We certify that we have read the thesis submitted by MARY OMODOLAPO **OLAPADE** titled "THE IMPACT OF WORKING CAPITAL MANAGEMENT ON FIRM'S PROFITABILITY: EVIDENCE FROM NIGERIA CEMENT INDUSTRY" and that in our combined opinion it is fully adequate, in scope and in quality, as a thesis for the degree of Master of Business Administration.

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THE IMPACT OF WORKING CAPITAL MANAGEMENT ON FIRM'S PROFITABILITY: EVIDENCE FROM NIGERIA CEMENT INDUSTRY	THE IMPACT OF WORKING CAPITAL MANAGEMENT ON FIRM'S PROFITABILITY: EVIDENCE FROM NIGERIA CEMENT INDUSTRY
MSc. THESIS	Msc. THESIS MARY OMODOLAPO OLAPADE
JUNE,2022	Nicosia June, 2022

# NEAR EAST UNIVERSITY INSTITUTE OF GRADUATE STUDIES DEPARTMENT OFBUSINESS ADMINISTRATION

# THE IMPACT OF WORKING CAPITAL MANAGEMENT ON FIRM'S PROFITABILITY: EVIDENCE FROM NIGERIA CEMENT INDUSTRY

Msc.THESIS

## MARY OMODOLAPO OLAPADE

Supervisor

Assist. Prof. Dr. Ahmed Samour

Nicosia

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#### Declaration

I thus certify that all material, documents, analysis, and results contained in this thesis were obtained and presented in accordance with the academic regulations and ethical guidelines of the Near East University Institute of Graduate Studies. As required by these rules and conduct, I further affirm that I have properly attributed and referenced all information and data that are not unique to this work.

Signature:

### MARY OMODOLAPO OLAPADE

### Dedication

I dedicate this thesis to my parents Mr and Mrs Olapade, my siblings Olumide(Engr. Chriz) and Abisola.Also to Mr Olokoba Rasaq (CEO of legendary Rasfa International Limited and my dear friend Bella(CEO Belzmart Store).

### Acknowledgments

May every moment of my life be dedicated to HIS worship, thanks to God Almighty, who has given me the fortitude to complete this research project.

I would like to begin by thanking my advisor, Assist.Prof.Dr. Ahmed Samour, whose assistance was vital in forming the study questions and methodology. Your informative feedback prompted me to refine my reasoning and elevated the quality of my work.

### MARY OMODOLAPO OLAPADE

#### Abstract

# The Impact of Working Capital Management on Firm's Profitability: Evidence From Nigeria Cement Industry

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This study's major purpose is to assess the impact of working capital management on the performance of Nigerian cement manufacturers. Examine the impact of accounts receivables days, inventory days, account payables days, and the cash conversion cycle on the financial performance of the cement manufacturing sector. Finance is typically defined as the study of money management and the management of funds to attain specified objectives. Effective working capital management is only concerned with maximizing returns while reducing financial risks. Before comprehending the most important aspect of working capital management, which is short-term working capital management or Working Capital Management in connection to day-to-day operations, it is crucial to appreciate the company objectives and financial functions. For a successful research project, structured questionnaires and observation of senior and junior officials of Elephant Cement and Dangote Cement will serve as the primary data sources. As secondary data sources, data from relevant publications of the two institutions listed above will also be utilized. Consequently, the research will be conducted at a variety of institutions, including Elephant and Dangote Cement. This study's intended audience is comprised of junior, intermediate, and senior-level employees of both Elephant and Dangote cement, as well as hundreds of other stakeholders. As seen in the tables in this study; intercept for this model is 1.373. The results indicate that the total number of day account receivables has a positive effect on the firm's total profitability, with total profit increasing by 0.18 units for every one unit increase in the total number of day account receivables. It also indicates that, at the 0.05 level of significance, there is no significant relationship between the variables, as the

probability value of the independent variable, 0.161, is greater than the significance level. Therefore, we must reject the alternative hypothesis and accept the null hypothesis. We acknowledge that there is no relationship between the total number of day-to-day accounts receivable and the company's overall profitability. Based on the analysis of existing literature and the study's findings, all working capital factors of inventory turnover, debtors' collection period, average payment period, andcash conversion cycle have a significant effect on the profitability of Nigerian cement companies. Therefore, one can conclude that working capital components have a significant impact on the working capital management efficiency of the sampled businesses. Furthermore, the study demonstrates that Nigerian cement companies make substantial investments in working capital, which has a substantial impact on their profitability. Working capital management is crucial to a company's operations and must be managed effectively. Maintaining a sufficient amount of working capital is essential for a company's ability to address liquidity issues. If a company has an excess working capital balance, however, it may miss out on investment opportunities. This study studied the effect of working capital management on the performance of Elephant and Dangote cement production companies in Nigeria.

Key Words: Working capital, firm profitability, management, cement industry

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# List of Abbreviations

TRNC:	Turkish Republic of North Cyprus	
MNE:	Ministry of National Education	
WC:	Working Capital	
WCM:	Working Capital Management	
NWCM:Net Working Capital Management		
CCC:	Cash Conversion Cycle	
NSE:	Nigerian Stock Exchange	
ICP:	Inventory Conversion Period	
DCP:Debtors Collection Period		
ROA:	Return of Assets	

#### **CHAPTER 1**

#### Introduction

#### **Background of the study**

Working Capital management is one of the most important parts of running a business. It has a direct effect on a company's income, growth, market share, and cash flow. These things should work together in a good way. The goal of this study is to find out how working capital management affects the performance of an organization. Management of working capital is important for a business's survival and success, both in terms of making money and having enough cash on hand. Making sure that current working capital is liquid is a key part of managing working capital. This is done to make sure that the capital works well and meets its obligations. Liquidity is important so that a company can meet its short-term obligations and keep making money from a business that is doing well (Gitman, 2005). When a company does a good job of managing its working capital, it can respond quickly and appropriately to unplanned changes in market factors like interest rates and commodity prices while still making money. Competitive edge over competitors Inventory, accounts receivable, and accounts payable are all important parts of working capital (Padachi, 2006). WC could be said in a positive or negative way. Working capital is negative when a company's current debts are higher than its current assets. When a company's current assets are more than its current debts, its working capital is positive (Lazaridis and tryfonidis, 2006) The ratio of total assets to liquid assets should be greater than 1 in businesses where management is trying to find and speed up the best way to handle workers' compensation policies, where the ratio of liquid assets to total assets is low, or where management chooses a leverage ratio greater than total liabilities in the short term. A higher liquid asset ratio can be bad for the company, while a low ratio can lead to poor liquidity and a drop in the number of shares, which makes things hard for the business (Belt, 2001).

For the short term, an organization whose management wants to understand the factors that affect and speed up the effective management of WC policy may choose a low ratio of liquid assets to total assets or a leverage ratio that is higher than the total liabilities. A company may be hurt by a high liquid asset ratio, while a low ratio leads to poor liquidity and a drop in the number of shares, which is bad for business (Belt, 2001). Because of this, it is important for businesses to evaluate and deal with trash. Working capital must be kept at a good level for an institution to stay liquid

and make money (Eljelly, 2004). To do this, you have to choose the amount and type of current assets and figure out how to pay for them. A higher ratio of liquid assets reduces the risk of not having enough or any liquidity. This makes sure that all important parts of working capital, like cash, marketable securities, accounts receivable, and inventories, are managed with equal importance, which creates value for shareholders. Bagchi and Khamreei (2012) talk about how important WCM is for managing money. No matter how they make money, how big they are, or what they do, all businesses need the right amount of WCM. WCM that doesn't work well can trap businesses (Niresh, 2012). When WCM is working well, it helps the organization's value grow in a good way. In this way, decisions about how to manage working capital are very important because they affect how much money a company makes and how much money its shareholders have. Every business has current assets and current liabilities. Like electricity, the flow of current assets and liabilities through a company is like the flow of current assets and liabilities. Working capital, on the other hand, is like the heart in that it pumps blood through the body. Working capital is made and passed around within an organization. If this doesn't happen, the organization will stop being around. Working capital is called "working capital" because it moves around like blood in the body (Agarwal, 2000:171-172) Management uses financial performance analysis to do two things: figure out how efficient and profitable operations are and how well commercial resources are being used. Helfert, Erich A., D.B.A., 2001). Working capital management is an important and complicated part of modern financial management. This is because a business has a lot of working capital and it has its own quirks. Working capital management is the process of keeping track of current assets (which are usually turned into cash during the accounting year) and current liabilities (which are usually paid off within a year), as well as how they relate to each other. A company's bottom line can be hurt by a high level of short-term assets, while a low level of short-term assets can lead to less cash flow and less inventory, which in turn can lead to less cash flow and less inventory. This makes it harder to keep doing your best (Van Horne and Wachowicz, 2004). Working capital is usually defined as the difference between a company's current assets and current debts. So, the goal of managing working capital is to manage and control current assets and liabilities so that the business can make as much money as possible and stay liquid. Profitability and cash flow are two of the most important things that determine if a business can

stay in business (Dr. K.S. Vataliya, 2009). The problem is that businesses can get into a lot of trouble if they try to make more money by cutting back on cash flow. So, companies have to choose between these two goals (liquidity and profitability). Both goals are just as important as each other, so neither should be given up for the other. Businesses that don't care about making money will eventually go out of business. If the business doesn't focus on liquidity in the next period, it could go out of business or go bankrupt. Because of these things, business owners and managers need to think carefully about how they manage their working capital. If they don't, it will hurt the business's ability to make money in the long run. So, the company can use efficient and effective working capital management to maximize profits and keep enough cash on hand. This is important because working capital management does affect the profits of businesses. A company can maximize profits and keep enough cash on hand if its working capital management is efficient and effective. Inefficient management of working capital could hurt a company's ability to make money (Gebrehiwot&Wolday, 2006). Working capital management is a key part of a company's overall strategy for creating shareholder value (Nazir and Afza, 2008). Good management of working capital can also help affiliated businesses improve their operational performance and meet their short-term cash needs (C. Paramasiyan T. Subramanian, 2009). So, businesses try to keep their working capital at a level that maximizes their value (Deloof, 2003). Working capital management is also important because it affects how profitable and liquid a company is (Taleb et al., 2010). The main goal of working capital management is to find the right balance between the different parts of working capital (Gill, 2011). In the uncertain and cashstrapped world we live in now, managing working capital can not only improve financial performance. But they also have to help with the day-to-day running of the business. So, it is important to look at working capital management to understand and judge the performance of an organization. The chapter is put together in this way: background information on the topic, a problem statement, research objectives, research questions, study limitations, the scope of the investigation, and study organization.

#### Statement of the problem

A perfect organization has enough resources to stay in business and uses those resources to their fullest potential to increase profits and overall performance.

Padachi, K. (2006), Finau, F. (2011), Anand and Gupta (2002), Mohamad and Noriza (2010), Deloof (2003), Luo et al. (2009), Koperunthevi (2010), Fathi and Tavakkoli (2009), V. Ganesan, (2007), and others have looked at working capital management and how it affects the performance of a business. Most of these and other researchers have found a strong link between managing working capital and how well a company does. In practice, however, it has been shown that managers make decisions about working capital based more on vague laws or poor model building than on good financial ideas. (2005) (Emery, Finnerty, and Stowe). In turn, managers aren't able to effectively manage the different working capital management portfolios they have at their disposal. This can cause the company to have too much or too little money, or even cause it to go out of business. Working capital management is a key part of figuring out how an organization runs on a daily basis because it makes sure there is a balance between cash flow and profits. Working capital management is important for a company's day-to-day operations and keeping its promises, because it makes sure that the company has enough cash on hand to do the things it needs to do every day. Managers have a tough job because they have to make sure that a company's operations run smoothly and make money. The current balance of assets and liabilities could be thrown off by this method. If this happens, it will hurt the company's growth and profits, and the manager won't be able to run the company well in the future. You must remember that making money is not enough to guarantee success; you also need a well-run Wage and Hours department. Even if a company is making money, a poorly run WC could mean the end of it in the worst case (Pass & Hike, 2007). WC's smooth operation and compliance depend on its cash flow, which is why the company's day-to-day operations are so important (Eljelly, 2004). Working capital management (WCM) allows a company to respond quickly and effectively to changes in the market, such as changes in loan rates and the price of raw materials (Filbeck& Krueger, 2005). Working capital management is based on the idea that a company's current assets should be in a good balance. This is the main goal of a company's finance directors. Thank you for your time, Mr. Lamberson (Lamberson, 2005). Because of WC need, an organization's liquidity and profitability affect its investment and finance decisions. When money builds up in assets because of a bad or inefficient WCM, an organization's liquidity and profits go down (Reddy &Kameswari 2004) Because of how unstable their finances are and how sensitive they are to changes in working capital, these companies often find

themselves short on cash, which hurts their ability to grow and make money (Sanger, 2001). You can't pay for any of your obligations with money in stock or money owed to your business by customers. So, if a company isn't running as well as it could, this will show up in the WC. Slow collection rates could mean that there are problems with the way the company does things, which can be found by comparing the WC over time. For a business to be successful, it needs to know how to handle waste well and how it affects its success and growth. Professors at the Institute of Public Administration and Management are still interested in this topic, despite what has been said. There wasn't any research done in Sierra Leone that was directly related to what the researchers were looking for, so they used the internet and books to find information. As a result, we came to the conclusion that the issue had not been well researched and that there was insufficient knowledge in the area. Working capital management has long been considered of as a tool for company owners in Sierra Leone to make their firms more successful by reducing the time it takes to transform cash into earnings. Because there isn't enough study in this area, it's probable that corporate executives are underestimating the importance of working capital management. With all of this in mind, it's critical to consider how working capital management influences the cement production industry in Sierra Leone.

