# APPRAISAL OF THE ROLE OF WORKING CAPITAL MANAGEMENT ON ORGANIZATIONAL PERFORMANCE

(A CASE STUDY OF NIGERIA BOTTLING COMPANY, PLC)

# By

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BEING A RESEARCH PROJECT SUBMITTED
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# **CERTIFICATION**

This is to certify that this study was carried out by **SULYMAN MARYAM OLODUOWO** with Matriculation Number **HND/23/ACC/FT/0520** has been read and approved as meeting part of the requirements for the award of Higher National Diploma (HND) in Accountancy, Institute of Finance and Management Studies (IFMS), Kwara State Polytechnic, Ilorin.

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# **DEDICATION**

This project is dedicated to Almighty God, ancient of days for His protection on me and my family throughout my academic pursuit. And for making my dream come true.

# ACKNOWLEDGMENT

Every good accomplishment starts by making the choice in the right direction it thus becomes exceedingly necessary in showing gratitude to the personalities who have in one way or the other contributed to the success of this project

Firstly, I would like to thank my supervisor Mr. Bello R. A. and other lecturers in the Department for their concerted effort geared towards putting the pieces of this project together and most important for the correction made in the chapters.

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#### **CHAPTER ONE**

#### INTRODUCTION

#### 1.1 BACKGROUND OF THE STUDY

The background of this study is premised upon the belief that in these hard times faced by firms in many developing countries of the world, of which Nigeria is one, the importance of working capital to their survival and continued success must be emphasized to an extent, working capital dictates the level of solvency of a firm in the nearest future.

Therefore, the paramount aid of any business organisation maximization of profit. This requires the efficient and effective management of resources such as materials, labour and capital which are at disposal of the firm. Increase in market share, rapid expansion and growth which are also high on the objective which the business organisation aims to achieve. However, despite the earnings of sound projects a business may still fail due to the mis-management of the working capital of any business concern.

The concept of working capital as an accounting term signifies current assets less current liabilities. It refers to the net investment required in a business enterprise to maintain its day-to-day operations as opposed to that of the investment that is committed for a longer period. Working capitalist defined as the asset held for current use within a business less the amount due to those who await settlement in the short term from value supplied in whatever form.

The oil and gas industry is one that requires a lot of funding so that its operations may go on. Some of this fund may be gotten from their joint venture partners, associate companies, and international monetary Industries or even local monetary industry. Hence, appropriate strategies must be put in place for the replacement of such loans and large stock crude oil which are also the features of the oil and gas industry. Therefore, the production manager must be aware of the most suitable techniques and equipment for the efficient and effective management of the organisation.

Relevant recommendation and suggestion with the aims of improving the present techniques of working capital management in Nigeria Bottling Company, Plc will be made and hoped that such contributions will be relevant to Nigeria Bottling Company, Plc and other industries.

# 1.2 STATEMENT OF THE PROBLEM

Working capital management is concerned with several issues among which are determining the amount of funds that should be in current assets and the management of liabilities arising from the activities of the business organisation. An inefficient management of these assets and liabilities may lead to folding up of the company with reference to Nigeria Bottling Company, Plc some of the problem hath might be faced when dealing with this topics are:

How to evaluate and manipulate the adequate factors determining the composition of working capital? How can funds required for the running of the day to day activities of the business be raised? How much funds should be invested in working capital and what should be at the appropriate financing mix? Should working capital be funded with short-term or long-term fund? The study is essentially designed to analyse their problems with a view to finding lasting solution to them.

# 1.3 RESEARCH QUESTIONS

- i. What are the components of capital, and how important is each component to the overall capital structure of Nigeria Bottling Company Plc?
- ii. Is the working capital of Nigeria Bottling Company Plc adequate to meet its short-term financial obligations?
- iii. What is the impact of working capital on the financial performance of Nigeria Bottling Company Plc?

#### 1.4 OBJECTIVES OF THE STUDY

The following are the objectives of this study:

- i. To examine the relative importance of each components of capital.
- ii. To examine the adequacy of working capital of the company in meeting its financial obligations.
- iii. To examine the impact of working capital on the financial performance Nigeria Bottling Company, Plc.

# 1.5 RESEARCH HYPOTHESIS

Ho1: There is no significant relationship between working capital management and organizational performance.

Ho2: There is no significant relationship between adequacy of working capital and financial performance.

Ho3: Working capital management is not a necessarily determinant of financial performance in Nigeria Bottling Company, Plc.

#### 1.6 SIGNIFICANCE OF THE STUDY

In these "hard times face by firms in many developing countries of the world, of which Nigeria is one, the importance of working capital to their survival and continued success must be underestimated. To a larger extent, working capital dictates the level of solvency of a firm in the nearest foreseeable future. Profitability would also be on the brighten side given effective working capital policies.

This study would therefore bring certain way important concepts and policies of working capital management to the firm. It is hoped that such knowledge would help improve the operation of Nigeria Bottling Company, Plc and other companies.

#### 1.7 SCOPE OF THE STUDY

This project work will be mainly concerned with cash management, inventory control, and the management of account and other relevant aspects of working capital management. The financing of working capital of five years (2020-2024) will be discussed, the use of ratios such as quick ratio and current ratio will be used for

illustration with the use of these ratio the company will be able to manage it working capital appropriately.

# 1.8 LIMITATIONS OF THE STUDY

In conducting a research of this nature, one is bound to have some constraints, that is, the extent to which one could go. Therefore, the limitation to this research includes lack of adequate time, finance, and also the distance between the researcher's house and the location of the case study. First of all, the period allow at times for execution of research work is not sufficient one of the problem is that, at times one will like to go and see some people that can provide information about the case study, but time will not permit because of the lectures in the class. Secondly, financial constraint is one of the problems, the fundwith which to take taxi to the case study location, because it takes several days that the researcher would have to go to the place because the person that is supposed to give the data may not be around.

## 1.9 DEFINITION OF KEY TERMS

# **Working Capital:**

The difference between a company's current assets and current liabilities used for daily operations.

