

CHAPTER FOUR

4.0 ANALYSIS AND DISCUSSION

4.1 PREAMBLE

This chapter is set out to present and analyze the data collected through the use of questionnaire and also the information extracted from the annual report of Nigerian National Petroleum Corporation (NNPC). Data gathered on each item of the research instrument are presented using frequency tables expressed in counts and percentages.

4.2 DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

TABLE 1: THE DISTRIBUTION OF THE RESPONDENTS BASE ON THEIR GENDER

SEX	NUMBER OF RESPONDENTS	PERCENTAGE (%)
MALE	80	80
FEMALE	20	20
TOTAL	100	100

Source: Field Survey, 2022

The table above shows the percentage distribution of the respondents by their genders. Male respondents constitute 80% while female respondents constitute 20%. This indicates that majority of the employees within the corporation were

TABLE 2: DISTRIBUTION OF RESPONDENTS BASE ON AGE

AGE (YEARS)	NUMBER OF RESPONDENTS	PERCENTAGE(%)
20-29	28	28
30-39	32	32
40-49	18	18
50-59	15	15
60 and above	7	7
Total	10	100

Source: Field Survey, 2022

Table 2 shows the age distribution of the respondents. 28% of them were within the age bracket of 0-9 years. 32% of them were within the age bracket of 30-39 years. 18% of them were within the age bracket of 40-49 years while 15% and 7% of the them were within the age bracket of 50-59 years and 60 and above respectively.

TABLE 3: DISTRIBUTION OF THE RESPONDENTS BY THEIR ACADEMIC QUALIFICATIONS

ACADEMIC QUALIFICATIONS	NUMBER OF RESPONDENTS	PERCENTAGE (%)
O'level	44	44
NCE/OND	38	38
First Degree/HND	15	15
Second Degree	3	3
Total	100	100

Source: Researcher's Field Work, 2022

From table 3, out of the respondents whose opinions were sought, 44% of them were having were O’level certificate Holders, 38% of them were NCE/OND certificate holders, 15% of them were first degree/HND certificate holders while 3% of them were second degree holders.

TABLE 4: DISTRIBUTION OF THE RESPONDENTS BY THEIR LENGTH OF YEARS IN SERVICE

LENGTH OF YEARS IN SERVICE	NUMBER OF RESPONDENTS	PERCENTAGE (%)
Less than 5 years	15	15.00
5-10 years	28	28
11-20 years	40	40.00
21-30 years	10	10.00
Above 30 years	7	7.00
Total	100	100.00

Source: Researcher's Field Work, 2022

Table 4 shows the distribution of the respondents by their length of years in service. Out of all, 15% of them had worked in the corporation for the period less than 5 years, 28% of them had worked in the corporation for the period of 5-10 years in the corporation, 40% of the respondents had worked in the corporation for the period of 11-20 years, 10% of the respondents had worked in the corporation for the period of 21-30 years

while 7% of them had worked in the corporation for the period above 30 years.

4.3 STATISTICAL RESULT

The following were the computations made through the use of excel spreadsheet on data gathered:

CRONBACH ALPHA

	AIS	HR	FL	IC	OE	
	1					
AIS	0.9078	1				
HR	0.044178	0.05343	1			
FL	0.09078	0.12035	0.05343	1		
IC	0.06354	0.07949	0.03808	0.07949	1	
OE	0.09078	0.122035	0.05343	0.12035	0.07949	1
Average (mean ri)	0.3806					
Kx Mean	2.2836	$R_c = \frac{Kxmean (ri)}{1 + mean(ri)x(k - 1)}$				
1+mean	2.903					
Crombach's Alpha	0.78663					

Source: Excel Computation

ANOVA

Variable	B	SIG f	S.E	R-Squared
Accounting Information System (X1)	0.1124	0.3524	0.7099	0.0177
Human resource nature (X)	0.1414	0.3776	0.7106	0.0159
Managerial Leadership (X3)	0.4730	0.0000	0.5993	0.2989
Internal control (X4)	0.1263	0.3394	0.7096	0.1864
Constant	3.3755			
Observation	51			
Standard Error	P<0.1			