#### **Objective of the Study**

Nigerian cement manufacturing companies' organizational performance will be evaluated as part of this study's primary goal. To accomplish these precise goals:

i. To examine the impact of accounts receivables days, inventories days, account payables days and cash conversion cycle on financial performance of the cement manufacturing industry

ii. To investigate the impact of working capital management on financial performance of the cement industry in Nigeria.

#### **Research Question**

The following study questions will be used to gather data in order to assess the utility of working capital management in measuring organizational performance and directing investment decisions.

1. What is the effect of working capital management components

towards the firm's profitability in organizations and manufacturing sectors?

2. How does number of days Accounts Receivable (ARD) affects the working capital of manufacturing firms in Nigeria?

3. How does number of days Inventories (INV) affect the profitability of the cement industry in Nigeria?

4. How does number of days Accounts Payable (AP) affects the Working capital of the manufacturing firms in Nigeria?

5. How can working capital be used in assessing the performance of the cement industry in Nigeria?

#### **CHAPTER 2**

#### **Literature Review**

In the study, the main ideas about how WCM affects the performance of a company were looked at. This chapter is a summary of the research that has been done on working capital management and how it affects the success of a business. The researchers looked at accounting and financial performance, as well as the effect of working capital management on financial operations. It's important to think about whether current assets are enough and how risky current liabilities are, as well as how to make the most of working capital incomes.

#### **Theoretical Framework**

Finance has traditionally been defined as the management of money and the use of money to reach certain goals. Working capital management has only one goal: to maximize revenues while lowering financial risks. It is critical to understand the company's goals and financial activities before focusing on short-term working capital management or working capital management connected to day-to-day operations, which is the most significant component of working capital management (Brigham and Ehrhardt, 2010; Chandra, 2008; Keown, Martin, Petty, and Scott, 2002; Sharma, 2009). Managing working capital is also about making money and getting the most out of what you invest. A lot of financial writing is about how businesses and other groups make long-term financial decisions. Reports say that Chandra (2007) used Zietlow, Hankin, and Seidner (2007) and Zietlow, Hankin, and Seidner (2007). How a company handles its working capital is affected by the problems and opportunities it faces. The owner/primary manager gets money from the company's trade credit policy, bank financing, personal financial contributions, financing for operations, and leasing financing. Even though they have fewer ways to get money, small businesses face the same financial problems as big companies (Arnold, 2008; Gitman, 2009; Sagner, 2010; Sharma, 2009). Managing working capital, which includes both current assets and current liabilities, is one of the most difficult financial tasks for businesses (NWCM). Most companies fail because they don't know how to manage their own working capital well. So, the financial

management team of the company has to keep a close eye on the amount of working capital. Managing a company's working capital is an important part of its overall strategy for maximizing shareholder value. The "working capital cycle" refers to the time between purchasing raw materials and receiving money from the sale of completed goods. Working capital management has a significant influence on a company's capacity to pay bills and generate revenue. Shin and his colleagues (1998) Any business's primary purpose is to generate as much money as possible. It is also critical to maintain the company's financial flow. The fear is that if a corporation seeks to boost earnings at the expense of cash flow, it may face serious challenges. As a result, the company strategy must carefully balance these two objectives. Profit and cash flow are both important, and neither should be given up for the other. If we don't focus on the bottom line, we won't be here for long. On the other hand, we risk going out of business if we don't pay attention to liquidity issues. Working capital management should get the attention it deserves because it has a direct effect on a company's bottom line. All businesses have to worry about their working capital, but small businesses have to worry more because they are more susceptible to changes in working capital. They found that small businesses were more likely than larger businesses to have a lot of current assets, not enough cash on hand, unpredictable cash flows, and rely too much on short-term loans. Working capital is a key part of a company's ability to grow and make money because it is linked to the idea of liquidity. In its simplest and most common form, working capital is the difference between a company's current assets and current liabilities (Larsson and Hammarlund, 2005).

The ability of a company to meet its short-term obligations is shown by a company's net working capital, which is found by subtracting its current assets from its current liabilities. The best case scenario for the vast majority of businesses is being able to pay for both expected and unexpected costs in the future (Maness &Zietlow, 2005). In the person of Braine Adeyemo (2008), a company has positive net working capital when its current assets are more than its current liabilities. This means that the company can use the extra money to meet its financial obligations and shareholder obligations, which is important for the company's growth. (Lantz, 2008). Positive net working capital has clear benefits, but companies that put a lot of money into current assets risk having negative net working capital. Tied capital is money that doesn't add to the value of the company and should be spent on new

projects that can bring in more money (Lantz, 2008). When current debts are greater than current assets, this is called "negative networking capital." It means that the company doesn't have enough money on hand to pay its bills right away. Negative net working capital has a big effect on a company, and even profitable businesses can end up in this situation if they don't manage their working capital well. ICAN (2006) says that working capital is the difference between current assets and current liabilities. This means that they are worried about how much money a company can get. As a result, it helps to figure out how much money is available for running the business. Working capital components are the assets and debts on a balance sheet that are due soon.

a) Inventory: this contains raw materials, work-in-progress, and finished commodities, among other things.

b) Debtors and prepayments: these are monies owing to the company by customers for credit sales.

c) Cash and cash equivalents: these are the company's physical cash balances in tile boxes, cash balances in banks, and short-term investments in the form of bank deposits, quoted investments, and cash equivalents that can be converted into cash in the quickest time feasible.

d) Creditors and accruals: these are the amounts owing to material and service providers, as well as unpaid taxes, dividends, and other accrued expenses.

#### Working capital management concept

Working capital management is the act of managing and regulating current assets and liabilities in such a manner that the danger of not being able to satisfy short-term commitments is minimized while excessive investments in these assets are avoided (Eljelly, 2004). Many people in charge of finance think that one of their most important jobs is to figure out the main things that affect working capital and the right amount of working capital. Firms can find out more about how working capital helps them reduce risk and improve their overall performance. A company's decision to finance itself could be influenced by an aggressive working capital management policy with a low level of current assets as a proportion of total assets or a high level of current liabilities as a percentage of total liabilities (Afza and Nazir, 2009). Working capital is a way for management to keep track of how shortterm assets and short-term liabilities relate to each other. The point of this system is to make sure that a company can meet its short-term obligations. A company that makes things in particular needs to always have a steady supply of liquid assets on hand. It's a way to pay for day-to-day operations, seasonal trade finance, loan repayments, and other capital projects that aren't covered by loan term plans. The main goal of WCM is to make as much money as possible. This definition comes from Garrison (2004), who says that WCM is an organization's management strategy for keeping the right amount of raw materials, finished goods, debtors, and cash on hand in order to make the most money. Manufacturing companies store their cash for speculative reasons, like paying for purchases before expected price increases or putting off payments to creditors (liquidity).

The main goal of managing working capital is to make sure that the different parts of working capital are always in a healthy state of balance. Receivables, inventory, and payables are all very important parts of a company's financial management (Filbeck and Krueger, 2005). Businesses should invest as little as possible in their current assets so that they can lower their borrowing costs and have more money for growth.

Working capital management is the process of managing and controlling current assets and liabilities to limit the risk of not meeting short-term obligations while avoiding excessive investments in these assets (Eljelly, 2004). Recognizing the major factors that affect working capital and the optimal quantity of working capital is one of the most crucial responsibilities of many financial managers. Firms can have a better understanding of how working capital might help them reduce risk and improve overall performance. An aggressive working capital management program with a low level of current assets as a proportion of total assets or a high level of current liabilities as a percentage of total liabilities could impact a company's decision to finance itself (Afza and Nazir, 2009).

Working capital is used to track the relationship between short-term assets and short-term loans. This strategy aims to ensure that a corporation can meet its shortterm obligations.

Working capital ratio, inventory turnover rate, and collection ratio are the three most essential performance parameters of a working capital management system. Ratio analysis will reveal various facets of a firm, including inventory management, cash management, and accounts receivable and payable management. Working capital (WC) decisions are made by businesses to make sure they can keep running and have enough cash flows to pay off short-term obligations and expected operating costs at the lowest cost possible, which increases their profits. For businesses to run well, they need to keep track of their current assets, current liabilities, and fixed assets (Barine, 2012). Accounts receivable, inventory, and cash are examples of current assets. On the other hand, accounts payable are examples of current liabilities. At the time this was written, WC is made up of these assets and debts. WC management has a direct effect on how profitable and liquid a company is, which makes it an important part of corporate financial management.

Padachi (2006) says that WC management is important to the financial health of every type of business. Based on Smith's two critical arguments, this importance is seen as important (1980). Because the amount spent on WC is often higher than the percentage of total assets that are used, this investment must be used well and efficiently to prove its worth. WCM has a direct effect on the financial health of a business, as well as on its ability to make money and build a net worth. In other words, Van-Horne and Wachowicz (2004) say that having too many current assets can hurt a company's ability to make money, while not having enough current assets can put the company at risk. As Van-Horne and Wachowicz (2004) explain, a business's current assets can be a liability if it has too many or too few. If it has too few, it risks being unable to pay its bills and running out of stock, which makes it hard to keep operations running smoothly.

Finance has traditionally been defined as the management of money and the use of money to reach certain goals. The only goal of good working capital management is to increase profits while reducing financial risks. Before focusing on short-term working capital management or working capital management related to day-to-day operations, company's goals and financial activities (Brigham and Ehrhardt, 2010; Chandra, 2008; Keown, Martin, Petty, and Scott, 2002; Sharma, 2009). Managing working capital is also about making money and getting the most out of the money you invest. A lot of writing about money is about how businesses and other groups make decisions that affect their finances in the long run. According to reports, Chandra (2007) used Zietlow, Hankin, and Seidner (2007) and Zietlow, Hankin, and Seidner (2007). (2007). The problems and opportunities a business faces affect how it handles its working capital. The company's trade credit policy, bank financing, personal contributions, financing for operations, and leasing

financing all give the owner and main manager money. Even though small businesses have fewer ways to get money, they have the same financial problems as big businesses (Arnold, 2008; Gitman, 2009; Sagner, 2010; Sharma, 2009). Keeping track of a company's working capital, which comprises both current assets and current liabilities, is one of the most onerous financial jobs it faces (NWCM). The majority of businesses fail because their owners do not know how to properly manage their own finances. As a result, the company's financial management staff must maintain a tight eye on the company's working capital. Working capital management is an important aspect of a company's overall strategy for increasing the value of its stock. The time between buying raw materials and getting money from selling the finished product is called the working capital period. The way a company handles its working capital also has a big effect on its ability to pay its bills and make money. Shin, his group (1998) Every business's main goal is to make as much money as it can. Also, keeping the company's cash flow going is very important. The problem is that a business can get into a lot of trouble if it tries to make more money by cutting back on cash flow. So, the business strategy must find a way to carefully balance these two goals. Both profits and cash flow are important, and you shouldn't give up one for the other. We won't be here for long if we don't pay attention to the bottom line. On the other hand, if we don't pay attention to liquidity issues, we could go out of business. Working capital management should get the attention it deserves because it directly affects a company's bottom line. Every business has to worry about its working capital, but small businesses have to worry more because their working capital is more likely to change. They found that small businesses were more likely than larger businesses to have a lot of current assets, not enough cash on hand, unpredictable cash flows, and too much reliance on short-term loans. Because it is tied to the concept of liquidity, working capital is a key aspect of a company's ability to grow and produce money. The difference between a company's current assets and current liabilities is known as working capital. This is the most basic and often used version (Larsson and Hammarlund, 2005).

