of the variables appearing in the cells of the table. The Test of Independence assesses whether an association exists between the two variables by carefully examining the pattern of responses in the cells; calculating the Chi-Square statistic and comparing it against a critical value from the Chi-Square distribution allows the researcher to assess whether the association seen between the variables in a particular sample is likely to represent an actual relationship between those variables in the population.

III. RESULTS ANALYSIS

3.1 Results

The obtained data from our field survey were statistically analyzed (questionnaire administration) to the staff of the NNPC at its Office in Abuja. This section is divided into two subsections; the first subsection presents an overview of data collected from the questionnaire administration using frequency distribution tables and simple percentages. The second subsection statistically analyzed the data using Correlation and Chi-square (χ^2). From the three hundred and sixty-seven (367) questionnaires administered, only 351 were dully completed and returned. This gives a response rate of 96%. The rest are either not returned or not dully filled. Thus, the 351 dully filled and returned questionnaires are presented below.

3.1.1 Demographic characteristics of respondents

Table 1 present the distribution of respondents by sex were it can be seen that 210 (59.8%) of the total respondents are males while 141 (40.2%) are females. This depicts the preponderance of males than the females' counterpart in the distribution.

Table 1: Distribution of respondents by sex

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	210	59.8	59.8	59.8
	Female	141	40.2	40.2	100.0
	Total	351	100.0	100.0	

Source: Field Survey, 2016

Table 2 present the distribution of respondents by age. It is obvious that 48 (13.7%) of the respondents are between 21-30years, 166 (47.3%) of the respondents are between 31-40years, 88 (25.1%) of the respondents are between 41-50years and 49 (14.0%) of the respondents are 51years and above.

Conspicuously, the majority of the respondents are between 31-40years.

Table 2: Distribution of respondents by age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Between 21-30 years	48	13.7	13.7	13.7
	Between 31-40 years	166	47.3	47.3	61.0
	Between 41-50 years	88	25.1	25.1	86.0
	51years & Above	49	14.0	14.0	100.0
	Total	351	100.0	100.0	

Source: Field Survey, 2016

Table 3 shows that 59 (16.8%) of the respondents have an educational qualification (such as diplomas) which is below the Bachelor's degree, 140 (39.9%) of the respondents possess Bachelor's degree as educational qualification, while 119 (33.9%) of the respondents have educational qualification above the Bachelor's degree (such as master's and doctorate degrees) while 33 (9.4%) possess other Certificates (that is, professional qualifications). From this distribution, the majority of the respondents are holders of only a Bachelor's degree.

Table 3: Educational qualification

		Frequency	Per cent	Valid Percent	Cumulative Percent
Valid	Below First degree	59	16.8	16.8	16.8
	First degree	140	39.9	39.9	56.7
	Above First degree	119	33.9	33.9	90.6
	Other Certificates	33	9.4	9.4	100.0
	Total	351	100.0	100.0	

Source: Field Survey, 2016

Table 4 shows that 143 (41.0%) of the respondents are Junior staff, 90 (26.0%) of the respondents are Senior staff, 50 (14.2%) are supervisors, 40 (11.3%) and Middle Management and 28 (8.0%) of the respondents are Top Management. This means that we have the majority of the respondents are Junior staff.

Table 4: Position at NNPC

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Junior staff	143	41	55.0	55.0
	Senior staff	90	26	37.0	92.0
	Supervisor	50	14.2		
	Middle Management	40	11.3		
	Top Management	28	8.0	8.0	100.0
	Total	351	100.0	100.0	

Source: Field Survey, 2016

Table 5 shows that 88 (25.1%) of the respondents have spent less than 5years at the NNPC, 172 (49.0%) of the respondents have spent between 6-10years, 80 (22.8%) of the respondents have spent between 11-20years and 11 (3.1%) of the respondents have spent 21years and above in the organization.