**Management:** The act of planning, controlling, and organizing resources effectively—here, specifically referring to short-term financial resources.

**Performance:** The measurable outcomes of an organization's activities, such as profit, growth, and efficiency.

**Organization:** A structured group or company, such as Nigeria Bottling Company, established to achieve specific goals.

**Company:** A business entity engaged in commercial, industrial, or professional activities.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.1 INTRODUCTION

This part of the work discusses the conceptual frame work, theoretical frame work and empirical review of working capital management on organizational performanc. The study of working capital management and profitability is becoming relevant because many organizations in the recent past had fallen a victim of premature liquidation as a result in inadequate attention to management of working capital from the management of the affected firms.

The working capital meets the short term financial requirement of a business enterprise. It is trading, not retained in the business in a particular form longer than a year. The money invested in it changes form and substance during the normal course of business operation. The need for maintaining an adequate working capital can hardly be questioned. Just as circulation of blood is very necessary to maintain business.

# 2.2 CONCEPTUAL FRAMEWORK

# 2.2.1 The Concept of Working Capital

The core concepts that need explanations in this study are the concept of working capital, working capital management, liquidity and profitability tradeoff and operating cycle (account receivables, account payables, inventory, cash conversion cycle, creditor turnover and current ratios as well as return on investment. In chapter two, these concepts are explained here under:

Working Capital refers to the current assets and current liabilities of a company that can easily be converted to cash. They can also be referred to as circulating assets. They consist of stocks, accounts payables and receivable, cash and short-term securities. Stocks of raw materials acquired through purchases. The raw materials are converted into finished goods. The finished goods are then converted into cash, which is used to settle

creditors from whom raw materials were purchased (Meginson,Smart & Gitman, 2018). Working capital is the excess of current assets over current liabilities. Current asset are the circulating assets of the company and are usually inform of cash in hand, cash at bank, account receivable (Debtors), inventories (Stock) and short-term or temporary investment while current liabilities on the other hand represent the indebtedness of the business to its supplier and other third parties (creditors) that fall due for the payment within the accounting period and are in these form: trade payable (creditors). Tax payable and other accrued expenses such as electricity bills, telephone bill and salaries.

According to Pandey (2020), there are two concepts of working capital namely, Gross Working Capital and Net working Capital. Gross Working Capital consists of accounts receivable (debtors), stocks of raw materials work-in-progress, and finished goods), cash and short-term securities. The net Working Capital refers to current assets minus current liabilities, which represent claims of outsiders that are expected to mature within one accounting year.

According to Brigham and Ehrhadt (2024), the term working capital originated with the old Yankee peddler, who would load up his wagon with goods and then go off on his route to peddle his wares. The merchandise was called working capital because it was what he actually sold or —turned over to produce his profits. The wagon and horse were his fixed assets. He generally owned the horse and wagon, so they were financed with —equity capital, but he borrowed the funds to buy the merchandise. These borrowings were called working capital loans, and they had to be repaid after each trip to demonstrate to the bank that the credit was sound. Working capital is arrived at only through the process of management. You cannot have working capital and not manage it. That is why much of the review in this study is around working capital management.

# 2.2.2 Working Capital Management

The existence of a firm depends on the ability of its management to manage the firm's working capital (Ross, 2019). Working capital management involves the process of converting investment in inventories and accounts receivables into cash for the firm to use in paying its operational bills. As such, working capital management is therefore at the heart of the firm's day-to-day operating environment, and improving corporate performance, as measured by its profitability. It involves managing the firm's inventory, receivables and payables in order to achieve a balance between risk and returns and thereby contribute positively to the creation of a firm value. Excessive investment in inventory and receivables reduces the profit, whereas too little investment increases the risk of not being able to meet commitments as and when they become due. The working capital includes all the items shown on a company's balance sheet as short term or current assets, while net working capital excludes current liabilities. These measures are considered useful tools in accessing the availability of funds to meet current operations of companies.

Therefore, the importance of maintaining an appropriate level of working capital and its contribution to business survival is a concept that should be understood by every company (Harris, 2015).working capital is the amount of funds that a business has made available to meet the day to day cash requirements of the operation (Pandey, 2018). It is the difference between current assets and current liabilities, current assets are the resources in cash that can be readily converted into cash, current asset include all those assets that in the normal course of business return in the form of cash within a short period of time ordinarily within a year and such temporary investment may readily be converted into cash upon need. They include bank balance, cash marketable securities, inventories and account receivables. A business must maintain an appropriate level of current asset over investment in current asset. Excessive level of current asset can easily

result in a company realizing a sub –standard return on investment (Horne and Wachowitz, 2019) current liabilities are organization commitments for which cash will soon be required they include bank overdraft, account payables and unpaid bills(Pandey, 2018).

Working capital is considered as the life-blood of any business and its performance has significant impact on the overall performance of the concerned firms. Hampton (1989) stated that working capital policy is a function of two decisions: the appropriate level of investment in currents assets and the chosen methods, working capital management deals with the administration of current assets (cash, marketable securities, debts and stock or inventories) and current liabilities (Pandey, 2004 and Sagner, 2011) it involves the setting up of working capital policy and carrying out that policy in day-to-day operation. It concerns the determination of levels and compositions of current assets and ensuring that right sources of funds are tapped to finance current assets and those current liabilities are paid in time. Thus working capital management revolves around two basic issues of (1) the appropriate amount of current assets for the firm to carry and (2) how current assets should be financed.

# 2.2.3 Importance of Working Capital Management

In the present day of rising capital cost and scarce funds, the importance of working capital needs special emphasis. It has been widely accepted that the profitability of a business concern likely depends upon the manner in which working capital is managed (Kaur, 2020).

Both excessive and inadequate working capital positions are dangerous from the firm's point of view (Islam & Mili, 2022). Excessive working capital leads to unproductive use of scarce funds. Excessive working capital means holding costs and idle funds which earn no profits for the firm (Islam & Miii, 2022). This leads to reduced profits although it guarantees a low liquidity risk.