#### **Firm Profitability**

Firm Profitability depicts the potential for a business to earn a profit from its operations. It demonstrates the efficacy with which a company converts its assets into revenue. Profitability, as defined by Horward and Upton (1953), is "the ability

of an investment to create a return on its utilization." Book value (used in the context of accounting) and market value (used in the context of investing) are two measures of financial success (marketing-base measurement). Return on Asset (ROA) (Rahman & Saima, 2018; Muhammad, Rehman & Waqas, 2016; Bui, 2016; Gul et al., 2013; Van Horne, 2008; Sharma & Kumar, 2011; Mohamad & Saad, 2010); Return on Invested Capital (ROIC) (Enqvist, Graham, & Nikkel, 1996), and Return on Equity (ROE) (Enq (Lazaridis & Tryfonidis, 2006). Market value, like the Tobin's Q ratio, reflects investors' conviction in a company's capacity to sustain its current level of profitability over the (Vural, Sokmen, & Cenenak, 2012; Mohamad & Saad, 2010). This article analyzes the effect of the WCM on the firm's profitability using ROA as the book value and Tobin's Q as the market value of the profitability of the firm. Both ROA and Tobin's Q demonstrate not only a company's past but also its potential future success. Here are descriptions of a wide range of previous research, completed by a wide range of authors and examining a wide range of topics: For the period between 1975 and 1994, Shin and Soenen (1998) analyzed the correlation between the WCM and the earnings of a sizable US-listed company sample. The NTC, which had replaced the CCC, was used to establish the WCM. The results of the study show that the NTC has a detrimental effect on a company's bottom line. Deloof (2003) used a sample of 1,009 nonfinancial firms in Belgium between 1992 and 1996 to investigate the connection between the WCM and profitability. The results demonstrated the destructive nature of the CCC, ARD, INVD, and APD on the Republican Party. Managers need to minimize both ARD and INVD to increase profits for shareholders. Lazaridis and Tryfonidis (2006) analyzed the 131 businesses that traded on the Athens Stock Exchange between 2001 and 2004. In fact, the numbers show that the CCC hurt the GOP. The findings of the study showed that by implementing a proper CCC and its components, managers can increase profits. From 2003 to 2007, researchers Mohamad and Saad (2010) looked at information from 172 randomly selected listed firms on Bursa Malaysia's main board. It was found that the WCM reduced the company's profitability as evaluated by both market value (Tobin's Q) and book value (ROA, ROIC). Sharma and Kumar (2011) examined the effect of the CCC and its components on return on equity (ROE) for a sample of 263 non-financial companies traded on the Bombay Stock Exchange (BSE) between 2000 and 2008. Statistically significant relationships between ARD, company size, and ROA were found in the study. Using secondary data collected

from 75 manufacturing firms listed on the Istanbul Stock Exchange Market between 2002 and 2009, Vural, Sokmen, and Cenenak (2012) investigated the effects of WCR and its components on a firm's profitability, specifically its book value (GOP) and market value (Tobin's Q). The findings suggested that lowering ARD and CCC would help businesses maximize their return on investment. Tobin's Q was untouched by anything besides the CCC. Gul et al. (2013) studied how the WCM affected the ROI of Pakistani SMEs from 2006 to 2012. The findings showed that the APD influenced the ROA in a beneficial way. The ARD had no influence on return on investment (ROI), in contrast to the INVD and CCC, which both had opposite effects. Contrarily, the research showed that control variables, especially firm size, have a favorable effect on ROA. The current ratio control variable, on the other hand, has a negative impact on ROA. The return on equity (ROE) of 208 nonfinancial companies across industries like construction, real estate, and transportation that are traded on the Vietnamese stock exchange was studied by Tu and Nguyen (2014). The findings demonstrated that effective WCM can boost a company's profitability by decreasing ARD and INVD. WCM's association with profits also varied by sector. Using data from the Vietnam Stock Exchange, Bui (2016) analyzed the effects of the working capital regulation on ROA for 35 real estate companies operating between 2010 and 2014. Research found that ARD and INVD, both of which are part of WCM, harmed ROA. Company size, leverage, and economic expansion also played a role on ROA. Muhammad, Rehman, and Waqas (2016) looked at the effect of the WCM on the ROA of businesses in Pakistan's tobacco industry from 2005 to 2014. According to the findings, the WCM had a major negative effect on the company's bottom line. Previous research has shown that the WCM has a serious detrimental effect on profits. By bringing WCM down to a manageable level, it appears that businesses can improve their bottom line. This research looks into how the CCC and its parts (such the ARD, INVD, and APD) affect a business's bottom line. Elements of sales growth (SG), company size (FS), debt ratio (LEV), firm age (AGE), and current ratio all play a role in regulating profits (CR).

#### Why working capital is important

You can't say enough about how important it is to run a company's day-to-day operations. The oversight and planning of business finances have, unfortunately, not taken it into account. Any company that wants to maximize shareholder value should try to make enough money from its activities to give investors a return on their money. To keep a steady profit margin, you also need a strong sales team. This can only be done if the company has enough working capital assets set aside. Aborode says that a business needs working capital because sales do not immediately turn into cash at the end of the business cycle (2005). So, you can divide working capital into cash or bank overdraft stock, debtors, and creditors. Each of these things has a big effect on working capital. In the early stages of a company's life, the founder or owner may put money into the business to pay for things like rent, rent increases, and the purchase of the first goods. The money made from selling the goods is then used to buy more goods, pay more workers, or leave a surplus for other things. By quickly turning over stock to be paid, the working capital operating cycle can be cut down. In reality, there are other things to think about, like how quickly stock needs to be sold or made. There are many reasons to keep money in the bank when stock is not being used. But because people often give out loans, stock sales are often linked to people who don't pay back their loans. isotopes (2005).

#### Management of working capital

No matter how big or small an organization is, it needs to be good with its working capital if it wants to stay in business. Working capital is a big part of how well assets are being used, so it's important to use it well and efficiently. Small businesses are notoriously bad at managing their working capital, and since many of them already don't have enough money, they need to get better at this. (Blumenthal, 1994; Blumenthal and Kargar, 1994) Working capital management (WCM) is a term that includes both inventory and work-in-progress. It involves operations, manufacturing, and finance. Howorth and Westhead (2003) say that small businesses focus on different parts of managing their working capital to get the most out of their marginal returns. Pike and Richard say that poor planning and control of working capital is one of the main reasons why organizations fail (1987). During times of financial trouble or disaster, people often realize how important good WCM is (Lo Lay 1991). As we've already said, the main goal of working capital management is to keep the balance between current assets and current liabilities. They are in charge of maximizing the value to shareholders or other stakeholders (Maness and Zietlow, 2005). As a financial manager, you can't stress enough how important working capital management is. Its main goal is to keep a steady balance between how assets and cash flow change over time. This brings us to the two main goals of working capital management: to keep the business running and to make money (Pass and Pike, 1984). A lot of research has been done to try to figure out if these two goals of managing working capital are incompatible or not. "Liquidity" refers to a company's ability to pay its bills, while "profitability" means the company's ability to increase the value of its shares. Long-term investment opportunities could hurt short-term liquidity, putting these two goals at odds with each other.

#### Problems with working capital management

Working capital management possesses a variety of characteristics that make it a critical responsibility of the financial manager.

i. Time: Managing working capital requires a large amount of time on the part of the financial manager.

ii. Investment: working capital represents a sizable portion of total asset investment.

iii. Importance: While managing working cash is critical for all firms, it is particularly critical for small enterprises.

iv. Because the demand for working capital is inextricably linked to a business's growth, every effort must be made to manage it effectively and efficiently. Financial managers must consider the influence of risk performance and pay close attention to the liquidity position.

#### **Trade-off Theory**

This theory says that there is a trade-off between being liquid and making money. As one rises, the other falls. At one end of the spectrum, things are very liquid but not very profitable, and at the other end, things are very profitable but not very liquid. The biggest problem is figuring out where the business fits in with everything else (Bhattacharya, 2001). Proponents of the trade-off method put most of their attention on dynamic structural trade-off models. They are interesting because they try to build a framework that can explain a lot of different facts at the same time. (Leary and Roberts, 2004) give two examples of this (Ju et al., 2004). When workforce compensation (WC) is handled well, it makes the market more liquid and increases the value for shareholders (Jeng-Ren, et al., 2006). As profits go up, so do risks, and the opposite is also true. When investing in WC, you have to choose

between these two things. Waste management that works well also helps firms grow and make money for their shareholders (Ganesan, 2007). WCM is important in finance, which is not a new idea. Largay and Stichney say that since the company started, W.T. Grant has gone bankrupt eight times in a row because of shortfalls in operating cash flow (1980). A company must always have a good WCM strategy in place if it wants to stay in business. Businesses that don't give WCM a lot of attention are doomed to fail (Dong and Su, 2010). Capital budgeting includes both fixed asset management and working capital management. However, working capital management is more of a continuous function that deals with the management and flow of financial resources as they move around the company. The best case scenario for the vast majority of businesses is being able to pay for both expected and unexpected costs in the future (Maness &Zietlow, 2005). Michna says that small businesses are especially at risk during economic downturns like the "credit crunch" (2007). The cost of borrowing has gone up, which has made it harder for ownermanagers to provide enough collateral. Some people also think that banks are even less willing to take risks than they used to be. Afza and Nazir (2007) say that WC management is important for a company's long-term success and that not having it can be disastrous (Christopher and Kamalavalli, 2009). it was clear that a business's survival depended on how well it managed its inventory, accounts receivable/payable, and accounts payable. By putting less money into current assets, businesses were able to lower their interest rates on loans and have more money available for growth. Filbeck and Krueger took into account how WCM's performance affected the stock price. According to them, there have been big differences in WC indicators between industries over time. Also, different industries and businesses have very different WC indicators. The above studies show that the effectiveness and efficiency with which WC is used in a company's operations affects both the company's ability to stay in business and its ability to make money.

#### **Effect of inflows and outflows**

Businesses must have a sufficient amount of cash on hand to cover day-to-day expenses. Additionally, cash must be kept on hand as a cushion against unexpected expenses to minimize liquidity difficulties. Additionally, it is important to retain cash on hand in order to capitalize on market opportunities. Inability to pay debts as they mature is one of the costs of running out of finances, which can have significant operational consequences, including the firm being wound up if it consistently fails to pay invoices as they mature As long as the company has too much cash on hand, it is sitting on an uninvested asset that could be used more effectively elsewhere. Too much use of the WC hurts profits because it wastes money (Chakraborty, 2008). Cash is the most basic sort of non-generating asset (Pandey, 2005). This is due to the fact that cash does not yield interest. The corporation, on the other hand, needs to retain adequate cash on hand to avoid missing out on interest income due to an excess of cash. It does not appear likely that the corporation will be unable to pay its short-term debts when they become due. To earn interest, a business needs to turn any unused funds into something that can bring in money. For example, you could buy short-term securities that can be sold quickly or lend out money that is already in your bank account. Sweeping is a common way for a company to make money from its cash reserves. It is common for companies to move their money into short-term money market deposit accounts that pay daily interest (usually a swap rate). Shortterm investments can be made in things like commercial papers, bonds, mutual funds, corporate notes, and mortgage-backed securities (Brealey; Myers; & Allen, 2006).

#### The Effects of Accounts Payable

Accounts payable is a financial phrase that refers to the debt or amount owed to creditors by a business. They are unpaid debts to creditors and suppliers. A company's obligations will always contain accounts payable, as they are monies borrowed to keep the organization functioning efficiently. To maintain the company's reputation and earn the trust of its creditors, the firm's managers must establish systems for rapidly clearing balance payments via accounts payable. Without it, the company's future ability to obtain finance may be jeopardized. In order to successfully complete the accounts payable clearance process, careful preparation and execution are required (Pedro Juan & Pedro Martinez, 2007). Unsecured short-term funding can be obtained through accounts receivable (Gitman, 2009). A company's cash flow and relationships with suppliers are directly impacted by the accounts payable process. Best practices companies conduct their accounts payable in a way that improves cash flow while also fostering mutually beneficial relationships with their vendors. Paying bills on time reduces the risk of accruing interest and late fees, as well as missing out on early payment incentives and other

cash flow-enhancing benefits (Ramachandran, &Muralidharan, 2009). In order to calculate a creditor's turnover ratio, you divide the average number of trade creditors by the number of working days in a given month.

#### The Effects of Accounts Receivable

Accounts receivable (A/R) are the debts that clients owe for goods and services they bought on credit but haven't paid yet. Receivables can change how much operating capital a business has. At either end of the spectrum, the company might not offer competitive payment terms or be careless about collecting debts, which could put it in danger of not being able to meet its obligations if it is too high. Maas and Dava (2008) say that the best way to deal with debtors is to have good credit standards. Businesses could sometimes use the money they are owed as collateral to borrow money. Accounts receivable can also affect a company's working capital, the number of days it takes to pay its bills, and its current ratio. Remember that uncollectible receivables do not count as assets. Instead, they are reclassified as a drop in receivables. Because of this, businesses usually let customers with good credit pay days, weeks, or months after they get the services or goods they bought. Sometimes, companies sell their receivables to groups whose only goal is to get the money they owe back (Vishnani& Shah, 2007). Because of the cash discount policy, customers are more likely to pay up front, which shortens the average time it takes for the company to get paid. So, when making credit policies, businesses should think about the credit term, credit criteria, and the trade-offs between cash-discount and credit policies, and try to reduce the risk of accounts receivable (Bhattacharya, 2001). Businesses should be run based on collection accounts, recovering money owed to them, and internal business divisions that are responsible for evaluating performance. If a customer can't pay back the loan on time, they may be asked to set up acceptances to balance out their receivables. Before the transfer, for example, the number of loans from financial institutions, the arrears are paid off. For businesses, bad debt losses are not a problem. Divide net credit sales by the average number of trade creditors to get the debtor turnover ratio.