Table 5: Number of years spent at NNPC

		Frequency	Per cent	Valid Percent	Cumulative Percent
Valid	Less than 5years	88	25.1	25.1	25.1
	Btw 6-10 years	172	49.0	49.0	74.1
	Btw 11-20 years	80	22.8	22.8	96.9
	21years & above	11	3.1	3.1	100.0
	Total	351	100.0	100.0	

Source: Field Survey, 2016

Table 6 shows that 144 (41.0%) of the respondents Strongly Agree that performance indicators provide the instrument by which an organization can measure the degree of critical success factors, 194 (55.3%) Agree and 13 (3.7%) are Undecided. This means the bulk of the respondents merely agree with the statement.

Table 6: Performance indicators provide the mechanism by which an organization can measure critical success factors.

		Frequency	Per cent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	144	41.0	41.0	41.0
	Agree	194	55.3	55.3	96.3
	Undecided	13	3.7	3.7	100.0
	Total	351	100.0	100.0	

Source: Field Survey, 2016

Table 7 shows the performance management is an umbrella term that incorporates the configuration and measurement of district performance areas. From the distribution, 144 (41.0%) of the respondents Strongly Agree, 166 (47.3%) Agree, 15 (4.3%) are Undecided, 16 (3.8%) Disagree and 10 (2.8%) Strongly Disagree. This means the majority of the respondents merely agree with the statement.

Table 7: Performance management is an umbrella term that integrates the configuration and measurement of district performance areas

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	144	41.0	41.0	41.0
	Agree	166	47.3	47.3	88.3
	Undecided	15	4.3	4.3	92.6
	Disagree	16	4.6	4.6	97.2
	Strongly Disagree	10	2.8	2.8	100.0
	Total	351	100.0	100.0	

Source: Field Survey, 2016

Table 8 is deducing that 218 (62.1%) of the respondents Strongly Agree that performance management is a critical business tool, particularly translating a strategy into results, 112 (31.9%) of the respondents Agree and 21 (6.0%) of the respondents are Undecided. This means the majority of the respondents jointly strongly agree and agree with the statement.

Table 8: Performance management is an important business tool, particularly translating a strategy into results.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	218	62.1	62.1	62.1
	Agree	112	31.9	31.9	94.0
	Undecided	21	6.0	6.0	100.0
	Total	351	100.0	100.0	

Source: Field Survey, 2016

Table 9 reveals that 8 (2.3%) of the respondents strongly Agree that NNPC employee competence rating criteria in their performance management system, 29 (8.3%) of the respondents Agree, 35 (10.0%) of the respondents are Undecided on the issue of performance management system, 269 (76.6%) of the respondents Disagree and 10 (2.8%) of the respondents Strongly Disagree. This means the majority of the respondents merely disagree with the statement.

Table 9: NNPC employs competency rating criteria in their performance management system.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	8	2.3	2.3	2.3
	Agree	29	8.3	8.3	10.5
	Undecided	35	10.0	10.0	20.5
	Disagree	261	76.6	76.6	97.2

	Strongly Disagree	10	2.8	2.8	100.0
	Total	351	100.0	100.0	

Source: Field Survey, 2016

Table 10 presents the opinion of the respondents on the statement that the success of performance management and its effect on industry and cultural strategies depend heavily on top management support. From the tabular presentation, 214 (61.0%) of the respondents Strongly Agree, 80 (22.8%) of the respondents Agree, 25 (7.1%) of the respondents are Undecided, 14 (4.0%) of the respondents Disagree and 18 (5.1%) of the respondents Strongly Disagree. This means the majority of the respondents strongly agree with the statement.

Table 10: Success of performance management and its effect on business and cultural strategies depend heavily on senior-level support.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	214	61.0	61.0	61.0
	Agree	80	22.8	22.8	83.8
	Undecided	25	7.1	7.1	90.9
	Disagree	14	4.0	4.0	94.9
	Strongly Disagree	18	5.1	5.1	100.0
	Total	351	100.0	100.0	

Source: Field Survey, 2016

Table 11 shows that the statement - The performance management system drives the key factor associated with business strategy – 220 (62.7%) Strongly Agree, 84 (23.9%) Agree, 45 (12.8%) of the respondents are Undecided and 2 (0.6%) of the respondents Disagree. By this distribution, it is evident that the majority of the respondents strongly agree with the statement.