The inefficient management of working capital impairs profitability and interrupts normal operations of a business as well (Kaur, 2010). This may ultimately lead to a financial crisis and bankruptcy. On the other hand, proper management of working capital leads to material savings and ensures financial return at the optimum level even on the minimum level of capital employed (Kaur, 2010). Both excessive and inadequate working capital is harmful for a business. Working capital and its importance is unquestionable. It directly influences the liquidity and profitability of firms. Just as circulation of blood is very necessary in the human body to maintain life, the flow of funds is very necessary to maintain business. If it becomes weak, the business can hardly survive.

It is not an exaggeration to suggest that working capital is the life-wire of a business (Brealey, 2021). Working capital is of importance in the finance functions of an organization for many reasons. Working capital has considerable effect on the firm's profitability.

# 2.2.4 Liquidity and profitability of working capital management

The two important aims of the working capital management are profitability and liquidity, liquidity or solvency refers to the firms continuous ability to meet maturing obligations (Sagner, 2011) to ensure liquidity, firms should hold larger investments in current assets, so a liquid firm has less risk of insolvency and hardly experience cash shortage out situation (Ibenta 2005) However, there is a cost associated with maintaining a sound liquidity position. A larger amount of the firms funds will be tied in current assets, and to the extent this investment is idle, the firms profitability will suffer; to have higher profitability the firm may sacrifice solvency and maintain a relatively low level of current assets, when a firm does so, its profitability will improve as fewer funds are tied up in idle current assets, but its solvency would be threatened (Pandey, 2020).

The concept of liquidity is defined as the ability to realize value in cash, it has two components, the conversion time of an asset and that is the time lag between deciding to

sell an asset and receiving payment for it and its conversion price (Ibenta, 2021). According to Sagner, (2021) the liquidity position of the firm suggests the extent to which the working capital needs may be financed by permanent sources of funds. Therefore current assets should be sufficient in excess of current liabilities to constitute a margin or buffer for maturing obligations within the ordinary operating cycle of business. It is conventional rule to maintain the level of current assets twice the level of current liability and the quality of current assets should be considered in determining the level of current asset vis-à-vis current liabilities, a weak liquidity position poses a threat to solvency of a company and makes it unsafe and unsound. A negative working capital means a negative liquidity and may move to be harmful for the company's reputation, excess liquidity is also bad, therefore prompt and timely activities should be taken by management to improve and correct the imbalances in the liquidity position of the firm (Olowe, 2021 and Pandey, 2020).

Moyer, Mcguigan and Kretlow (2020) argue that, there is an optimal level of working capital investment, which changes with the variability of output and sales that a firm must maintain. For a given level of output or sales there is certain working capital level that results in the highest profit. Other factors that affect the optimum working capital include the variability of cash flows, the degree of financial leverage and the degree of operating leverage. The issue of profitability and liquidity risk trade-off is based on the argument that short-term investment and financing have opposing effect on liquidity and profitability. Investment in current sales though useful to achieve the objectives of liquidity, but it does not generate as much profit as investing in fixed assets and it is against this back drop that this study is undertaken.

# 2.3 THEORETICAL FRAMEWORK

# 2.3.1 The irrelevant theory of Miller and Modigliani

The interaction between current assets and current liabilities which involves managing the balance between a firm's short-term assets and short-term liabilities with an aim of ensuring continuity of operations has remained the core of the theory of working capital management (Pandey, 2010 cited in Nyamweno & Olweny, 2014). Despite the assertion from Nakamura and Palombini (2012) that there are no robust and widely accepted theories about working capital management, it is worthy of note that theories which explains a link of working capital management and firm profitability is acceptable. The irrelevant theory of Miller and Modigliani (1958) posit that firm's value is independent irrespective of its capital structure and if firms' value depend on the capital structure then this opportunity must have to be available in the perfect market according to Megginson ,Smart and Gitman (2008)capital structure decisions cannot affect firm value. This theory thus implies that working capital management has played no role in firm's performance. This assertion seems impractical, though it provides the basic hypothetical framework for new studies.

# 2.3.2 Trade-Off Theory

Under perfect capital market assumptions, holding cash neither creates nor destroys value. The firm can always raise funds from capital markets when funds are needed, because the capital market is assumed to be fully informed about the prospects of the firm. The trade-off theory explains that firms target an optimal level of liquidity to balance the benefit and cost of holding cash which includes delay in payment to suppliers on one hand and allows company of discounts for prompt or early payment on other hand. These benefits save transaction costs to raise funds and do not need to liquidate assets to make payments and the firm can use liquid assets to finance its activities and investment if other source of funding are not available or are extremely expensive.

Considering account receivables, it argued that a flexible trade credit policy with an interest on receivables may increase sales (Deloof & Jegers, 2020). As theory, the use of trade off model cannot be ignored, as it explains that, firms with high management of inventory should hold an economic order quantity of inventory that balances the trade-off between liquidity and profitability. This will attracts high cost of managing the working capital items and it covers different cost such as transport, storage, insurance and damage (Long, 2021) thereby affecting its profitability. But maintaining a low level of inventory may leads to loss of sales and stock-out (Deloof, 2023), thereby having an impact on profitability of Nigerian Bottling company PLC.

# 2.3.3 Pecking Order Theory

Having seen that from trade-off theory that availability or working capital vis-à-vis capital structure, can influence firm performance, pecking order propounded by Donaldson in 1961 and was later modified by Steward myers and Nicholas Majluf in 1984 is one of the influential ttheories of corporate finance tries to explain that some forms of capital are better than others in enhancing firm performance. According to the Pecking Order theory, firms have preference in financing their business using retained earnings as compared to debt, short- term debt over long-term debt and debt over equity. This theory according to Asmawi and Faridah (2020) is the nearest pertinent theory explaining the company's optimal capital structure. In line with the prediction of Pecking Order Theory (Myers & Majluf, 1984), an inverse relationship is expected between profitability and working capital management of firms. Thus, leveraged companies aim to work with low level of current assets, to avoid issuing new debt and equity securities (Nakamura & Palombini, 2022).