#### **Inventory Control**

For the purposes of this conversation, inventories are the finished products and parts that a business makes to sell (Pandey, 2005a). Raw materials, work in progress

(WIP), and finished goods are the three primary categories of inventory for an organization. Raw resources and work-in-progress stockpiles are useful for manufacturing things, but finished goods stockpiles are required for selling them (Hadley, 2006). When it comes to managing inventory, Pandey (2005b) says that a company has to balance two different needs. As a first step, it explained how to keep huge stocks of raw materials and finished goods for ongoing sales operations to keep up with demand. Second, it looked for ways to make more money while spending as little as possible on inventory.

The goal of managing inventory should be to set and keep a level of investment in inventory. So, inventory is a big part of how decisions are made about production, marketing, and buying. Because a company's level of activity depends on its inventory, good inventory management leads to profits (Filbeck, Krueger & Preece, 2007).

#### **Inventory Effects**

Stock is another essential current asset. Raw materials, work in progress, and finished goods may all be included in a company's inventory, depending on the type of business. When there is a careful balance between sales and money that is locked up, inventory optimization works best. This can take a long time. A business needs to have enough stock on hand so it doesn't miss out on sales or can't meet customer needs. Having too much inventory is bad because it costs money that could be used in other ways. The number of available items has been going down for a long time (Brealey; Myers; & Allan; 2006). Just-in-time (JIT) purchasing can be used instead of traditional inventory management, which requires storing goods in a warehouse. Inventory management is the process of making sure that you only buy raw materials when you need them. Firms that use this strategy don't keep raw materials in stock. The main goals of the system are to cut down on inventory storage costs and waste caused by things like obsolescence, theft, and pilferage. Because of this change, there will no longer be any costs for inventory insurance or a shop manager.

# Hypothesis Development and Research Model

# **Research Design**



Figure 2.1 Proposed Research Models

Accounts Profitability of a Business and the Number of Days It Takes to Collect Accounts Receivable As the number of days an organization takes to collect payment from its customers decreases, the amount of working capital required to run the business decreases as well. Firms can be more proactive in their bill paying and in their search for attractive investment prospects. Nearly all previous empirical research—Deloof (2003), Lazaridis and Tryfonidis (2006), Sharma and Kumar (2011), Vural, Sokmen, and Cenenak (2012), Gul et al. (2013), Tu and Nguyen (2014), Bui (2016), and Muhammad, Rehman, and Waqid (2017)—showed that ARD had a negative influence on profitability (2017). (2016). To that end, the following theory is put forth:

H1: The number of days it takes to collect payment from customers affects a company's bottom line negatively.

Profitability of a Company as Measured by Inventory Turnover Time (INVD) Industrial companies typically have huge stockpiles. As a result, businesses' bottom lines will take a hit due to storage costs and a halt in working capital when they have to hold onto a lot of stuff. According to research by Deloof (2003), Lazaridis and Tryfonidis (2006), Gul et al. (2013), Tu and Nguyen (2014), Bui (2016), and Muhammad, Rehman, and Waqas (2016), the number of days it takes to sell an entire stock of goods is referred to as "inventory turnover" (2016). That's why I'm going to propose the following hypothesis:

Hypothesis 2: A decrease in the inventory turnover in days (INVD) will have a negative effect on a company's bottom line.

Profitability of a Business and the Number of Days It Takes to Pay Its Bills The lower an organization's APD, the more secure it is, the less it needs to borrow money from other enterprises to run, and the more respectable it is seen as a whole. As a result, it provides a glimpse into the potential future earnings of companies. According to Deloof (2003), Lazaridis and Tryfonidis (2006), Tu and Nguyen (2014), Bui (2016), and Muhammad, Rehman, and Waqas (2003), Lazaridis and Tryfonidis (2006), Tu and Nguyen (2014), and Bui (2016), APD has a negative effect on profits (2016). (2016). Though some research have found a positive correlation between APD and profits (Sharma and Kumar 2011, Gul et al. 2013), others have found no such correlation (Vural, Sokmen, and Cenenak 2015). (2007). (2009). (2012). That's why I'm going to propose the following hypothesis: Accounts payable days (APD) have a detrimental effect on a company's profitability, according to Hypothesis 3.

Business Profitability and the Cash Conversion Cycle The CCC is calculated with the aid of the ARD, INVD, and APD. Consequently, the CCC will be affected by any variable that is altered. Almost all previous empirical studies, such as Deloof (2003), Lazaridis and Tryfonidis (2006), Mohamad and Saad (2010), Sharma and Kumar (2011), Vural, Sokmen, and Cenenak (2012), Gul et al. (2013), Tu and Nguyen (2014), Bui (2016), Muhammad, Rehman, and Waqid (2017), and others, concluded that the CCC had a negative impact on profitability (2016). That's why I'm going to propose the following hypothesis:

Cash conversion cycle (CCC) negatively affects firm profitability, hypothesis 4

#### **Measurement of Working Capital Management**

There are two ways to figure out WCM: being aggressive or being careful. In their 2005 study of 32 non-financial businesses in the U.S., Filbeck and Krueger emphasized how important it is to manage working capital well (WCM). From what they found, it's clear that WC practices vary a lot between industries and over time. These WC behaviors also vary a lot from one industry to the next. Rahman and Mohamed (2007) looked at how different WCM factors, such as average collection time, inventory turnover in days, average payment period, CCC, and the current ratio, affected the net operational profitability of Pakistani firms. When the CCC goes up, profits go down. Managers can make more money for shareholders by lowering the CCC as low as they can. Using panel data econometrics, Falope and Ajilore (2009) combined and estimated time-series and cross-sectional data in a pooled model. They discovered a substantial negative association between net operational profitability and the average collection duration, inventory turnover in days, average payment period, and CCC for a sample of fifty Nigerian firms listed on the Nigerian Stock Exchange. It takes longer for a corporation to pay off its obligations when it produces more money (the average payment period). There are several scientific conflicts regarding the risk-reward trade-off for various WC regimens (Brigham and Ehrhardt, 2004; Gitman, 2005 and Moyer et al., 2005). Effective liquidity management, according to Eljelly (2004), entails managing and regulating current assets and liabilities in a way that removes the risk of failing to satisfy short-term commitments and prevents excessive investment in these assets.
The link between profitability and liquidity in terms of the current ratio and the cash gap was investigated using correlation and regression analysis on a set of Saudi Arabian joint stock enterprises (CCC). A study found that liquidity is a better indicator of how profitable a business will be than the current ratio. Industry research shows that smaller businesses make more money than their larger counterparts. Garcia-Teruel and Martinez-Solano (2007) say that a company's profits go up when the CCC goes down. The results of this study may be different from those of other similar ones because there was a strong link between half of the sectors that were looked at. It was shown that small businesses change their levels of assets and liabilities and the amount of working capital they need in response to changes in the economy. The index of year-average coincident indicators was used to measure economic activity, while the current ratio, the current assets to total assets ratio, and the inventory to total assets ratio were used to measure the WC requirement. Contrary to what was expected, the study found that changes in the economy and changes in WC have a very small link. When Singh and Pandey (2008) looked at how profitable Hindalco Industries Limited was from 1990 to 2007, they found that WCM had a big effect on the company's profits. According to the report, the current ratio, the liquid ratio, the receivables turnover ratio, and the working capital to total assets ratio all had an effect on Hindalco Industries Limited's ability to make money. In his study of important Belgian companies from 1992 to 1996, Deloof (2003) found that Belgian companies can make more money by reducing the number of days their accounts receivable aren't paid and by having less inventory. Teruel and Solano (2005) say that managers can add value by shortening the time it takes for accounts receivable and inventories to be paid. When the CCC goes down, it also makes businesses more profitable.

From 1999 to 2004, Rehman (2006) looked at how the use of WCM affected the profits of 94 Pakistani companies listed on the Islamabad Stock Exchange (ISE). The effects of WCM parameters like average collection time, inventory turnover in days, average payment time, and CCC on net operational profitability were studied. Based on the WC ratios and firm profits mentioned above, he came to the conclusion that there was a strong link in the opposite direction. Managers can also boost shareholder value by lowering the CCC. Howorth and Westhead (2003), Eljelly (2004), Ghosh and Maji (2004), and Lazaridis and Tryfonidis (2004) all looked at the link between WC and profitability (2004). (2006). Afza and Nazir (2007) used cross-sectional data from 263 companies listed on the Karachi Stock Exchange from 1998 to 2003 to look at the relationship between aggressive and conservative safety measures in the workplace (KSE). Using ANOVA and the Least Significant Difference (LSD) test, the study found that the policies of different businesses for investing in and financing WC were very different. An analysis of rank order correlation over a six-year period showed that these statistically significant differences have stayed very stable. A simple least squares regression study shows that there is a link between how profitable a business is and how aggressively it invests and finances itself. In order to reach the main goal of the study, the researcher will do a careful and thorough analysis of financial papers. There are good reasons to look at both options, since most companies use both to pay for assets they already have.

#### **Summary**

The majority of trading organizations invest significant sums of money in working capital. As a result, it is reasonable to predict that the way those organizations manage their working capital will have a significant impact on their financial success.

#### **Corresponding Research**

By looking at Nigerian companies that are traded on the stock market, Akindele and Odusina looked into the link between WCM and company profits (2015). The research was based on the audited financial statements of 25 Nigerian companies from 2005 to 2011. A method called "multiple regression analysis" was used to look at the data. When WCM is used, it hurts the bottom line of an organization.

Olayinka (2012) looked at a number of publicly traded companies in Nigeria to see if WCM had any effect on how much money they made. The goal of the study was to find out how WCM affects how much money a company makes. Between 1997 and 2007, researchers looked at information from 68 non-financial firms in Nigeria. Increasing the number of days on account receivable hurts a company's profitability, while lowering the CCC helps.

Oladele and Tasie (2011) did a large study to learn more about how WCM affects manufacturing businesses in Nigeria. The goal of this paper was to show how WCM and the profit of manufacturing firms are related. The data for the study came from the audited annual reports of six Nigerian industrial companies that are publicly traded. Analysis of correlations shows that WCM has a negative relationship with how well a business does financially.

Dauda, Martins, and Luka looked at Nigerian food product companies to find out how profitable they were and what their WCM was (2016). The purpose of this study was to look at how WCM affected the profits of NSE-listed companies from 2002 to 2011. Panel data regression techniques were used to look at the annual reports of companies. The companies' CCC and ROA were found to be linked in a good way.

Lara and Martha (2018) looked at the return on assets (ROA) of manufacturing firms to see how WCM affected ROA (ROA). Twenty-two (22) manufacturing businesses in Lagos and Ogun gave financial information for the study. Many regressions show that WCM has a big effect on the ROA of a company.

Nkechi, John, and Natali (2016) looked at WCM and how it affects the growth and profitability of the manufacturing industry. This study looked at the relationship between WCM and the profitability of manufacturing businesses to see if there was one. The study's conclusions were based on information from the books of seven companies that make drinks in Lokoja, the capital of Nigeria. Research shows that WCM has a big effect on how much money a business makes.

Ojoade and Tolu looked at the role of WCM in managing liquid assets and making businesses profitable (2015). The study looked at the financial records of ten companies that made things in Lagos. Using panel analysis, Ordinary Least Square (OLS), and Fixed Effect Estimation, the results of the study show that WCM can have a positive effect on ROA (FEE).

According to Dapo and Teju, WCM has a substantial impact on the success and profitability of manufacturing enterprises (2017). Between 2005 and 2014, research was undertaken on twenty (20) Nigerian Stock Exchange-listed manufacturing enterprises (NSE). Multiple regression analyses demonstrate that WCM has a considerable impact on a company's profitability. Angahar and Alematu conducted an eight-year study on the impact of working capital management on profitability in the Nigerian cement business. They analyzed the days accounts receivable are outstanding (DAR), the days inventory is held (DINV), and the cash conversion cycle (CCC) (2002 - 2009). Four of the five Nigerian Stock Exchange cement businesses had their data examined utilizing descriptive statistics and multiple regression analysis (NSE). This study found a very small link between the number of days a company has been listed on the NSE and how profitable it is (as measured by ROA). According to the study, there is no link between the number of day's outstanding receivables and ROA (profitability) for cement companies that are listed on the NSE (DAR). Even stronger was the link between how many days cement companies were able to keep their stock under control and how much money they made.

Profitability was found to be linked to the cash conversion cycle in a positive way (CCC). During the study period, NSE-listed cement companies made money because DINV and CCC sped up the time it took to turn cash into cash.

Akinsulire (2005) says that WC items are those that are needed for a company to make goods that are sold every day (such as stock, creditors, and cash). Ramachandran and Janakiraman define WC as the amount of cash a business needs to run well (2007). "WC" stands for investments in assets and debts that are due right away. Falope and Ajilore use the term "WC" for short-term investments in assets (2009). These assets are very important to a company's survival because they are used in the production and sales processes. WCM is in charge of these assets.