Table 11: The performance management system drives the key factor associated with business strategy.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	220	62.7	62.7	62.7
	Agree	84	23.9	23.9	86.6
	Undecided	45	12.8	12.8	99.4
	Disagree	2	0.6	0.6	100.0
	Total	351	100.0	100.0	

Source: Field Survey, 2016

Table 12 shows that 283 (80.6%) of the respondents Strongly Agree that organizations (such as NNPC)

need to stay ahead continually to re-evaluate and try new methods for managing performance, 49 (14.0%) of the respondents Agree and 19 (5.4%) of the respondents are Undecided. This means that the majority (larger percentage) of the respondents strongly agree with the statement.

Table 12: To stay ahead, organizations should continually re-evaluate and try new methods for managing performance.

		Frequency	Per cent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	283	80.6	80.6	80.6
	Agree	49	14.0	14.0	94.6
	Undecided	19	5.4	5.4	100.0
	Total	351	100.0	100.0	

Source: Field Survey, 2016

Table 13 indicates that 196 (55.8%) of the respondents Strongly Agree that NNPC experience problems because they failed to establish a clear linkage between the business pressure strategic actions and required capabilities as well as technology enablers, however, 82 (23.4%) Agree, 22 (6.3%) of the respondents are Undecided, 36 (10.3%) of the respondents Disagree and 15 (4.3%) of the respondents Strongly Disagree. The majority of the respondents strongly agree with the statement.

Table 13: NNPC experience problems because they fail to establish a clear linkage between the business pressure strategic actions and required capabilities as well as technology enablers.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	196	55.8	55.8	55.8
	Agree	82	23.4	23.4	79.2
	Undecided	22	6.3	6.3	85.5
	Disagree	36	10.3	10.3	95.7
	Strongly Disagree	15	4.3	4.3	100.0
	Total	574	100.0	100.0	

Source: Field Survey, 2016

Table 14 indicates that 173 (49.3%) of the respondents Strongly Agree that strong and positive relationship still exists between performance management and the productivity level of firms, however, 122 (34.8%) Agree, 37 (10.5%) of the respondents are Undecided, 3 (0.9%) of the respondents Disagree and 16 (4.6%) of the respondents Strongly Disagree. It is noticeable from this distribution that the majority of the respondents strongly agree to the statement.

Table 14: Despite the influence of other critical factors affecting productivity, a strong and positive relationship still exist between performance management and the productivity level of firms.

		Frequency	Per cent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	173	49.3	49.3	49.3
	Agree	122	34.8	34.8	84.0

	Undecided	37	10.5	10.5	94.6
	Disagree	3	.9	.9	95.4
	Strongly Disagree	16	4.6	4.6	100.0
	Total	351	100.0	100.0	

Source: Field Survey, 2016

Table 15 shows that 107 (30.5%) of the respondents Strongly Agree that inadequate training is the most inhibiting factor affecting performance management system, 229 (65.2%) of the respondents Agree and 15 (4.3%) of the respondents are Undecided. With this distribution, it can be said that the majority (larger percentage) of the respondents agree to the statement.

Table 15: Inadequate training is the most inhibiting factor affecting performance management system.

		Frequency	Per cent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	107	30.5	30.5	30.5
	Agree	229	65.2	65.2	95.7
	Undecided	15	4.3	4.3	100.0
	Total	351	100.0	100.0	

Source: Field Survey, 2016

From Table 16, respondent's opinion shows that 163 (46.4%) of the respondents Strongly Agree that quantitative performance appraisal could affect performance management effectiveness, 158 (45.0%) of the respondents Agree, 12 (3.4%) of the respondents are Undecided, 10 (2.8%) of the respondents Disagree and 8 (2.3%) of the respondents Strongly Disagree. This implies that the majority of the respondents strongly agree with the statement.

