

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

This chapter of the study focuses on the methodology adopted in the course of gathering information used for the research work as it paves way for the actualization of analyzing opinions of the respondents on each item of the research instrument. The chapter is discussed under the following subheadings; Research Design, Population of the Study, Sampling Technique and Sampling Size, Source of Data, Method of data analysis, Definition and Measurement of Variable and Model Specification.

3.1 DESIGN STUDY

The design for this research is basically descriptive a descriptive survey is intended to diacritic of phenomena in themselves. Also a sample survey is being used. This is because it will be very difficult if not impossible to include all the relevant variables i.e. everyone who might provide useful information needful for the final report. The design was as well chosen due to time and financial constraints.

3.2 SOURCE OF DATA

Basically, there are two main sources of data which are the primary and secondary sources of data. The primary source of data comprises information that are obtained directly from the respondents through the use of researcher's designed questionnaire and personal interview. The secondary source of data

comprises information gathered through the use of journal, publications made by previous researchers, magazines among others. The researcher therefore considers the use of both primary and secondary sources of data.

3.3 POPULATION OF THE STUDY

The population for the study covers all employees within NNPC, Oke-Oyi, Ilorin, Kwara State. In all, a total number of 1896 employees work in the organization. However, all these employees comprise the senior staff and junior staff working in various departments within the organizations. In all, the opinions of these respondents would be sampled.

3.4 SAMPLE SIZE AND TECHNIQUE

The sample size was drawn out of the sampling frame (population) which was fund by the researcher's enumeration to he 500

$$N_0 = \frac{Z^2XP(1-P)}{e^2} \quad \frac{1+Z^2XP(1-P)}{e^2N}$$

n_0 = sample size

p = standard deviation (0.5)

e =level of significance (alpha level 0.05)

N = population Size (500)

$$N_0 = \frac{Z^2XP(1-P)}{e^2} \quad \frac{1+Z^2XP(1-P)}{e^2N}$$

$$n_0 = \frac{1.96^2 \times 0.5(1.0.5)}{e^2} \quad \frac{1+1.96^2 \times 0.5(1-0.5)}{e^2N}$$

$$0.05^2$$

$$0.05^2 \times 500$$

$$n_0 = \frac{3.8416 \times 0.25}{1 + 0.76832}$$

$$0.05$$

$$n_0 = 176.832 / 1.76832$$

$$n_0 = 100$$

Sample size = 100

3.5 RESEARCH INSTRUMENT

The main instrument used in compilation of information for the purpose of this study. The instrument used is a researcher's designed questionnaire. The questionnaire comprises of series of questions related to the research questions formulated in chapter one of the study. The questionnaire is designed on a dichotomous state of Yes and No.

3.6 METHOD OF DATA ANALYSIS

The statistical method used for the analysis and presentation of the responses of the respondents involves the use of simple percentage using statistical machine of excel spread sheet presented using frequency table.

3.7 MODEL SPECIFICATION

This is the mathematical relationship that exists between the dependent and the independent variables and the model for the parameters of the function. The

model specification used for this study is the use of Regression analysis towards measuring the effect of accounting information system on public corporation sector with reference to NNPC, Oke-oyi, Ilorin. However, the model specification is mathematically given thus;

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + \dots \quad (1)$$

Where

Y= Organizational Effectiveness (OE). This is measured in term of increase in profits, revenue growth and increased market share.

a= constant

b= regression slope

X₁= Accounting information system (AIS). This was measured in terms of ability to be used in recording financial data, speed, accuracy and quality.

X₂= Human Resource (HR). this was measured in terms of qualification, reliability, honesty and motivation

X₃= Financial Leadership (FL). This was measured in terms of standards, relevance, reliability and understandability

X₄= Internal Control IC. This was measured in terms of availability of data security systems. audit schedules and reports meeting JFRS guidelines.

x₂= Σ