Ashaka cement Plc was utilized as a case study to examine how WCM influences a company's profitability. This study was conducted to determine how much value WCM may bring to industrial organizations. The study examined information regarding money from 2015 to 2019. Inventory Conversion Period (ICP), Debtors' Collection Period (DCP), Creditors' Payment Period (CPP), and Cash Conversion Cycle (CCC) were utilized to determine WCM (CCC). Return on Assets (ROA) was used to determine a company's profitability (ROA). ICP and CCC have a beneficial impact on ROA, whereas DCP and CPP have the reverse impact.A multicollinearity test shows that all of the explanatory variables have a high/severe and impaired correlation. This means that the variables (endogenous factors) don't matter and can't be used to predict future ROA projections.

The research suggested that the government could help the manufacturing sector make more money by making it easier for businesses to do well. This could be done by giving manufacturing companies like ICP and CCC more security and better infrastructure.

# CHAPTER THREE Methodology

### **Research Design**

Henn, Weinstein, and Foard (2006) define research design as "the plan or strategy for creating the research," which may encompass the entire research process, from envisioning a topic through developing research questions, and on to data collecting, analysis, and interpretation (2007). We devised a strategy for this research that takes into account the well-designed structure of research instruments and provides a consistent and logical framework for data gathering, presentation, and analysis. This study's questionnaire and other research instruments are designed to collect, present, and analyze pertinent data in order to answer the research questions, meet the research objectives, and solve the research problem. To ensure the effectiveness of the research, standardized questionnaires and observation of senior and junior officials from Elephant Cement and Dangote Cement would be used as main data sources. Additionally, data from relevant publications of the two institutions indicated above will be used as secondary sources of data.

### **Participants/Population and Sample**

Maxfield and Babbie (1995) define a target population as the collection of items from which the sample is drawn. The target population for this study is the combined population of Elephant and Dangote Cement management, as well as all variables with observable features in common. A sample size of ninety (90) is carried on the total of the population of the both institution where fifty-one (51) from elephant Cement and thirty-nine (39) from Dangote Cement. Out of this, a sample size of twenty-five (25) and nineteen (19) are taken from junior management staff of Elephant and Dangote cement respectively, seventeen (17) and thirteen (13) from middle management staff of Elephant and Dangote cement respectively, six (6) and five (5) from senior management staff of Elephant and Dangote cement respectively, and three (3) and two (2) from other stakeholders of Elephant and Dangote respectively.

A simple-random sampling method was employed in the study.

## **Data CollectionTools/Materials**

During the process of collecting data, personal interviews, self–administered questionnaire and documentation will be used for the research studies.

**Questionnaire**: The study will make considerable use of questionnaires. The researcher will break it into sections and will collect data from various departments within both institutions and from other stakeholders. This questionnaire, on the other hand, included both structured and open-ended questions. Additionally, it comprised brief, specific, and straightforward questions that necessitated a prompt answer from responders. The questionnaire questions were adapted from the research study dpne by Chukwumerije, T., & Akinyomi, O. (2011). The impact of tax incentives on the performance of small-scale enterprises. *Published Thesis, Redeemer's University, Ogun State, Nigeria.* The respondents will be informed of the aim of the questionnaires, which will be sent to Dangote and Elephant employees. The only difference is that the responses should not be Likert scales; rather, they should be style rating scales in which respondents are requested to select the correct choice from A to D for each statement based on a quick response and 'yes' or 'no' responses.

Series of pre-prepared questions, which will be logically structured and well-thought out, will be considered in ensuring an effective use of this instrument and meeting the research objectives. Employees of relevant departments and other stakeholders will be selected. The surveys will be distributed to the majority of the personnel contacted, despite the fact that they may not be able to complete them on their own due to their hectic schedules. The researcher will make an effort to build rapport with participants and encourage them to provide us with facts and cleared-up ambiguities. It took 3 months to finish the distribution and retrieval process. A sample size of 90 was determined from the 105 completed questionnaires that were recovered after being dispersed with 120 total.

#### **Data Analysis Procedures**

#### **Study Plan**

In general, a research population is a large collection of individuals or items that are the subject of a detailed inquiry. The purpose of research is to help the broader public. However, due to the huge size of the populations, researchers frequently are unable to examine every member of the population due to the time required. The research will be thus carried out in a broad category of institutions – Elephant and Dangote cement. The reason for this decision is because in Nigeria, Dangote Cement and Elephant Cement are the most widely used cement across various regions of the country.

The population of interest for this study therefore consists of headquarter staff of the Elephant and Dangote cement, targeting junior, middle and senior level employees of both institutions, as well as other stakeholders of around three hundred (300) as depicted on table 3.0

Categories	Elephant	Dangote	Total
	Staff	Staff	
Junior Management Staff	110	65	175
Middle Management Staff	50	30	80
Senior Management	20	15	35
Other stakeholders	10	5	15

#### Table 3.0: Study Population

Total

190

300

110

#### Sample

A sample of the population is the percentage of the population that is studied, Nworgu (1991). Due to the limited resources available, covering the full population of both institutions will be challenging, if not impossible. A stratified sampling strategy was used to pick a sample of staff and other stakeholders from the defined population. The number of employees is divided into junior, middle, and senior management, as well as other stakeholders, with each item of the population having an equal chance of being chosen. A sample size of ninety (90) people will be chosen from the indicated demographic for this investigation.

Categories	Elepant Staff	Dangote Staff	Total	
Junior Management	25	19	44	
Middle Management Senior Management	17 6	13 5	<u>30</u> 11	
Other Stakeholders	3	2	5	
Total	51	39	90	

#### Table 3.1: Study Sample

#### **DATA ANALYSIS**

Analyzing, classifying, and summarizing the data, as well as telling a story about it, will be part of the presentation. Most of the time, qualitative data will be presented and analyzed. But simple statistical, mathematical, and accounting tools like percentages in tables, charts, and graphs are used for further analysis and interpretation.

#### ETHICAL CONSIDERATION

For research to be trusted and accepted by the general public, it must be true, accurate, and objective. If it isn't, it will be thrown out, and its results won't change how the public thinks. Because of how sensitive this research was, the dependability and reliability of the quality level have gone up.

In the study, there are four ethical principles: protecting people from harm, getting informed consent, having the right to privacy, and being honest with colleagues. There won't be any dishonesty in how business training and paperwork are used. Participants' individual answers will not be used in the study's conclusions, and neither will their names be made public. Everyone who takes part in the study will be kept safe by keeping their identities secret. "Babie" is a word used to talk about a baby or young child (2005).

#### SUMMARY

This chapter investigates the influence of working capital management on an organization's performance. The size of the sample and how it is chosen, the data sources, the methods used to gather data, and how the data is processed are all part of the study design. A questionnaire will be utilized as the primary method of gathering qualitative data for this study.

#### **CHAPTER 4**

#### FINDINGS AND DISCUSSION

## Introduction

This chapter primarily discusses data interpretation. The following categories will be used to analyze the data and essential information gathered for this research:

### 4.2 The Company's Fundamental Characteristics

This part focuses on the information provided in Section A of the questionnaires regarding the Company's core features.

## **Frequency Table**

Table 1.

Total Number of Respondents

Stat	tist	tics						
								Wha
			Wh					tformalorga
			en did	What is				nizationstru
			yourcomp	the length of	Und	Wha	How	cturedoes
			anycomme	time your	erwhatclassi	tisyourorga	manyworke	your
		Ti	nceitsoper	company has	ficationisyo	nizationalfo	rsarecurrent	company
	1	nestamp	ation	existed	urcompany	rm	lyemployed	have
alid	V	90	90	90	90	90	90	90
۱ issing	М	0	0	0	0	0	0	0

From the table above the total number of respondents are 90 persons

## Table 2.

When the Company Started itsOperations

Whendidyourcompanycommenceitsoperations

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-10 Years ago	3	3.3	3.3	3.3
	41-50 Years ago	5	5.6	5.6	8.9

Over 50 Years	82	91.1	91.1	100.0
Total	90	100.0	100.0	

Table 2 above indicates that out of the 90 respondents, those who attest to the fact that the company commences its operations over 50 years ago are 82 (representing 91.1%), while those who said 41-50 years ago are 5 persons (representing 5.6%), and the others who said 1-10 years ago are just 3 (representing 3.3%). The analysis presented above shows that majority of the sampled respondents are of the opinion that the company started its operations over 50 years ago, as it has the highest frequency score.

What is the effect of working capital management components towards thefirm's profitability in organizations and manufacturing sectors?

How does number of days Accounts Receivable (ARD) affects the working capital of manufacturing firms in Nigeria?

How does number of days Inventories (INV) affect the profitability of the cement industry in Nigeria?

How does number of days Accounts Payable (AP) affects the Working capital of the manufacturing firms in Nigeria?

How can working capital be used in assessing the performance of the cement industry in Nigeria?

working capital management on organizational performance of cement manufacturing firms in Nigeria.

٦	Whatisthelengthoftimeyourcompanyhas existed									
					Cumulative					
		Frequency	Percent	Valid Percent	Percent					
Valid	1-5 Years	1	1.1	1.1	1.1					

Table 3. Length of Time Your Company has existed

11-15 Years	2	2.2	2.2	3.3
16-20 Years	1	1.1	1.1	4.4
21-25 Years	21	23.3	23.3	27.8
6-10 Years	2	2.2	2.2	30.0
Over 25 Years	63	70.0	70.0	100.0
Total	90	100.0	100.0	

Table 4. Classification of the Company

		Frequenc	y Perc	cent	Valid Percent	Cumulative Percent
Valid	Building, Mining and Construction	88	8	97.	97. 8	97.8
	Foodsand Beverages Sector	1		1.1	1.1	98.9
	Pharmaceutical and Metal Equipment	1		1.1	1.1	100.0
	Total	90	100	.0	100.0	

Source: Author's computation

Table 4 above indicates that out of the 90 respondents, those who classify the company under building, mining and construction are 88 (representing 97.8%), while only one person said it is a good and beverage company (representing 1.1%), and also one person said it is into pharmaceutical and metal equipment (representing 1.1%). The analysis presented above shows that majority of the sampled respondents are of the opinion that the company is a building, mining and construction company, as it has the highest frequency score

Table 5.

Organizational Form

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid		2	2.2	2.2	2.2
	Co-operative S	10	11.1	11.1	13.3
	Listed Company	23	25.6	25.6	38.9
	Other limited	31	34.4	34.4	73.3
	Partnership	16	17.8	17.8	91.1
	Sole Proprieto	8	8.9	8.9	100.0
	Total	90	100.	100.0	
		)0	0	100.0	

Table 5 above shows that out of the 90 respondent above 10 said it is a cooperative society (representing 11.1%), 23(representing 25.6%) said it is a listed company 31(representing 34.4%) said it is other form of limited company, while 16 (representing 17.8%) said it is a partnership business, 8 respondent (representing 8.9%) said it's a sole proprietor business. Thus, a larger percentage 34.4% said it's a limited company.

					_			Cumulative
					Frequency	Percent	Valid Percent	Percent
Valid					1	1.1	1.1	1.1
	Between workers	101	and	250	4	4.4	4.4	5.6
	Between workers	11	and	50	2	2.2	2.2	7.8

Table 6.Number of Workers Currently Employed

Between 251 and 50 workers	00 17	18. 9	18.9	26.7
Over 500 workers	66	73.3	73.3	100.0
Total	90	100.0	100.0	

Table 6 above indicates that out of the 90 respondents one person did not respond to the question, 4 (representing 4.4) said the number of workers currently employed ranges between 101 and 250 workers, 2 (representing 2.2) between 11-50 workers, while 17 (representing 18.9) said number of workers employed ranges between 251 and 500 workers, while 66 (representing 73.3%) the company employs over 500 workers. The analysis presented above shows that majority of the sampled respondents are of the opinion that the company employs over 500 workers, as it has the highest frequency score.

Table 7. Formal Organizational Structure of the Company

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid		2	2.2	2.2	2.2
	Divisional	26	28.9	28.9	31.1
	Functional	23	25.6	25.6	56.7
	Matrix	23	25.6	25.6	82.2

 Simple for	16		17.8	17.8	100.0
Total	90	0	100.	100.0	

#### Source: Author's computation using SPSS V16

Table 7 above indicates that out of the 90 respondents, 2 did not turn up for the question, those who said the formal organizational structure of the company is divisional are 26 (representing 28.9%), 23 (representing 25.6) said it has a functional formal organizational structure, 23 (representing 25.6) said it has a matrix formal organizational structure while 16 (representing 17.8%) said it's a simple organizational structure. The analysis presented above shows that majority of the sampled respondents are of the opinion that the company has a functional and matrix Organizational Structure, as they both have the highest frequency score.

#### **Descriptive Statistics**

Table 8.

<b>Descriptive Statistics</b>			
	Mean	Std. Deviation	N
otal profitability	18.8889	6.97579	90
Total.INV	16.0444	5.43999	90

## Source: Author's computation using SPSS V16

From the table above the mean of the total profitability approximately 19 units with a standard deviation of approximately 7 units

<b>Descriptive Statistic</b>	es		
	Mean	Std. Deviation	Ν
total.profitability	18.8889	6.97579	90
Total.ARD.	18.9333	6.44214	90

 Table 9: Descriptive Statistics

Source: Author's computation using SPSS V16

The table reveals that the mean of the total number of days account receivables is

approximately 19 with a standard deviation of 6 approximately.