Table 16: Quantitative performance appraisal could affect performance management effectiveness.

		Frequency	Per cent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	163	46.4	46.4	46.4
	Agree	158	45.0	45.0	91.5
	Undecided	12	3.4	3.4	94.9
	Disagree	10	2.8	2.8	97.7
	Strongly Disagree	8	2.3	2.3	100.0
	Total	351	100.0	100.0	

Source: Field Survey, 2016

On whether the current management practice in NNPC delivers sound results, Table 17 shows that 11 (3.1%) of the respondents Strongly Agree, 52 (14.8%) of the respondents Agree, 51 (14.5%) of the respondents are Undecided, 189 (53.8%) of the respondents Disagree and 48 (13.7%) of the respondents Strongly Disagree. This implies that the majority of the respondents disagree with the statement.

Table 17: The current management practice in NNPC delivers sound results.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	11	3.1	3.1	3.1
	Agree	52	14.8	14.8	17.9
	Undecided	51	14.5	14.5	32.5
	Disagree	189	53.8	53.8	86.3
	Strongly Disagree	48	13.7	13.7	100.0
	Total	351	100.0	100.0	

Source: Field Survey, 2016

On whether there is conformity with best practice in performance management practices in NNPC, Table 18 shows that 22 (6.3%) of the respondents Strongly Agree, 41 (11.7%) of the respondents Agree, 44 (12.5%) of the respondents are Undecided, 204 (58.1%) of the respondents Disagree and 40 (38.3%) of the respondents Strongly Disagree. This means that majority of the respondents disagree with the statement.

Table 18: There is conformity with best practice in performance management practices in NNPC.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	22	6.3	6.3	6.3
	Agree	41	11.7	11.7	17.9
	Undecided	44	12.5	12.5	30.5
	Disagree	204	58.1	58.1	88.6
	Strongly Disagree	40	11.4	11.4	100.0
	Total	351	100.0	100.0	

Source: Field Survey, 2016

Table 19 reveals respondents' opinion on whether performance management challenges have a strong relationship with the success of the firm. From the tabular presentation, 114 (32.5%) of the respondents Strongly Agree, 212 (60.4%) of the respondents Agree and 25 (7.1%) of the respondents are Undecided. This means the respondents largely agree to the statement.

Table 19: Performance management challenges have a strong relationship with the success of the firm.

		Frequency	Per cent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	114	32.5	32.5	32.5
	Agree	212	60.4	60.4	92.9
	Undecided	25	7.1	7.1	100.0
	Total	574	100.0	100.0	

Source: Field Survey, 2016

Table 20 reveals respondents' opinion on whether there is a performance management model operated at NNPC. From the tabular representation, 15 (4.3%) of the respondents Strongly Agree, 214 (61.0%) of the respondents Agree, 13 (3.7%) of the respondents are Undecided, 30 (8.5%) of the respondents Disagree and

79 (22.5%) of the respondents Strongly Disagree. This means the respondents largely agree to the statement.

Table 20: There is a performance management model operated at NNPC.

		Frequency	Per cent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	15	4.3	4.3	4.3
	Agree	214	61.0	61.0	65.2
	Undecided	13	3.7	3.7	68.9
	Disagree	30	8.5	8.5	77.5
	Strongly Disagree	79	22.5	22.5	100.0
	Total	574	100.0	100.0	

Source: Field Survey, 2016

Table 21 reveals respondents' opinion on whether NNPC has a suitable performance management model. From the tabular presentation, 202 (57.5%) of the respondents Strongly Agree, 142 (40.5%) of the respondents Agree and 7 (2.0%) of the respondents are Undecided. This means the respondents largely agree to the statement.

Table 21: NNPC has a suitable performance management model.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	202	57.5	57.5	57.5
	Agree	142	40.5	40.5	98.0
	Undecided	7	2.0	2.0	100.0
	Total	574	100.0	100.0	

Source: Field Survey, 2016

From Table 22, 237 (67.5%) of the respondents Strongly Agree that timely reward and promotion of staff could impact positively on organizational productivity, while 114 (32.5%) Agree. Majority of the respondents strongly agree to the statement.