These three theories are relevant to this study. However, the study is hinged on the Perking Order theory because it ensures firms capital structure weigh its scale of financial preference before deciding on the exact financial engagement. The theory shows that

retained earnings are the best alternatives for capital structure that can enhance firms' performance before considering other possible best alternatives. The theory further shows that appropriate capital structure will help to enhance performance of the firm. Account receivables impact or influence on firm profitability further buttressed the pecrking order theory. Account receivables are expected to cause an increase in the profitability and performance of firms. Return on investment increases the profitability status and enhance performance of the firm.

#### 2.4 EMPIRICAL REVIEW

Filbeck and Krueger (2021) defined working capital management as the difference between resources in cash or readily convertible into cash (current assets) and organizational commitments for which cash will be required soon (current liabilities). The importance of working capital is defined by smith (2020) as important as a measure of liquid asset that provide a safety cushion to creditors. It is also important in measuring the liquid reserve available to meet contingencies and the uncertainties surrounding a company's balance of cash outflows.

This section presents a review of prior studies carried out by different researches in various countries at different times in the area of working capital management and financial performance. It covers how each component of working capital management (IT, AR. AP and CCC) impacts on financial performance of businesses.

Specifically, the study showed that Inventory Turnover in Days (ITD) is significant but negatively related to profitability. The study concluded that effective management of WC affect performance of manufacturing firm in Nigeria. The data were collected from annual report and account of sixty listed firms out of 237 from Nigerian stock exchange across the sectors in the Nigerian economy. The panel data method was adopted and analyzed using descriptive and inferential statistics.

Mumtaz (2020) used a sample of 22 firms in chemical sector for the period of six years from 2005-2010. The study revealed a positive association between inventory turnover and firm performance. On the other hand, the finding of Adeleke and Mukolu (2023) used sample a 10 listed companies in the Nigerian stock exchange and make use of multiple regression technique for analysis to examine the effect of working capital on profitability if a firm. But during the period under review working capital of all ten companies does not have positive significant effect on performance. In this study, profitability was measured by return on capital employed of firms. It is expected that there is a positive association between working capital management and profitability.

Mansoori and Muhammad (2022) used 24 listed firms to examine the effect of working capital management on firm"s profitability in Singapore. Using panel data analysis, pooled OLS and Fixed Effect estimation, from 2014 to 2019, receivable conversion period and inventory conversion period are the independent variables while the dependent variable is return on asset (ROA). The study showed that managers can increase profitability by managing working capital efficiently. Among other specific findings, the study documents a significant positive impact of inventory conversion period on profitability. The technique of data analysis employed by the study is limited on the basis of the fact that it does no allowed heteroscedasticity test and other related robustness tests.

Similarly, Panigrahi and Sharma (2023) also investigated the relationship between working capital management and the firm sperformance in India by taking a sample of five selected Indian cement companies for the period 2019-2024. This study employed multiple regression and Pearson scorrelation for data analysis. The dependent variable is performance proxied by return on asset (ROA) while the independent variable is the working capital proxies by inventory. The findings indicate that there is a negative association between Inventory conversion period and profitability. This shows that the

lower the inventory conversion period the higher the profitability. The measurement of inventory turnover may be better if it was based on inventory divide by cost of sales which may be spurious in practical situation.

Moroki and Jagongo (2023) used a sample of five manufacturing and construction firms and analyzed the effect of working capital management on firm's profitability in Kenya for the period 2013 to 2019. They used balanced panel data from annual account of the listed firms on the Nairobi Stock Exchange (NSE). Pearson correlation and Ordinary Least Squares regression techniques were used to establish the relationship between working capital management and firm's profitability. Among other findings, the study documents a positive relationship between profitability and number of days of inventory. The findings indicated that the management can increase the level of sales by increasing their inventories conversion period to a reasonable level. In doing so, the profitability of the firms is expected to increase.

Ademola (2024) investigated the relationship between working capital management and profitability of manufacturing firms listed on the Nigerian Stock Exchange. The study used secondary data of 120 firm-year observations of ten years (2012 and 2018). Survey research design was adopted. The data were analyzed using descriptive statistics, correlation analysis and multiple regression analysis. The dependent variable is net operating profit while the independent variable is the working capital management proxies by ACP, ICP and APP. The study indicated a positive and significant association between Working Capital management and Net Operating Profit. Inventory conversion Period showed insignificant negative relationship with Net operating profit of food and beverages manufacturing companies in Nigeria.

### **CHAPTER THREE**

# RESEARCH METHODOLOGY

# 3.1 INTRODUCTION

This chapter presents the methodology adopted for this study. It outlines the research design, population of the study, sample size and sampling technique, sources and method of data collection, instrument for data collection, and the techniques employed for data analysis. The methods were selected to ensure valid, reliable, and objective outcomes related to the appraisal of the role of working capital management on organizational performance, with a focus on Nigeria Bottling Company, Plc.

#### 3.2 RESEARCH DESIGN

The research design adopted for this study is the survey design. This design was considered most suitable due to its ability to allow the collection of data from a representative sample of the population in order to generalize the findings. According to Creswell (2014), survey research design is effective in collecting opinions, behaviors, or characteristics of a large group through questionnaires or interviews. This approach is also cost-effective and enables the researcher to obtain first-hand information about the working capital management practices and their impact on organizational performance at Nigeria Bottling Company.

# 3.3 POPULATION OF THE STUDY

The population of this study consists of all the employees of Nigeria Bottling Company, Plc, particularly those in the finance, operations, and administrative departments across selected branches. These departments are primarily responsible for managing working capital components such as inventories, receivables, payables, and cash. As of the time of this research, the company has approximately 400 employees in its operational branches nationwide (Nigeria Bottling Company Annual Report, 2023).