Table 10

<b>Descriptive Statistics</b>				
			Std.	
		Mean	Deviation	Ν
total. Profitability		18.888	( 07570	00
	9		6.97579	90
TOTALAccountPayable		53.677	16.00600	00
	8		16.88682	90

# Source: Author's computation using SPSS V16

The table above reveals that the mean of the total account payable is approximately 54 with a standard deviation of approximately 17.

Table	12
I UUIC	

	Mean	Std. Deviation	Ν
total.profitability	19.0241	6.78049	83
1.Currentassets	3.3614	1.31203	83
2.Inventories	3.4096	1.26911	83
3.Cashandmarketablesecur	3.3494	1.20399	83
ities			
4.Liquidityratios	3.0120	1.16341	83

5.cashbudget	3.0964	1.16467	83
6.Cashflowprediction	3.2169	1.20008	83
7.optimumcashbalancepoli cy	3.1566	1.25409	83
8.optimum andminimumlevelsofliqui dity	3.1566	1.30180	83

The mean and standard deviation of the important variables are shown in the table above. Total profitability has a mean of about 19 units and a standard deviation of about 7 units. Mean and standard deviation of Current assets are 3 and 1.3 respectively. Inventories 3.4 and 1.3 respectively, cash and marketable securities 3.3 and 1.2 respectively, liquidity ratios 3 and 1.2 respectively, cash budget 3.1 and 1.2 respectively, cash flow prediction 3.2 and 1.2 respectively, optimum cash balance 3.2 and 1.3 respectively, optimum and minimum levels of liquidity 3.2 and 1.3 respectively.

Table13

<b>Descriptive Statistics</b>			
	Mean	Std. Deviation	Ν
Totalprofitability	18.8889	6.97579	90
TotalARD.	18.9333	6.44214	90
TotalINV	16.0444	5.43999	90
TOTALAccountPayable	53.6778	16.88682	90

## **Results & interpretation for the Hypothesis**

H1:The accounts receivable turnover in days (ARD) has the negative impact on the firm "s profitability

**ANOVA**<sup>b</sup>

	Sum of		Mean		Sig
Model	Squares	df	Square	F	

1 Regre ssion	34.568	1	34.568	35. 566	.00 0 <sup>a</sup>
Resid	85.532	88	.972		
Total	120.100	89			

a. Predictors: (Constant), 1. The firm extend s credit facilities to its customers

b. Dependent Variable: 3. The length of time allowed to your customers has an influence on sales

The F-statistics depicts an overall significance of this model since it's >2.

Firm Profitability is proxied by the Dependent Variable: "The length of time allowed to your

customers has an influence on sale"

Accounts receivable turnover in days (ARD) is provided by " The firm extend

a

credit facilities to its customers"

**Model Summary** 

				Std.	Error	of	the
Model	R	R Square	Adjusted R Square	Estim	ate		
1	.536 <sup>a</sup>	.288	.280		.986		

a. Predictors: (Constant), 1. The firm extend s credit facilities to its customers

R square is poor since it's <0.5, thus ARD does not sufficiently captures the variations

in the firm's profitability

## **Coefficients**<sup>a</sup>

	Unstandardized	Standardized		Si
Model	Coefficients	Coefficients	t	g.

		Std.			
	В	Error	Beta		
1 (Constant)	1.756	.269		6.537	.000
1. The firm extend s credit facilities to its customers		.074	.536	5.964	.000

a. Dependent Variable: 3. The length of time allowed to your customers has an influence on sales

From the regression analysis above, each hypothesis is captured by the regression models below:

Thus Hypothesis 1: The accounts receivable turnover in days (ARD) has the negative impact

on the firm"s profitability

PROF	=	1.756	+
0.443ARD		(1)	

The intercept value of the model is 1.756% as shown by the previous equation(1). The results show that an increase in accounts receivable turnover in days (ARD) is positively correlated with a rise in profitability of 0.443% for every unit increase in ARD. Since the probability value of the independent variable is 0.00, this analysis also shows that there is a significant correlation between ARD and company profitability at the 0.05 level of significance. Thus, we should prefer the alternative hypothesis over the null. Thus, we may draw the following conclusion from the evidence gathered in relation to the theoretical underpinnings: ARD has a statistically significant positive impact on the firm's profitability.

Theoretically, a smaller ARD indicates that customers are spending less of their own money on working capital. Firms can be more proactive in their bill paying and in their search for attractive investment prospects. Nearly all previous empirical research—Deloof (2003), Lazaridis and Tryfonidis (2006), Sharma and Kumar (2011), Vural, Sokmen, and Cenenak (2012), Gul et al. (2013), Tu and Nguyen (2014), Bui (2016), and Muhammad, Rehman, and Waqid (2017)—showed that ARD had a negative influence on profitability (2017). (2016).

Further insight into the causal relationship between ARD and the firm's Profitability by multi-linear regression:

		Sum of				
	Model	Squares	Df	Mean Square	F	Sig.
1	Regression	79.623	5	15.925	29. 094	.00 0 <sup>a</sup>
	Residual	45.977	84	.547		
	Total	125.600	89			

**ANOVA**<sup>b</sup>

a. Determinants: (Constant), Cash discounts are offered to clients to encourage early payment. The company routinely sends consumers letters urging them to pay their bills. The company evaluates the creditworthiness of credit-seeking customers. The company routinely monitors accounts receivable balances. The company offers credit facilities to its consumers.

b. Dependent Variable: 17. The company's credit policy has the potential to improve sales.

**Model Summary** 

			Adjusted I	R	Std. Error of
Model	R	R Square	Square		the Estimate
1	.796 <sup>a</sup>	.634	.612		.740

a. Determinants: (Constant), Cash discounts are offered to clients to encourage early payment. The company routinely sends consumers letters urging them to pay their bills. The company evaluates the creditworthiness of credit-seeking customers. The company routinely monitors accounts receivable balances. The company offers credit facilities to its consumers. captures the variations

in the firm's profitability

# **Coefficients**<sup>a</sup>

	Unstandardized		Standardized		
	Coefficients		Coefficients		
Model	В	Std. Error	Beta	t	Sig.
1 (Constant)	.422	.263		1.603	.113
1. The firm extend s credit facilities to its customers	.238	.088	.282	2.721	.008
4. The firm frequently reviews levels of accounts receivables	.026	.087	.028	.301	.764
6. The firm investigates the credit worthiness of customers who want credit facilities	.099	.099	.095	.995	.322
7. The firm regularly writes to customers reminding them to pay their debts	.232	.088	.246	2.640	.010

11. The firm allows					
cash discounts to	.282	.092	.297	3.070	.003
customers to induce	.202	.092	.291	5.070	.003
them pay promptly					

a. Dependent Variable: 17. The overall firm's credit policy has an ability to increase sales

# 1. H2: The inventory turnover in days (INVD has the negative impact on the firm "s profitability

*Firm Profitability is proxied by the Dependent Variable: ". The overall firm's credit policy has* 

an ability to increase sales"

The inventory turnover in days (INVD) is proxied by the following; 2. Inventories constitute a large

position of the total current assets, 5. The firm has installed an inventory control system,

1. The firm has a defined level of inventories for raw materials

			Standardized Coefficients		
Model	В	Std. Error	Beta	t	Si g.
1 (Constant)	.657	.265		2.474	.015
1. The firm has a defined level of inventories for raw materials(DIRM)	.222	.091	.239	2.435	.017

**Coefficients**<sup>a</sup>

5. The firm has installed an inventory control system(ICS)	.444	.092	.472	4.832	.000
2. Inventories constitute a large position of the total current assets(ILPC)	.129	.096	.142	1.341	.184

a. Dependent Variable: 17. The overall firm's credit policy has an ability to increase sales

# PROF = 0.657 + 0.222DIRM + 0.444ICS + 0.129ILPC(1)

According to the preceding equation(1), the model has an intercept value of 0.657. The results indicate that the inventory turnover in days (INVD) has a positive effect on the firm's profitability, such that when "The firm has a defined level of inventories for raw materials (DIRM)" increases by one unit, the firm's profitability increases by 0.222 units; the same holds true for the other variables. It also demonstrates that there is a significant association between "The firm has a defined level of inventories for raw materials (DIRM)" and the firm's profitability at the 0.05 level of significance, given the probability value of the independent variable is less than 0.05. Therefore, we should REJECT the alternative hypothesis and ACCEPT the null hypothesis. The inventory turnover in days (INVD) has a statistically significant positive effect on the firm's profitability, based on the obtained data versus the theoretical foundations. According to theory, the inventories of industrial businesses are relatively abundant. Consequently, holding a significant quantity of goods would result in stagnant working capital and high storage expenses, which will have a negative impact on the profitability of firms.

ANOVA	)
-------	---

	Sum of		Mean		
Model	Squares	df	Square	F	Sig.

1.Regressio	70.511	3	23.504	36.692	$.000^{a}$
n	/ 0.011	5	23.301	50.072	.000
Residual	55.089	86	.641		
Total	125.600	89			

a. Predictors: (Constant), 2. Inventories constitute a large position of the total current assets, 5. The firm has installed an inventory control system, 1. The firm has a defined level of inventories for raw materials

b. Dependent Variable: 17. The overall firm's credit policy has an ability to increase sales

The F-statistic is greater than 2, thus the model is jointly, statistically significant.

**Model Summary** 

			Adjusted R	Std. Error of	
Model	R	R Square	Square	the Estimate	
1	.749 <sup>a</sup>	.561	.546	.800	

a. Predictors: (Constant), 2. Inventories constitute a large position of the total current assets, 5. The firm has installed an inventory control system, 1. The firm has a defined level of inventories for raw materials

R square is poor since it's >0.5, thus the independent variables sufficiently captures the variations

in the firm's profitability

H3: The accounts payable in days (APD) has the negative impact on the firm "s

*profitability* Coefficients<sup>a</sup>

			Standardized Coefficients		
Model	В	Std. Error	Beta	t	Sig.
1 (Constant)	.857	.250		3.425	.001
1. The firm receives credit facilities from its suppliers(CFS)	.559	.085	.615	6.577	.000
2. The firm receives cash discounts from its suppliers upon payment within a stipulated period of time(CDSP)	.183	.090	.191	2.043	.044

a. Dependent Variable: 17. The overall firm's credit policy has an ability to increase sales

## PROF = 0.857 + 0.559CFS + 0.189CDSP

\_(1)

The intercept of the model is 0.857, as shown by the previous equation (1). We find that a rise in "The firm receives credit facilities from its suppliers(CFS)" by one unit is associated with a 0.559 unit increase in profitability, and that the same holds true for the other variables. Given that the probability value of the independent variable is.000, which is below the significant threshold, the data also demonstrates that "The firm receives credit facilities from its suppliers(CFS)" is positively correlated with firm profitability at the 0.05 significant level. Therefore, we should reject the null hypothesis and not the alternative. Therefore, we can conclude that there is a statistically significant positive influence on the firm's profitability by The Accounts Payable in Days from the evidence obtained relative to the theoretical foundations (APD).

Profitability of a Business and the Number of Days It Takes to Pay Its Bills

In theory, a company's solvency, dependence on external sources for operational capital, and overall credibility will all improve if its APD falls. As a result, it provides a glimpse into the potential future earnings of companies. According to Deloof (2003), Lazaridis and Tryfonidis (2006), Tu and Nguyen (2014), Bui (2016), and Muhammad, Rehman, and Waqas (2003), Lazaridis and Tryfonidis (2006), Tu and Nguyen (2014), and Bui (2016), APD has a negative effect on profits (2016). (2016). Though some research have found a positive correlation between APD and profits (Sharma and Kumar 2011, Gul et al. 2013), others have found no such correlation (Vural, Sokmen, and Cenenak 2015). (2007). (2009). (2012).

**Model Summary** 

						Std.
	N			R	Adjuste	Error of the
ode	el		R	Square	d R Square	Estimate
	1	5 <sup>a</sup>	.75	.57 0	.560	.788

a. Predictors: (Constant), 2. The firm receives cash discounts from its suppliers upon payment within a stipulated period of time, 1. The firm receives credit facilities from its suppliers

R-square is .570, thus the explanatory variables jointly account for the changes in the independent variable by 57%.