Table 22: Timely reward and promotion of staff could impact positively on organizational productivity.

		Frequency	Per cent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	237	67.5	67.5	67.5
	Agree	114	32.5	32.5	100.0
	Total	574	100.0	100.0	

Source: Field Survey, 2016

From Table 23, 74 (21.1%) of the respondents posit that response time is the best measure of standard performance at NNPC, 191 (54.4%) of the respondents show that it is capacity utilization and 86 (24.5%) of the respondents indicated that it is the maximum output.

Table 23: What could be the best measure of standard performance at NNPC?

		Frequency	Per cent	Valid Percent	Cumulative Percent
Valid	Response time	74	21.1	21.1	21.1
	Capacity utilization	191	54.4	54.4	75.5
	Maximum output	86	24.5	24.5	100.0
	Total	351	100.0	100.0	

Source: Field Survey, 2016

Table 24 depicts the respondents' opinions on the most applicable appraising performance management system to NNPC. From the tabular distribution, 93 (26.5%) indicated that it is Peer Input, 130 (37.0%) of the respondents posited that it is Customer Feedback and 128 (36.5%) of the respondents asserted that it is Input from Direct Reports.

Table 24: Which of these, is most applicable to NNPC in appraising performance management system?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Peer input	93	26.5	26.5	26.5
	Customer Feedback	130	37.0	37.0	63.5
	Input from direct reports	128	36.5	36.5	100.0
	Total	351	100.0	100.0	

Source: Field Survey, 2016

Table 25 presents respondents' opinion on performance management elements they think it needs an integrated and coordinated effort for effective delivery by organization members. From the distribution, 65 (18.5%) of the respondents chose Standards, 69 (19.7%) of the respondents ticked Targets, 68 (19.4%) of the respondents selected Training, 143 (40.7) of the respondents chose Performance Appraisal and 6 (1.7%) of the respondents picked Leadership.

Table 25: Which of these performance management elements need an integrated and coordinated effort for effective delivery by organization members?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Standards	65	18.5	18.5	18.5
	Targets	69	19.7	19.7	38.2
	Training	68	19.4	19.4	57.6
	Performance Appraisal	143	40.7	40.7	98.3
	Leadership	6	1.7	1.7	100.0
	Total	574	100.0	100.0	

Source: Field Survey, 2016

Table 26 reveals the functional areas of performance management that the respondents think should be considered paramount by NNPC. From the frequency table, 72 (20.5%) chose Planning-scheduling, sequencing, or load leveling, 34 (9.7%) of the respondents selected Executive instruction, instruction, inspection or status, 215 (61.3%) of the respondents ticked Control-plan Vs actual status, alerting, replacing, or corrective action and 30 (8.5%)

of the respondents selected Analysis- effectiveness or improving opportunity Identification.

Table 26: Which of these functional areas of performance management should be considered paramount by NNPC?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Planning-scheduling, sequencing, or load leveling	72	20.5	20.5	20.5
	Executive directive, instruction, inspection or status	34	9.7	9.7	30.2
	Control-plan Vs real status, alerting, replacing, or remedial action	215	61.3	61.3	91.5
	Analysis- efficiency or improving opportunity Identification	30	8.5	8.5	100.0
	Total	351	100.0	100.0	

Source: Field Survey, 2016

On which performance management the respondents feel management should maintain significant progress, Table 27 shows that 65 (18.5%) chose "reduction in operation cost", 46 (13.1%) respondents selected "shrinking operating cycle time", 48 (13.7%) respondents picked "improving scheduled compliance", 42 (12.0%) respondents ticked "satisfying demand for more complete and on-time shipments and 150 (42.7%) respondents chose all the above.