# 3.4 SAMPLE SIZE AND SAMPLING TECHNIQUE

To achieve an objective and manageable analysis, a sample size of 80 respondents was selected from the population. The stratified random sampling technique was used to ensure fair representation from each of the relevant departments (finance, operations, and administration). This technique divides the population into subgroups (strata) and selects respondents randomly from each subgroup, thereby reducing bias and ensuring that each category of employees has a fair chance of participation (Kothari, 2004).

$$n = \frac{N}{1 + N(e)^2}$$

Where:

n = sample size

n = population size

e = margin of error (decimal form)

Given:

Population size N = 400

Margin of error, e = 10% = 0.10

Calculation:

$$n = \frac{400}{1 + 400 \, x \, 0.010^{\,2})}$$

$$n = \frac{400}{1 + 400 \times 0.01}$$

$$n = \frac{400}{1+4}$$

$$n = \frac{400}{5}$$

$$n = 80$$

Sample size, n = 80

#### 3.5 SOURCES AND METHOD OF DATA COLLECTION

Both primary and secondary sources of data were utilized in this study.

Primary data were obtained directly from the selected respondents through the administration of structured questionnaires.

Secondary data were sourced from textbooks, academic journals, Nigeria Bottling Company's financial reports, official websites, and other relevant literature on working capital management and organizational performance.

These sources provided the basis for establishing theoretical underpinnings and enhancing the validity of the data collected.

# 3.6 INSTRUMENT FOR DATA COLLECTION

The primary instrument used for data collection was the structured questionnaire. The questionnaire was designed using a 5-point Likert scale format ranging from "Strongly Agree" to "Strongly Disagree" to measure the perceptions of respondents on various aspects of working capital management and its effects on organizational performance. The questionnaire was divided into three sections: demographic information, working capital practices, and organizational performance indicators.

The instrument was subjected to content and face validity by consulting experts in finance and research methodology. Additionally, a pilot test was conducted among 10 staff members from a different branch of the company to ensure reliability, yielding a Cronbach's alpha of 0.78, which indicates acceptable internal consistency (Nunnally, 1978).

# 3.7 TECHNIQUES FOR DATA ANALYSIS

The data collected were analyzed using descriptive and inferential statistical methods.

Descriptive statistics such as frequency tables, percentages, and mean scores were used to summarize respondents' demographic information and general trends.

Inferential statistics, particularly the Pearson Product Moment Correlation and Regression Analysis, were used to test the relationship and effect between working capital components (inventory, accounts receivable, accounts payable, and cash management) and organizational performance. The analysis was carried out using Statistical Package for Social Sciences (SPSS) version 26.0.

This approach allows for objective evaluation and supports the hypothesis testing to determine the significance and strength of relationships (Field, 2013).

#### 3.8 MODEL OF SPECIFICATION

The study employed the following model;

 $Y_{it} = B_0 + B_1 + BOS + B_2 BODCOMP + B_3$ 

(EODUAL +B<sub>4</sub>LEVERAGE +e<sub>t</sub> where;

Y<sub>it</sub> represent firm performance variable which are;

Return on Assets and Return on Equity for bank's firms at time t.

**BOS** represent Board Size

**BODCOMP** represent Board

Composition, (EODUAL

# Represent CEO Duality

LEVERAGE represents leverage as a corporate Governance variable and et, the error term which account for other possible factors that could influence  $Y_t$  that are not captured in the model.

Based on the fact that different financial performance proxies were employed, the above was therefore modified as below to determine the relationship between firm in Nigeria.

# **Equation 3.1**

$$\begin{split} ROA_{it} &= f\left(BOS_{it}, BODCOMP_{t}, CEODUAL_{t}, LEVERAGE_{t}\right)......(1) \\ ROAT_{it} &= B_{0} + B_{1}BOSt + B_{2}BODCOMP + B_{3}(EODUAL_{t} + B_{4}LEVERAGE_{t}) \\ &+ e_{t}......(2) \end{split}$$

# **CHAPTER FOUR**

# ANALYASIS AND DISCUSSION

# 4.1 INTRODUCTION

This section deals with the presentation and analysis of data collected from the field survey by means of questionnaire. For the purpose of clarity, simple percentage and regression analysis were used and the responses were presented in tabular forms.

# 4.2 RESPONDENTS CHARACTERISTIC AND CLASSIFICATIONS

Below is the tabular presentation of responses to personal information on the questionnaires distributed to respondents. It is important to note that out of the eighty (80) questionnaires distributed to the respondents, sixty seven (67) were filled and returned.

TABLE I: ANALYSIS OF RESPONDENTS TO AGE DISTRIBUTION

_	-		Percentag	Valid	Cumulative
		Frequency	e	Percentage	Percentage
Valid	20-30 YEARS	18	28.6	28.6	28.6
	31-40 YEARS	20	35	35	63.6
	41-50 YEARS	11	16.9	16.9	80.5
	51ABOVE	18	19.5	19.5	100.0
	Total	67	100.0	100.0	

Source: Field survey, 2025

Table I shows that out of (67) questionnaires filled and returned by the respondents (18) representing about 28.6% were 20-30 years, (20) representing about 35% were between the age range of 31-40 years, thirteen (11) representing about 16.9% were between the age range of 41–50 years, fifteen (18) representing about 19.5% were between the age range of 51 years and above. It can be deduced from the above analysis that majority of the respondents were within the working age in Nigeria.

TABLE II: ANALYSIS OF RESPONDENTS GENDER

			Percentag	Valid	Cumulative
		Frequency	e	Percentage	Percentage
Valid	MALE	25	35.5	35.5	35.5
	FEMAL E	42	64.5	54.5	100.0
	Total	67	100.0	100.0	

Source: Field survey, 2025

Table II shows that out of (67) questionnaires filled and returned by the respondents, (25) representing 35.5% were male and (42) representing 64.5% were female. This implies that majority of the respondents were female.