	Sum of				
Model	Squares	df	Mean Square	F	Sig.
1 Regression	71.534	2	35.767	57.553	.000 <sup>a</sup>
Residual	54.066	87	.621		
Total	125.600	89			

**ANOVA**<sup>b</sup>

a. Predictors: (Constant), 2. The firm receives cash discounts from its suppliers upon payment within a stipulated period of time, 1. The firm receives credit facilities from its suppliers

b. Dependent Variable: 17. The overall firm's credit policy has an ability to increase sales

H4:The cash conversion cycle (CCC) has the negative impact on the firm "s profitability

	Unstandardized Coefficients		Standardized Coefficients		
	D	Std.	D.		c.
Model	В	Error	Beta	t	Sig.
1 (Constant)	1.073	.287		3.744	.000
3. Cash and marketable securities are maintained at a higher level than the current liabilities(CMS)	.330	.121	.336	2.730	.008
2. The firm maintains a high level of current assets in relation to current liabilities(HCA)	.353	.118	.369	2.998	.004

**Coefficients**<sup>a</sup>

a. Dependent Variable: 17. The overall firm's credit policy has an ability to increase sales

The intercept of the model is 1.073 as shown by the first equation above. One unit increase in "The cash conversion cycle (CCC)" is associated with a 0.559 unit increase in profitability, as shown by the data. Since the probability value of the independent variable is smaller than the significance level (.008), this also shows that there is a significant correlation between "cash conversion cycle (CCC)" and the firm's profitability at the 0.05 level of significance. Because of this, we should choose to believe the null hypothesis rather than the alternative hypothesis. Based on empirical evidence and theoretical underpinnings, the cash conversion cycle is determined to have a statistically significant positive effect on a company's profitability (CCC).

Using the ARD, INVD, and APD, one can theoretically derive the CCC. Consequently, the CCC will be affected by any variable that is altered. Almost all previous empirical studies, such as Deloof (2003), Lazaridis and Tryfonidis (2006), Mohamad and Saad (2010), Sharma and Kumar (2011), Vural, Sokmen, and Cenenak (2012), Gul et al. (2013), Tu and Nguyen (2014), Bui (2016), Muhammad, Rehman, and Waqid (2017), and others, concluded that the CCC had a negative impact on profitability (2016).

	Sum of				
Model	Squares	df	Mean Square	F	Sig.
1 Regre ssion	54.874	2	27.437	33. 751	.00 0 <sup>a</sup>
Resid ual	70.726	87	.813		
Total	125.600	89			

## **ANOVA**<sup>b</sup>

a. Determinants: (Constant), The company maintains a high ratio of current assets to current liabilities. Cash and marketable securities are kept at a level that exceeds current liabilities.

b. Dependent Variable: 17. The firm's overall credit policy has the potential to boost sales.

There is an overall significance of the model as showed by the F-statistics above.

# **Model Summary**

				Std.
			Adjusted R	Error of the
Model	R	R Square	Square	Estimate
1	.66 1 <sup>a</sup>	.43 7	.424	.902

# Reliability

**Statistics** 

Cronba	N of
ch's Alpha	Items
.736	2

# Reliability

**Statistics** 

Cronba	N of
ch's Alpha	Items
.690	2

# Reliability

Statistics

Cronba	N of
ch's Alpha	Items
.838	2

## Reliability

**Statistics** 

Cronba	N of
ch's Alpha	Items
.895	4

## **Reliability Statistics**

**Reliability Statistics** 

Cronbach's Alpha	N of Items
.968	17

The alpha coefficient for the six items is.968, indicating that the items' internal consistency is relatively strong. (Note that a reliability coefficient of 0.70 or over is regarded as "acceptable" in the majority of social science and management research contexts.)

**Case Processing Summary** 

			Ν	%
ases	C d	Vali	90	97. 8
	udec	Excl l <sup>a</sup>	2	2.2
	1	Tota	92	10 0.0

a. Listwise deletion based on all variables in the procedure.

Reliability

Scale: ALL VARIABLES

## **Correlation Matrices**

Table

Correlations				
				TOTAL
			TotalPro	fi Account
			tability	Payable
Pearson		TotalProfitability	1.000	.867
Correlation		TOTALAccountPay	0.47	4 000
	able		.867	1.000
Sig. (1-tailed)tf		total Profitability	•	.000
		TOTALAccountPay	000	
	able		.000	
Ν		total Profitability	90	90
		TOTALAccountPay	00	00
	able		90	90

## Source: Author's computation using SPSS V16

From the table above total account payable and total profitability have a correlation coefficient of 0.867, this shows a very high positive relationship between the variables.

Correlations				
		total.		TotalIN
		Profitability	V	
Pearson Correlation	total.	1.000		701
	Profitability	1.000		.791
	TotalINV	.791		1.000
Sig. (1-tailed)	Totalprofitability	•		.000
	TotalINV	.000		•
N	Totalprofitability	90		90

Correlations				
		total.		TotalIN
		Profitability	V	
Pearson Correlation	total.	1.000		.791
	Profitability	1.000		./91
	TotalINV	.791		1.000
Sig. (1-tailed)	Totalprofitability	•		.000
	TotalINV	.000		•
N	Totalprofitability	90		90
	TotalINV	90		90

## Source: Author's computation using SPSS V16

From the table above total number of days inventory and total profitability have a correlation coefficient of 0.791, this shows a very strong positive relationship between the variables.

## *Correlations*

Correlation	18				
		Totalp	TotalAR	TotalIN	TOTALAcc
		rofitability	D.	V	ountPayable
Pearson Correlation	Totalprofitabil ity	1.000	.80 1	.7 91	.867
	TotalARD.	.801	1.0 00	.8 62	.870
	TotalINV	.791	.86 2	1. 000	.877
	TOTALAcco untPayable	.867	.87 0	.8 77	1.000
Sig. (1- tailed)	Totalprofitabil ity		.00 0	0. 00	.000
	TotalARD.	.000		0. 00	.000
	TotalINV	.000	.00 0		.000
	TOTALAcco untPayable	.000	.00 0	0. 00	
Ν	Totalprofitabil ity	90	90	90	90
	TotalARD.	90	90	90	90
	TotalINV	90	90	90	90
	TOTALAcco untPayable	90	90	90	90

## Source: Author's computation using SPSS V16

The correlation coefficient between total days of inventory and total days of account receivables in the table above is 0.8625, indicating a very strong positive link. The correlation coefficient between total days of inventory and account payables is

0.877, indicating a very significant link or association. Using a correlation coefficient of 0.87, the total days of account receivables and account payables are strongly linked.

Correlations			
		Totalprofitability	TotalARD.
Pearson	Totalprofit	a 1.000	901
Correlation	bility	1.000	.801
	TotalARD	.801	1.000
Sig. (1-tailed)	Totalprofit	a	000
	bility	•	.000
	TotalARD	.000	•
Ν	Totalprofit	a 90	90
	bility	90	90
	TotalARD	. 90	90

Table .

Source: Author's computation using SPSS V16

**4.5 Data Analysis on the Effect of working capital management components on firm's profitability or Performance:**What is the effect of working capital management components towards the firm's profitability in organizations and manufacturing sectors?

## Table 18.

The Level of Current Assets have large impact on company's Performance

(	Currer	ntass	sets			
						Cumulative
		]	Frequency	Percent	Valid Percent	Percent
Valid	SD		10	11.1	11.1	11.1
		D	17	18.9	18.9	30.0
		U	22	24.4	24.4	54.4
		А	15	16.7	16.7	71.1
	A	S	26	28.9	28.9	100.0
	Tota	1	90	100.0	100.0	

## Source: Author's computation using SPSS V16

In table 18 above, 28.9% of the respondents strongly agree that level of current

assets affects company's Performance towards goal achievement, 24.4% of the respondents are undecided, while 18.9% of the respondent disagree, 11.1% of the respondents strongly disagree, while 16.7% agree.

Table.

Inv	rentories				
		Cumulative			
		Frequency	Percent	Valid Percent	Percent
Valid	SD	8	8.9	9.1	9.1
	D	17	18.9	19.3	28.4
	U	22	24.4	25.0	53.4
	А	18	20.0	20.5	73.9
	SA	23	25.6	26.1	100.0
	Total	88	97.8	100.0	
Missing	System	2	2.2		
Tot	al	90	100.0		

Level of Inventories have large impact on Company's Performance

## Source: Author's computation using SPSS V16

In table 19 above, 25.6% of the respondents strongly agree that high level of Inventories can boost the company's Performance 20% of the respondents agree that level of Inventories have great impact on the company's Performance , 24.4% of the respondent are undecided if level of Inventories can boost the company's Performance achievement, while 18.9% of the respondent disagree that level of Inventories can boost the company's Performance, 8.9% strongly disagree.

Table 20.

Level of Cash and marketable securities have large impact on the firm's Profitability

Cash	andmarket	ablesecuritie	es		
					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	SD	8	8.9	9.0	9.0
	D	15	16.7	16.9	25.8

	U	24	4	26.7	27.0	52.8
	А	2:	5	27.8	28.1	80.9
	SA	1′	7	18.9	19.1	100.0
	Total	8	9	98.9	100.0	
Missing	System	1		1.1		
Tot	al	90	100.	0		

Source: Author's computation using SPSS V16

As can be seen in the table above, 18.9% of respondents strongly agree that the Level of Cash and Marketable Securities has a substantial impact on the firm's Profitability; 27.8% agree that it does; and 26.7% are doubtful.

Table 21.

Liquidity ratios have large impact on the firm's performance

L	iquidityı	ratios			
					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	S	7	7.8	7.8	7 9
	D	7	7.8	7.8	7.8
	D	29	32.2	32.2	40.0
	U	24	26.7	26.7	66.7
	A	19	21.1	21.1	87.8
	S	11	12.2	12.2	100.0
	А	11	12.2	12.2	100.0
	Total	90	100.0	100.0	

## Source: Author's computation using SPSS V16

In table 21, 12.2 percent of respondents strongly agree that the firm's Profitability is influenced by the Level of Liquidity ratios, 21.1 percent of respondents agree that the Level of Liquidity ratios have a large impact on the firm's Profitability, and 26.7 percent of respondents remain undecided if the Level of Liquidity ratios have a large impact on the firm's Profitability.

Table 22.
Cas	shbudget				
					Cumulative
		Frequency	Percent	Valid Percent	Percent
Val	SD	5	5.6	5.7	5.7
id	D	26	28.9	29.5	35.2
	U	26	28.9	29.5	64.8
	А	16	17.8	18.2	83.0
	SA	15	16.7	17.0	100.0
	Total	88	97.8	100.0	
Missing	System	2	2.2		
Tot	al	90	100.0		

Cash budget have large impact on Firm's Performance

## Source: Author's computation using SPSS V16

In table 21, 12.2% of respondents strongly agree that the firm's Profitability is affected by the Level of Liquidity ratios, 21.1% of respondents agree that the Level of Liquidity ratios have a large impact on the firm's Profitability, and 26.7% of respondents are unsure whether the Level of Liquidity ratios have a large impact on the firm's Profitability.

#### Table 23.

Cashflowprediction			
			Cumulative
Frequency	Percent	Valid Percent	Percent

The Extent of Cash flow Prediction have a Large impact on the firm's performance

SD	7	7.8	7.9	7.9
D	21	23.3	23.6	31.5
U	25	27.8	28.1	59.6
А	19	21.1	21.3	80.9
SA	17	18.9	19.1	100.0
Total	89	98.9	100.0	
	D U A	D     21       U     25       A     19       SA     17	D       21       23.3         U       25       27.8         A       19       21.1         SA       17       18.9	D       21       23.3       23.6         U       25       27.8       28.1         A       19       21.1       21.3         SA       17       18.9       19.1

Missing System	1	1.1	
Total	90	100.	

#### Source: Author's computation using SPSS V16

In table 23 above, 18.9% of the respondents strongly agree that the Extent of Cash flow Prediction have a Large impact on the firm's performance and will bring about efficiency and effectiveness in profitability and organizational goal achievement, 21.3% of the respondents agree that the Extent of Cash flow Prediction have large impact on the firm's Profitability, 28.1% of the respondents remain undecided if the Level of Cash flow Prediction have large impact on the firm's Profitability, 23.3% of the respondents disagree, while 7.8% of the respondent strongly disagree that the Level of the extent of cash flow prediction have large impact on the firm's Profitability.

Table 24.

Optimumcashbalancepolicy						
					Cumulative	
		Frequency	Percent	Valid Percent	Percent	
Valid	SD	9	10.0	10.1	10.1	
	D	22	24.4	24.7	34.8	
	U	22	24.4	24.7	59.6	
	А	20	22.2	22.5	82.0	
	SA	16	17.8	18.0	100.0	
	Total	89	98.9	100.0		
Missing	System	1	1.1			
Tot	al	90	100.0			

Optimum cash balance policy has impact on the firm's performance

#### Source: Author's computation using SPSS V16

In table 24, 17.8% of respondents strongly agree that Optimum cash balance policy has a Large impact on the firm's performance and will bring about efficiency and effectiveness in profitability and organizational goal achievement, 22.2% of respondents agree that the Optimum cash balance policy has a large impact on the

firm's Profitability, and 24.4% of respondents are unsure if the Optimum cash balance policy has a large impact on the firm's Profitability.

Table 25.