Table 27: In performance management, which do you feel management need to maintain significant progress?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Reduction in operation cost	65	18.5	18.5	18.5
	Shrinking operating cycle time	46	13.1	13.1	31.6
	Improving scheduled compliance	48	13.7	13.7	45.3
	Satisfying demand for more complete and on-time shipments	42	12.0	12.0	57.3
	All the above	150	42.7	42.7	100.0
	Total	351	100.0	100.0	

Source: Field Survey, 2016

Table 28 shows that 99 (28.2%) of the respondents think management should focus on "quality" dimension of productivity, 57 (16.2%) indicated that management should focus on "price", 18 (5.1%) respondents selected services delivery and 177 (50.4%) respondents selected all the items; meaning that they want the management to focus on quality, price and service delivery.

Table 28: Management traditionally focuses on which of these dimensions of performance?

		Frequency	Per cent	Valid Percent	Cumulative Percent
Valid	Quality	99	28.2	28.2	28.2
	Price	57	16.2	16.2	44.4
	Services delivery	18	5.1	5.1	49.6
	All the Above	177	50.4	50.4	100.0
	Total	351	100.0	100.0	

Source: Field Survey, 2016

3.1.2 Data analysis

This section presents the results of the data analysis using Correlation (r) and Chi-Square (χ^2). The results emanating from the analyses are used to validate (invalidate) the research hypotheses subsequently.

a) Hypothesis One

H0- There exists no relationship between performance management model and productivity.

H1- There exists a relationship between performance management model and productivity.

Table 29: Correlations

		Performance Management Model	Organizational Productivity
Performance Management Model	Pearson Correlation	1	.5744**
	Sig. (2-tailed)		.000
	N	351	351
Organizational Productivity	Pearson Correlation	.744**	1
	Sig. (2-tailed)	.000	
	N	574	574
**. Correlation is significant at the 0.01 level (2-tailed).			

- Condition for Acceptance or Rejection of Hypothesis:

Returned p-value < 0.05 level of significance; Reject Ho and Accept Hi, otherwise fail to reject Ho.

From the correlation result in Table 29, it is depicted that the returned Pearson Correlation Coefficient (r) calculated as 0.744 and the returned p-value = 0.000 < 0.05, the criterion level of significance, thus the null hypothesis was rejected. Since the returned correlation coefficient (r) is positive i.e. 0.744, it means that there exists a direct relationship between the two variables or items measured; meaning that, increase in one variable (for instance Performance Management Model) will automatically lead to an increase in Organizational Productivity and vice-versa. Consequently, there exists a significant direct relationship between Performance Management Model and NNPC Productivity; the null hypothesis is rejected and the alternative is accepted.

b) Hypothesis Two

H0- There is no performance management model operated in NNPC.

H1- There is a performance management model operated in NNPC.

- Chi-Square Frequency Test – Result

Table 28 shows the respondents opinion on the existence of performance at the NNPC. From the observations, the respondents' opinions differ (79 respondents strongly disagree, 30 respondents disagree, 13 respondents are undecided, 214 respondents agree and 15 respondents strongly agree), thus, subjecting the differences in their responses to statistical test vis-à-vis the hypothesis 2. The rationale is to the significance of the differences in opinions.

Table 30: There is a performance management model operated at NNPC.

	Observed N	Expected N	Residual
Strongly Disagree	79	70.2	8.8
Disagree	30	70.2	-40.2
Undecided	13	70.2	-57.2
Agree	214	70.2	143.8
Strongly Agree	15	70.2	-55.2
Total	351		

Table 31: Test Statistics

	There is a performance management model operated at NNPC.
Chi-Square	408.701[a]
Df	4
Asymp. Sig.	.000
a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 70.2.	

The above Chi-Square (χ^2) statistics table shows a value of 408.701, with 4 degrees of freedom and asymptotic significance value of 0.000.

From the χ^2, the asymptotic significance level shows 0.000 which is less than 0.05. Thus, since the p-value < 0.05 level of significance; we reject Ho and Accept Hi. This means that there is performance management at the NNPC.

c) Hypothesis Three

H0- There is no performance management model suitable for NNPC.