TABLE III : ANALYSIS OF RESPONDENTS JOB POSITION/LEVEL

	-	Percentag e	Valid Percentage	Cumulative Percentage
Valid SENIOR STAFF	28	36.4	36.4	36.4

JUNIOR STAFF	28	36.4	36.4	72.7
CASUAL	21	27.3	27.3	100.0
Total	67	100.0	100.0	

Source: Field survey, 2025

Table III shows that out of (67) questionnaires filled and returned by the respondents, twenty-eight (28) representing 36.4% were senior staff, twenty-eight (28) representing 36.4% were junior staff and twenty-one(21) representing 27.3% were casual.

TABLE IV: ANALYSIS OF RESPONDENTS TO EDUCATIONAL QUALIFICATION

	-		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0 LEVEL		20	26.0	26.0	26.0
	ND	AND		20.8	20.9	46.0
	ABOVE		16	20.8	20.8	46.8
	BSC	AND	31	53.2	53.2	100.0
	ABOVE		51	JJ.2	55.2	100.0
	Total		67	100.0	100.0	

Source: Field survey, 2025

Table IV shows that out of (67) questionnaires filled and returned by the respondents, (20) representing about 26.0% were '0' level holders, sixteen (16) representing about 20.8% were ND and Above holder, (31) representing about 53.2% were BSc and Above holder. It can be deduced from the above analysis that majority of the respondents were qualified employees.

TABLE V: ANALYSIS OF RESPONDENTS TO MARITAL STATUS

			Percentag	Valid	Cumulative
		Frequency	e	Percentage	Percentage
Valid	SINGLE	25	32.5	32.5	32.5
	MARRIE D	42	67.5	67.5	100.0
	Total	67	100.0	100.0	

Source: Field survey, 2025

It can be deduced from TABLE V above that twenty-five (25) respondents representing about 32.5% were single, (42) respondents representing about 67.5% were married. This implies that majority of the respondents are married.

TABLE VI: ANALYSIS OF RESPONDENTS TO WORKING EXPERIENCE

	-		Percentag	Valid	Cumulative
		Frequency	e	Percentage	Percentage
Valid	0-5YRS	24	31.2	31.2	31.2
	6-10YRS	34	57.1	57.1	88.3
	11-15YRS	9	11.7	11.7	100.0
	Total	67	100.0	100.0	

Source: Field survey, 2025

Table VI shows that out of questionnaires filled and returned by the respondents, (24) representing about 31.2% have 0-5 years working experience, (34) representing about

57.1% have 6-10 years working experience, nine (9) representing about 11.7% have 11-15 years working experience.

# 4.3 ANALYSIS AND ANLAYIS OF DATAA ACORDING TO RESEARCH OR RESEARCH HYPOTHESIS

The following are the analysis of individual statement. Statement 1: cash management is sometimes used in working police for the organization.

**Table 4.7** 

RESPONDENT	CODE	FREQUENCY	PERSENTAGE
Strongly	5	7	10.4
Agree	4	38	56.7
Undecided	3	17	25.4
Disagree	2	5	7.5
Strongly Disagree	1	-	-
Total		67	100

Research Survey, 2025

As Table 4.7 depicts, 7 respondents representing 10.4% agree with the statement 38 respondent's representing 56.7 17 respondents representing 25.4 undecided 4.5 respondents representing 7.5%. This shows that a total Number of forty – Five respondents representing 7.1 percentage agree with the statement above.

RESPONDENT	CODE	FREQUENCY	PERSENTAGE
Strongly	5	20	29.9
Agree			41.8
Undecided			17.9
Disagree		-	-
Strongly Disagree		67	100
Total		67	100

Research Survey, 2025

From the 4.8 above, 20 respondents representing 29.9% strongly the statement Number (2) above 28 respondents representing agree 40:8% 12 respondents representing were undecided 17.9% while 7. Respondents representing 10.4% with the statement number (2) this implies that a total of 48 respondents representing 17.7%.

STATEMENT NUMBER 3: at time the organization monitor the amount of credit it gives to its customers.

**Table 4.9** 

RESPONDENT	CODE	FREQUENCY	PERSENTAGE
Strongly	5	24	35.8
Agree	4	37	55.2

Undecided	3	4	6.0
Disagree	2	2	3.0
Strongly Disagree	-	-	-
Total		67	100

Research Survey, 2025

From the table 4.9 above, 24 respondent with 35.8 percent strongly agree with the statement number (3), 37 respondents agree with 55.2 percent while 4 respondents were undecided with 6.0 percent 2 respondents disagree with 3.0 percent. A total number (3) that organization monitors the amount of credit give to its customers.

STATEMENT NUMBER 4: Stock control is sometimes used in production planning of the company.

RESPONDENT	CODE	FREQUENCY	PERSENTAGE
Strongly	5	20	29.9
Agree	4	37	55.2
Undecided	3	7	10.4
Disagree	2	3	4.5
Strongly Disagree	-	-	-
Total		67	100

Research Survey, 2025

From above table 4.10, 20 respondents strongly agree with the statement number (4) representing 29.9 percent, 37 respondents agree with 55.2 percent 7 respondents were undecided representing 4.5 percent, 57 respondents out of the number of 67 respondents agree with the statement that stock control; s sometime used in production planning of the company.

STATEMENT NUMBERS 5: When financing the current in an organization, production or short and long term funds are considered.

RESPONDENT	CODE	FREQUENCY	PERSENTAGE
Strongly	5	34	50.7
Agree	4	24	35.8
Undecided	3	3	4.5
Disagree	2	6	9.0
Strongly Disagree	-	-	-
Total		67	100

Research Survey, 2025

From the table 4.11 above, 34 respondents strongly agree with the above statement represent 50.7 percent, 24 respondents agree with 35.8 and 6 respondents disagreed with the statement represent 9.0 percents.

The shows that 58 respondents agree with the statement number 5.

STATEMENT NUMBER 6: in working capital management processing the extent at which the organization makes profit was determined.