Source: Excel computation

	OE	AIS	HR	OL	IC
OE	1	0.8587	0.9107	0.4410	0.5501
AIS	0.8587	1	0.8484	0.9024	0.4410
HR	0.9107	0.9024	1	0.8258	0.9024
OL	0.8484	0.8258	0.8258	1	0.8258
IC	0.4410	0.5501	0.6933	0.6486	1

Since $p > 0.05$ then the model is considered to be significant. $P = 0.3524$

Summary of correlation analysis and p-value

Variables	Correlation coefficient	p-value
Accounting information system (x ₁)	0.8575	0.3524
Human resource nature (x ₂)	0.9017	0.3776
Managerial leadership (x ₃)	0.5484	0.0000
Internal control (x ₄)	0.4410	0.3394

Source: Research Findings

From the above tables, we can predict the quality of financial reports in any given time provided we have accounting information system. It is clear that AIS affects quality of financial reports positively since all coefficients are positive. So the model will be:

$$Y = 3.37 + 0.1124X_1 + 0.1414X_2 + 0.4739X_3 + 0.1263X_4 \dots\dots\dots (iv)$$

From the above model (iii). the performance of the organization could be predicted when the need be

4.4 TEST OF HYPOTHESIS

The hypothesis set in chapter one of the study is tested below:

HYPOTHEIS

H₀: Accounting information system does not have significant effect on public corporation performance

Determination of Critical Value

Degree of freedom= df (v) is given by (r-1)(c-1)

Where R= number of row

C= number of column

The significance is 5% or 0.05 using chi-square formula.

$$\chi^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

Where, O_i is observed value

E_i is expected value

χ^2 is chi-square

Decision rule

Reject H_0 if $\chi^2_{cal} > \chi^2_{tab}$

Chi-square Table

Option	O	E	O-E	(O-E) ²	$\frac{(O-E)^2}{E}$
Strongly Agree	49	49	0	0	0
Agree	45	49	-4	16	0.33
Strongly disagree	1	49	-47	2209	45.08
Disagree	5	49	-44	1936	39.51
					W4.92

$$\chi^2_{cal} = 5.105$$

Hence comparing X^2 with the table value of the chi-square distribution using 5% level of significance and 2 degree of freedom (df)(column-1) (row-1)=
 $(3-1)(2-1)=(2)(1)=2$

$X^2_{\text{tab } 0.05}$ (table value) 5.041

Decision Rule

Reject H_0 if $X^2_{\text{cal } 0.05} > X^2_{\text{tab } 0.05}$

Conclusion

We reject H_0 since X^2_{cals} greater than X^2_{tab} and conclude that accounting information system has significant effect on public corporation performance

4.5 SUMMARY OF FINDINGS

The findings clearly shows that taking all other independent variables at zero, a unit increase in accounting information systems will lead to a 0.1124 increase in efficiency of public corporation in Nigeria; a unit increase in quality of human resource will lead to a 0.1414 increase in efficiency of public corporation. This infers that accounting information system, human resource and finance leadership affect public corporation efficiency with near equal measures. At 1% level of significance and 99% level of confidence, accounting information systems had 0.01424 level of significance; human

resource showed a 0.08893 level of significance then transparency had 0.0516 thus most significant.

The researcher found out that the factors that influence affect transparency including if the organization share the program progress to its shareholders, if they have sufficient electronic control, the framework/right of confidentiality, integrity of top management, accountability of funds and current reports value in the future which scored mean of 4.0 out of the possible 5 which is a good indicator that the manufacturing firms are transparent in their operation which contributes to the quality reports.

The general objective of the study was to establish the impact of accounting information system of organization effectiveness. From the study, an organization which has invested in a reliable information system in terms of speed, data accuracy, data organization, user friendly, reliability and availability. This will enable public corporation become efficient in term of time delivery of financial reports, reduced costs, increased profitability and adaptability to changes in both micro and macro environment.