H1-There is performance management model suitable for NNPC.

- Chi-Square Frequency Test – Result

Table 32 shows the respondents opinion on the suitability of the performance management model for NNPC. From the observations, the respondents' opinions differ (7 respondents are undecided, 142 respondents agree and 202 respondents strongly agree), thus, to determine the significance of differences in responses, we conducted χ^2 statistical test vis-à-vis the hypothesis 3.

Table 32: NNPC has a suitable performance management model.

	Observed N	Expected N	Residual
Undecided	7	117.0	-110.0
Agree	142	117.0	25.0
Strongly Agree	202	117.0	85.0
Total	351		

Table 33: Test Statistics

	NNPC has a suitable performance management model.
Chi-Square	170.513[a]
Df	2
Asymp. Sig.	.000

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 114.8.

Table 33, Chi-Square (χ^2) statistics table shows a value of 170.513, with 2 degrees of freedom and asymptotic significance value of 0.000.

From the χ^2, the asymptotic significance level shows 0.000 which is less than 0.05. Thus, since the p-value < 0.05 level of significance; we reject Ho and Accept Hi. This means that there is a suitable performance management model suitable for NNPC.

3.2 Discussion of Findings

In this study, three hypothesis were tried to decide the relationship of performance management model and show clearly organizational efficiency within the Nigerian National Petroleum Organization (NNPC) conjointly the presence of performance management at the NNPC as well as exploring the appropriateness of performance administration demonstrate in NNPC. From the primary analysis, it is found that there's a positive relationship of 59% between the Performance Management and Organizational Efficiency. The result is significant as the p-value (of 0.000<5%, the measure centrality level). From the result, it is obvious that performance management has gotten to be a principal apparatus utilized to encourage organizational viability and more prominent employees' commitment to the work environment. The consider found that if employees were well trained, compensated and advanced for a work done, it'll increment their commitment and dependability within the organization. Within the same vein, on the off chance that representatives were legitimately spurred with the essential and satisfactory preparing needs, advancement would increment quickly on the work and this will subsequently lead to competitive situating. Most respondents certified that preparing increments their fulfilment and level of efficiency within the organization. In expansion to this, representatives concurred that in the event that they got standard criticism around their execution on the employments, it may secure competitive situating for the organization. As this will offer assistance them to distinguish their qualities and shortcomings which might constantly create openings or risk to the organization they are working with. Hypothetically, the goal-setting hypothesis maintained the revelations that person objectives set by representatives would goad them to perform superior within the affiliation usually on account of the workers proceed taking after those set objectives and in circumstances where it shows up the objectives can't be completed, the objectives are either changed or made more sensible. Typically in line with the position of numerous researchers such as [10] [11] [12] among others both in Nigeria and past that performance management is the key and coordinates approach to conveying supported victory to organizations by making strides the execution of the individuals who work in them and by creating the capability of groups and person donors. This finding too bolsters the see of [13] who found that performance management (even-handed remunerate and advancement, preparing and input) makes a difference to find qualities and shortcomings which might perpetually deliver openings to an organization. From theory two, we found out that there's performance management at NNPC; in any case, it is incapable to drive its efficiency. There's an torrential slide of reports that appear that the NNPC has recorded negative monetary comes about over the complete esteem chain of operations for a long time (Atumah, 2016; National Express, 2015; The Nigerian Voice, 2010) Small ponder, an undeniable case for the change of NNPC has been made by numerous Nigerians who after meticulously inspected the execution of the enterprise in its diverse businesses and detailed obtusely that the organization and the complete staff had fizzled woefully and the situation must alter profoundly. Strikingly, previous Gather Overseeing Chief of the Nigerian National Petroleum Organization (NNPC), in 2012, Engr. Andrew Yakubu presented modern trade models in all its Vital Trade Units (SBUs) and Corporate Benefit Units (CSUs) within the journey to guarantee the commercial reasonability of the Enterprise to stay competitive within the worldwide oil and gas industry. Among the activities considered by him include: performance management based on commercial orientation. Before then, several performance managements (such as Management by Objective, Tasks and Targets Setting and Management etc) has been implemented without improved productivity, the recent unbundling of the organization bears testament to this assertion. Remarkably, without effective performance