RESPONDENT	CODE	FREQUENCY	PERSENTAGE
Strongly	5	20	29
Agree	4	37	55.2
Undecided	3	10	14.4
Disagree	2	-	-
Strongly Disagree	1	-	-
Total		67	100

Research Survey, 2025

As it can be seen from the table 4.12 above, 20 respondents strongly agree with the statement number 6 representing 29.9 percent, 37 respondents agree representing 55.2 percent, which 10 respondents were undecided and this represents 14.9 percents. The total number of 57 respondents out of the 67 respondents agrees with the statement.

STATEMENT NUMBER 7: Working capital management serves as a reference point to the survival of manufacturing organization.

**Table 4.13** 

RESPONDENT	CODE	FREQUENCY	PERSENTAGE
Strongly	5	16	23.9

Agree	4	24	40.3
Undecided	3	7	10.4
Disagree	2	12	7.3
Strongly Disagree	1	5	-
Total		67	100

Research Survey, 2025

From the table 4.13 above, 16 respondents strongly agree with the statement number 7 representing 23.9 percent, 24 respondents agree representing 40.3 percent, 7 respondents were undecided representing 10.4 percent 12 respondents disagreed representing 17.9 percent while 5 respondents strongly agreed representing 7.3.

The total number of 16 strongly agreed respondents and 24 respondents representing 40 respondents in statement number 7.

STATEMENT NUMBER 8: When investing in assets, working capital management in facilitated.

**Table 4.14** 

RESPONDENT	CODE	FREQUENCY	PERSENTAGE
Strongly	5	7	10.5
Agree	4	33	49.2
Undecided	3	8	11.4

2	12	17.9
1	7	10.6
	67	100
	1	1 7

Research Survey, 2025

The above table 4.17 shows that 7 respondents strongly agree with the statement representing 10.5 percents, 33 respondents 49.3 percent 8 respondents are undecided 11.9 percent, percent 17 respondents strongly disagree with the 10.5 percent, 40 respondents agree with the statement out 67 respondents in statement numbers 8.

# 4.5 TEST OF HYPOTHESES

Hypothesis testing is to further understand the relationship between working Capital and the achievement of the organization objective, this testing will be done using the chi-square formular for computing the chi-square values.

$$X^2 = \sum (Fo-Fe)^2$$
Fe

Where:

 $x^2$  = computed value of chi-square

 $F_o$  = observed frequency figure

 $F_e$  = expected figure

 $\sum$  = summation sign ( $\sum$ )

To test this hypothesis, we formulate both the null (Ho) and the alternative (Hi) hypothesis. They are state below.

# **HYPOTHESIS I**

**H**<sup>0</sup>: Web design has no considerable effect on brand preference

To test this hypothesis, statement used for table 4.2.6

responses	Fo	F <sub>e</sub>	F <sub>o</sub> - F <sub>e</sub>	$(F_o-F_e)^2$	$(F_o-F_e)^2$
					$F_{e}$
Yes	25	21	4	16	0.7619
No	5	7.7	-27	7.29	0.9467
					6.5894 mean
					calculated

Source: Field Work 2024

# **DEGREE OF FREEDOM**

$$(R - 1 (C - 1))$$

Where: R = number of Rows

C = number of Columns

$$R = 2, C = 3$$

$$1 \times 2 = 2$$

# **Interpretation**

The hypothetical mean, which we get by checking 0.5 under 2, gives us 5.991. the difference between the calculated means i.e 6.5894 and the hypothesis mean i.e. 5.991 as a result of this difference. We therefore accept Hi and reject Ho. This means that the performance of the employees increase when they are recognized and rewarded for doing good job.

# **HYPOTHESIS II**

**H**<sup>0</sup>: Search engine marketing has no significant effect on customer satisfaction To test this hypothesis, statement used for table 4.2.7

Response	Fo	F <sub>e</sub>	F <sub>o</sub> - F <sub>e</sub>	$(F_o-F_e)^2$	$(F_o-F_e)^2$
					$F_{e}$
Lack of basic amenities	29	25.08	3.92	15.3664	0.6126

High cost of school fees	4	6.84	2.84	8.0656	1.1791
Inadequate transport	5	6.08	-1.08	1.1664	0.1918
system					
All of the above	4	7.92	-3.92	15.3664	1.9402
					8.2662 mean
					calculated

Source: Field Work 2024

# **DEGREE OF FREEDOM**

$$(R - 1 (C - 1))$$

Where: R = number of Rows

C = number of Columns

$$R=2, C=3, (2-1)(3-1)$$

$$1 \times 2 = 2$$

# **Interpretation**

The hypothesis mean which we get by checking 0.5 under the degree of freedom i.e gives us 5.991 as the difference between the calculated means i.e 8.2662, we therefore, accept  $H_i$  and reject  $H_o$ , meaning that incentives that are given to employee will lead to improvement in their performance.

# HYPOTHESIS III

**H**<sup>0</sup>: Social media marketing does not affect customer loyalty

To test this hypothesis, statement used for table 4.2.6

responses	F <sub>o</sub>	F <sub>e</sub>	F <sub>o</sub> - F <sub>e</sub>	$(F_o-F_e)^2$	$(F_o-F_e)^2$
					$F_{e}$
Yes	16	31	9	11	0.68745

No	4	4.2	-12	5.17	0.3241	
					5.2654	mean
					calculated	

Source: Field Work 2024

#### **DEGREE OF FREEDOM**

$$(R - 1 (C - 1))$$

Where: R = number of Rows

C = number of Columns

R = 4, C = 4

 $1 \times 5 = 5$ 

# Interpretation

The hypothetical mean, which we get by checking 0.6 under 3, gives us 4.245. the difference between the calculated means i.e. 6.5894 and the hypothesis mean i.e. 6.471 as a result of this difference. We therefore accept Hi and reject Ho. This means that the performance of the employees increase when they are recognized and rewarded for doing good job.