management in place, all the streams of initiates have continued to remain a mirage even till today. Finally, empirical evidence from the third hypothesis shows that there is a suitable performance management model in the NNPC. These are performance appraisal, Control-plan Vs actual status, alerting, replacing, or corrective action, Reduction in operation cost, shrinking operating cycle time, improving scheduled compliance, Satisfying demand for more complete and on-time shipments, Quality Price and Services delivery are very important factors of its existence.

CONCLUSION AND RECOMMENDATIONS

From the findings emanating from the analysis, it is imperative to posit that performance management model (performance appraisal and related variables such as training, reward, promotion and feedback) is an essential requirement for enhancing/improving the productivity and efficiency of the Nigerian National Petroleum Corporation. It is obvious that productivity of the NNPC it present position far from being satisfactory as occasioned by the low crude oil production and other reasons like depleting reserves and failures in pipelines and depot system etc. Observably, the NNPC Management seems not to have been given much attention and considerable motivation to its employees on whose shoulders the organizational goals lie. If employees were well rewarded and promoted for a job done, it will increase their commitment and loyalty in the organization in return. In the same disposition, if employees were properly motivated with the necessary and adequate training needs, innovation would increase rapidly on the job and this will thereby lead to competitive positioning. Most respondents admitted that promotion increases their satisfaction and level of productivity in the organization. In addition to this, employees agreed that if they got regular feedback about their performance on the jobs, it could secure competitive standing for the organization. As this will help them to identify their strengths and weaknesses which could invariably produce opportunities or threat to the organization they are working with. Thus, consequent upon the foregoing, it is has become not only imperative but inevitable for the NNPC management to evolve adopt effective performance management model that interlink the current situation and providing solution to the future, in the support (for its employees) which involves production activities, operations and management practices.

Sequel to the findings and conclusions drawn from this study, it is exigent for the management of NNPC set-up a performance management model that will fit the present situation; not as a placebo but a panacea towards its productivity. However, the following is suggested as essential ingredients of a performance management model for NNPC.

i. First of all, the management of NNPC should set-the-stage correctly by defining an employee's goals and aligning them with the corporate strategy. The process of setting goals should be a collaborative with all stakeholders' process between the management and its employees. Once the company-wide strategy is established, employee's goals should be created that support the "big picture". Major Job functions and responsibilities, both shared and individual, should be addressed within a SMART goal framework.
ii. Also, maagement needs to be cognizance of their employees' progress on goals to step in with training assistance or resources when it appears that goal targets may be missed or, even better, to acknowledge successes with appropriate financial and non-financial rewards. In addition to the need for managers to review the employees' productivity regularly, it's also important for the employees to track their progress on goals constantly. Having this information handy is helpful during the all-important appraisal process to inform management of the steps involved in reaching a goal or to highlight successes from earlier in the year. The secret to high performance: review individual and team goals at least once a week or month to clarify your focus and use this information as a basis for performance discussions.
iii. To get the maximum support from employees, management should, from-time-to-time, conduct appraisal process which should include among others through stakeholder engagement, listening, observing, giving constructive feedback, and providing recognition constructive analysis of the employee's performance. Similarly, timely reward (monetary or non-monetary), promotion and training should also be included. This can be an important factor not only in the employee's growth but also in the success of the entire organization

since employees have a greater sense of loyalty to companies that develop talent from within and thus become more engaged in their work. These development plans also allow the company to create a pool of talent for strategic succession planning.

iv. The performance management model of the NNPC should include a successful pay-for-performance compensation strategy with a view of increasing competition which is a key to retaining top talent and driving organizational performance that exceeds all expectations. Pay-for-performance serves to align employees with the goals and objectives of the NNPC and motivate and reward top performers while continuing to develop the underperformers to become greater assets to the organization.

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