#### 4.6 SUMMARY OF FINDINGS

In order to identify the working capital management on the organization performance of Nigeria Bottling Company, Plc. a financial analysis which is the process of identifying the financial strategies and weakness of the firm by properly establishing relationship between the item of the balance sheet and the profit and loss account shall be carried out.

The bulk of Nigeria Bottling Company, Plc. The forty percent (40%) of their closing stock is valued and incorporated into Nigeria Bottling Company, Plc, while the other sixty percent (60%) belongs to the company's joint venture partner

#### **CHAPTER FIVE**

# SUMMARY, CONCLUSION AND RECOMMENDATIONS

# 5.1 SUMMARY OF THE STUDY

This study focused on the appraisal of the role of working capital management on the performance of organizations, using Nigeria Bottling Company Plc as a case study. The study examined how the management of key components of working capital—such as cash, inventory, receivables, and payables affects profitability, operational efficiency, and overall organizational performance. A descriptive survey design was adopted, and data were collected through structured questionnaires administered to staff members of Nigeria Bottling Company Plc. The study employed both descriptive and inferential statistics to analyze the data.

The major findings revealed the following:

- i. Efficient cash management positively influences the liquidity and profitability of the organization.
- ii. Proper inventory management reduces operational costs and enhances service delivery.
- iii. Effective receivables management improves cash flow and minimizes bad debt risks.
- iv. Timely settlement of payables enhances supplier relationships and supply chain efficiency.

# 5.2 CONCLUSION

The findings of this study underscore the significant influence that effective working capital management has on organizational performance. Efficient management of cash ensures the availability of funds for day-to-day operations, reduces the risk of insolvency,

and enables the organization to respond promptly to opportunities. Inventory control, when optimized, helps minimize waste, reduce holding costs, and maintain product availability, all of which enhance operational efficiency and customer satisfaction. Additionally, the study confirmed that sound receivables management improves the cash conversion cycle, thereby enhancing liquidity and reducing exposure to bad debts.

Furthermore, the research revealed that strategic payables management contributes to maintaining healthy supplier relationships, which in turn ensures consistent supply and production flow. Overall, the study concludes that working capital components—when well-managed—collectively enhance profitability, financial stability, and long-term growth. Therefore, it is essential for organizations like Nigeria Bottling Company Plc to regularly review and refine their working capital policies in line with industry trends and internal performance metrics.

# 5.3 **RECOMMENDATIONS**

In light of the conclusions drawn, the following recommendations are made:

- i. Cash Management: Nigeria Bottling Company should adopt automated cash forecasting systems to better predict and manage cash flows.
- ii. Inventory Management: Implementing just-in-time (JIT) inventory systems will help reduce holding costs and avoid overstocking.
- iii. Receivables Management: The company should strengthen its credit policy by setting clear credit terms and ensuring thorough creditworthiness assessments.
- iv. Payables Management: The company should optimize payment cycles to take advantage of early payment discounts without jeopardizing supplier relationships.

# 5.4 FRONTIER FOR FURTHER RESEARCH

Further studies could explore the impact of working capital components on the performance of SMEs or compare multinational corporations with indigenous firms. Additionally, research could assess the role of digital financial tools in optimizing working capital management in Nigeria's manufacturing sector.

# **REFERENCES**

- Afza, T., & Nazir, M. S. (2020). Impact of aggressive working capital management policy on firms' profitability. The IUP Journal of Applied Finance, 15(8), 19–30.
- Akinyomi, O. J. (2020). Effect of working capital management on profitability of selected quoted manufacturing companies in Nigeria. International Journal of Academic Research in Accounting, Finance and Management Sciences, 4(4), 34–45.
- Bhunia, A., Khan, I. U., & Mukhuti, S. (2021). A study of managing liquidity. Journal of Management Research, 3(2), 1–22.
- Deloof, M. (2019). Does working capital management affect profitability of Belgian firms? Journal of Business Finance & Accounting, 30(3-4), 573–587. https://doi.org/10.1111/1468-5957.00008
- Gill, A., Biger, N., & Mathur, N. (2020). The relationship between working capital management and profitability: Evidence from the United States. Business and Economics Journal, 2010(BEJ-10), 1–9.
- Jose, M. L., Lancaster, C., & Stevens, J. L. (2019). Corporate returns and cash conversion cycles. Journal of Economics and Finance, 20(1), 33–46. https://doi.org/10.1007/BF02920497
- Lazaridis, I., & Tryfonidis, D. (2020). Relationship between working capital management and profitability of listed companies in the Athens Stock Exchange.

  Journal of Financial Management and Analysis, 19(1), 26–35.
- Mathuva, D. M. (20209). The influence of working capital management components on corporate profitability: A survey on Kenyan listed firms. Research Journal of Business Management, 4(1), 1–11. https://doi.org/10.3923/rjbm.2010.1.11

- Mokhtar, E. S., & Ariff, A. M. (2020). Working capital management and firm performance in emerging markets: The case of Egypt. International Journal of Managerial Finance, 11(3), 302–320. https://doi.org/10.1108/IJMF-06-2013-0061
- Nyamao, N. R., Patrick, O., Martin, L., & Odhiambo, N. (2022). Effects of working capital management practices on financial performance: A study of small scale enterprises in Kisii South District, Kenya. African Journal of Business Management, 6(18), 5807–5817. https://doi.org/10.5897/AJBM11.1411
- Raheman, A., & Nasr, M. (2019). Working capital management and profitability Case of Pakistani firms. International Review of Business Research Papers, 3(1), 279–300.
- Shin, H. H., & Soenen, L. (2020). Efficiency of working capital management and corporate profitability. Financial Practice and Education, 8(2), 37–45.
- Uyar, A. (2019). The relationship of cash conversion cycle with firm size and profitability: An empirical investigation in Turkey. International Research Journal of Finance and Economics, 24, 186–193.
- Wasiuzzaman, S. (2021). Working capital and firm value in an emerging market.

  International Journal of Managerial Finance, 11(1), 60–79.

  https://doi.org/10.1108/IJMF-01-2013-0016