Optimum and minimum levels of Liquidity have large impact on firm's performance

	Optimumandminimumlevelsofliquidity								
				Fı	requ		Perc	Valid	Cumulati
				ency		ent		Percent	ve Percent
	Val		SD	1(	)		11.1	11.4	11.4
id			D	21	1		23.3	23.9	35.2
			U	21	1		23.3	23.9	59.1
			А	20	)		22.2	22.7	81.8
			SA	16	5		17.8	18.2	100.0
		al	Tot	88	3		97.8	100.0	
	Mis		Sys	2			2.2		
sing		tem		2			2.2		
	Tota	.1		9(	)	0	100.		

# Source: Author's computation using SPSS V16

In table 25 above, 17.8 percent of the respondents strongly agree that Optimum and minimum levels of Liquidity have a Large impact on the firm's performance and will bring about efficiency and effectiveness in profitability and organizational goal achievement. 22.2 percent of the respondents agree that the Optimum and minimum levels of Liquidity have a Large impact on the firm's performance. 23.3 percent of respondents disagree, with 11.1 percent strongly disagreeing that the Level of Optimum and minimum levels of Liquidity have a significant impact on the performance

#### **EXPLANATION**

You can see that the model has an intercept of 1.756 by looking at the tables that are located above. According to the findings, total day account receivables have a beneficial influence on the overall profitability of the company. When there is a one-unit increase in total day account receivables, there is a 0.443-unit increase in overall profit. In addition, the fact that the probability value of the independent variable is 0.161, which is higher than the significance threshold, suggests that there is not a significant association between the variables when using the 0.05 level of significance as the criterion for significance. Therefore, the alternative hypothesis ought to be rejected, and the null hypothesis ought to be accepted as valid in its place. We are in agreement that there is not a statistically significant connection between the total number of day account receivables and the overall profitability of the company as a whole.

A bigger total inventory appears to have a positive influence on the success of the company, according to the outcome of the regression analysis presented in the tables that are located above. According to the data presented in the table, a one-unit increase in total inventory results in a 0.079-unit rise in profitability. At the 0.05 level of significance, the findings also indicate that there is no significant association between total inventory and overall profitability. This was determined by analyzing the correlation between the two variables. This is due to the fact that the value of the probability associated with the independent variable total inventory is 0.613, which is greater than the level of significance. The alternative hypothesis, which states that there is a strong link between a company's total inventory and how much money it makes, should be rejected in favor of the null hypothesis, which states that there is no such link.

In addition, the results of the model suggest that there is a positive connection between the total amount of a company's account payables and the overall amount of profit that it makes. In other words, there is a gain in profitability of 0.276 units for every one unit that is added to the total amount of account payables. In addition, the findings indicate that there is a significant correlation between total account payables and firm profitability at the 0.05 level of significance. This is due to the fact that the probability value of the independent variable, which is 0.000, is greater than the level at which a correlation is considered significant. It is necessary to conclude that the alternative hypothesis, which claims that there is a significant connection between the variables, is hypothesis correct and that the null is false.

#### **CHAPTER 5**

#### **Discussion of Findings**

In addition, the model predicts a 498 kobo increase in returns for each unit increase in the liquidity ratio. This result is consistent with past results that a greater investment in current assets, notably inventory and trade debtors, helps the Nigerian cement industry raise its profitability. This study confirms the findings of Hayajne and Yassine (2011), who identified a significant positive link between cement industry profitability and current ratio.

A greater total inventory appears to have a positive impact on the company's success, as evidenced by the regression analysis presented in the tables included in the results chapter. The table shows that for every one unit of added inventory, the resulting profit rises by 0.079 units. At the 5% level of significance, the results show that total inventory has no bearing on total profits. This result was reached after studying the relationship between the two factors. The probability associated with the independent variable total inventory is 0.613, which is greater than the 0.05 level required to be considered statistically significant. For this reason, it is preferable to accept the null hypothesis (that there is no connection between total inventory and income) rather than the alternative hypothesis (that there is a significant connection).

Because of this model, it's very evident that practically every facet of working capital management has a major bearing on the success or failure of a company, the current ratio is positively correlated with profitability in the Malaysian real estate development business, as was found by Zariyawati, Annuar, Taufiq, and AbdulRahim (2009). As opposed to this, research conducted by Shin and Soenan (1998) and Raheman and Nasr (2007) found a significant inverse link between corporate returns and current ratio. In favor of the independent variable However, for every 1 naira added to debt, returns fall by 0.06 naira. This evidence disproves the claim that the cement production industry in Nigeria is profitable regardless of how well working capital is managed. Based on the data, it appears that the independent variables (indicators of working capital management) impact the profitability (ROA) of Nigerian cement manufacturing enterprises on both a micro and macro scale. The study found that the profitability of Nigerian cement enterprises was significantly affected by all working capital variables. These variables included inventory turnover, debtors' collection period, average payment period, and cash conversion cycle. As a result, it is safe to say that the working capital components are a major reason why the sampled companies are so good at managing

their working capital. The study also shows that working capital expenditures have a major effect on the profitability of Nigerian cement manufacturers.

#### **Conclusion and Recommendations**

#### Conclusion

The management of a company's working capital is vital, and it must be done correctly. As liquidity issues arise, a company's working capital needs to be sufficient and appropriate. Investment opportunities may be missed by companies with excess working capital. Working capital management techniques of the Nigerian cement manufacturing companies Elephant and Dangote were analyzed to determine the impact on their respective financial performance of working capital management. Implementing the aforementioned strategies will unquestionably aid the chosen companies in improving their overall working capital and cash flow management performance. Nigeria's economic growth can be boosted by increasing cement production at a reasonable cost through proper working capital management. As a result, the working capital components of the selected businesses are expected to have a significant influence on working capital management efficiency. As a consequence, the research discovered that Nigerian cement businesses spend a lot of money on working capital.

It is impossible to argue against the significance of effective working capital management (WCM). In addition, the management of a company's working capital is vital because it has a direct influence on the profitability of businesses. In the current research, an effort has been made to investigate the connection between the effective administration of a company's working capital and the profitability of Nigerian cement businesses(Ambore,2022). Some investments that seemed to have a bright future and a high rate of return ended up being unsuccessful and were therefore forced out of business. Even though the companies were listed on the Nigerian stock exchange, many businesses had either temporarily or permanently closed their doors, forcing many Nigerian workers into the jobless market. This was the case even if the businesses had been temporarily or permanently closed. In spite of the widespread belief that effective management of a company's working capital is essential to the organization's continued existence, there is still only a limited amount of information available regarding the manner in which businesses actually manage their working capital and how this may have a negative or positive impact on their profitability (Adamu, 2022). This study investigated how the working capital management practices of Nigerian businesses

affected the profitability of such businesses. According to the findings of the research, there is a positive and significant connection between accounts receivable and the profitability of the industry as a whole. On the other hand, the association between accounts payables and the firm's profitability is both negative and small, whereas the relationship between CCC and the firm's profitability was both negative and significant. With the exception of APPP, every single variable that pertains to working capital management has a substantial influence on the profitability of enterprises that are engaged in manufacturing in Nigeria.

#### Recommendations

Working capital investments should be increased by a lot if output and income are to go up. Investing in raw materials and manufacturing consumables should be the main focus of current assets if you want to increase production and sales. To figure out how much inventory they have, business owners must be careful and use a scientific method. Before production starts, the stock should be bought. In order to cut down on inventory costs, the Just-in-Time (JIT) method is recommended. Companies must retain adequate cash on hand to pay for monthly expenditures and purchase raw materials in order for the manufacturing process to function effectively and constantly satisfy client requirements. Businesses can use more unplanned ways to get money in order to depend less on shortterm loans and cash advances

In light of the data and inferences drawn from this study, the researchers have come up with some suggestions, which are as follows:

i. The managers of manufacturing companies in Nigeria should give working capital management the priority it deserves, and they should place an emphasis on maintaining optimal levels of working capital in their individual companies. This is due to the enormous impact that the cash conversion cycle and account receivable have on the overall profitability of the business.

ii. In order to receive knowledgeable counsel on the administration of working capital in Nigerian manufacturing enterprises, these businesses may consider recruiting individuals with specialized knowledge in the field of finance.

iii. Even though it is a good thing to make sales, it is not encouraging to sell everything in order to prevent stock outs, which may occur if there are regular huge sales, as can be seen in all of the companies that are being studied. If there are regular huge sales, it is possible that stock outs will occur.

iv. The corporations need to keep a closer eye on their outstanding debts to their creditors. Additionally, there should be an increase in the amount of credit sold by them so that they do not have to declare bankruptcy after paying off their debts.

v. The managers of manufacturing companies should decrease the amount of time that their accounts receivables are outstanding. They can do this by implementing an adequate control system and a credit policy that is flexible. This will allow the companies to receive payments from their creditors in a shorter amount of time.

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## Appendices

# Appendix A QUESTIONNAIRE

Instructions

Please respond each question by putting a tick ( )

## PART - A

## **Background Information**

1. When did your company commence itsoperations?

1-10 Years ago	0
11-20 Years ago	0
21-30 Years ago	0
31- 40 Years ago	0
41-50 Years ago	0
Over 50 Years ago	0

2. What is the length of time your company has been a member of Nigeria Association of Manufacturers?

1-5 Years	0
6-10 Years	0
11-15 Years	0
16-20 Years	0
21-25 Years	0
Over 25 Years	0

3. Under what classification is your company placed by Nigeria Association of Manufacturers?

Building, Mining and Construction	0
Chemical and Allied Sector	0
Energy, Electrical and Electronics Sector	0
Foods and Beverages Sector	0
Leather and Footwear Sector	0
Metal and Allied Sector	0
Motor Vehicles Assemblers and Accessories Sector	0

Paper and Board Sector	0
Pharmaceutical and Metal Equipment Sector	0
Plastic and Rubber Sector	0
Textile and Apparels Sector	()
Timber, Wood and Furniture Sector	()
4. What is your organizational form?	
ListedCompany	0
Otherlimitedcompanies	0
Partnership	0
SoleProprietorship	0
Solerrophetoiship	$\mathbf{V}$
Co-operativeSociety	0

5. How many workers are currently employed by your companyemployed?

Between 1 and 10 workers	0
Between 11 and 50 workers	0
Between 51 and 100 workers	0
Between 101 and 250 workers	0
Between 251 and 500 workers	0
Over 500 workers	Ο

6. What formal organization structure does your companyhave?

Simpleform	0	
Functional	0	
Divisiona		0
Matrix	0	
Other, please specify		

## PART – B

#### **Credit Policy**

The following statements relate to credit policy, credit standards, credit terms and collection efforts by your company. Indicate how agreeable you are with the statements by placing a tick () against correct option. Strongly agree – (SA), Agree – (A), Neutral

- (N), Disagree - (D), Strongly Disagree -

SD)

	Statement	Response						
		SA	А	Ν	D	SD		
1	The firm extend s credit facilities to its customers							
2	The firm considers production cycle when setting credit standards							
3	The length of time allowed to your customers hasan influence on sales							
4	The firm frequently reviews levels of accounts receivables							

5	The firm frequently reviews the levels of bad debts
6	The firm investigates the credit worthiness of customers who want credit facilities
7	The firm regularly writes to customers reminding         them to pay their debts
8	The firm Sometimes writes off bad debts from
9	The firm sometimes take legal action against       Image: Comparison of the second secon
10	The firm has set credit terms that stipulate credit
11	The firm allows cash discounts to customers to induce them pay promptly
12	The firm stipulates the amount of discount allowed to a customer on payment within a specified time

13	The discount given to your customers depend on the credit period allowed			
14	The firm considers production cycle when setting collection period			
15	The average length of time between credit sales and cash collection from the customers is longer than 30 days			
16	The firm has set a lenient credit policy			
17	The overall firm's credit policy has an ability to increase sales			

# PART - C

## **Accounts Payable Practices**

For the following statements you are requested to indicate whether you Agree (A), Disagree (D), Strongly Agree (SA), Strongly Disagree (SD) or Neutral (N) about accounts payable practices in your firm

	Statement		Response						
		SA	А	N	D	SD			
1	The firm receives credit facilities from its suppliers								
2	The firm receives cash discounts from its suppliers upon payment within a stipulated period of time								
3	The firm is sometimes charged an interest by its suppliers for late payment								
4	The firm's past debts have ever been waived by its suppliers								
5	The firm is sometimes unable to pay its suppliers on time								
6	The payment period allowed by your suppliers to your firm is reasonable								

# PART - D

## **Inventory Control Practices**

For the following questions you are requested to indicate whether you Agree (A), Disagree (D), Strongly Agree (SA), Strongly Disagree (SD) or Neutral about inventory control practices in your firm

	Statement	Resp				
		SA	А	Ν	D	S
						D
1	The firm has a defined level of inventories forraw					
	materials					
2	The firm has determined optimal batch sizes					
3	The firm reviews inventory levels periodically					
4	The firm keeps accurate inventory records					
5	The firm has installed an inventory control system					

# PART - E

# Liquidity ManagementPractices

For the following questions you are requested to indicate whether you Agree (A), Disagree (D), Strongly Agree (A), Strongly Disagree (SD) or Neutral about Liquidity Management Practices in yourfirm

	Statement		Response						
		SA	А	Ν	D	SD			
1	Current assets are maintained at a higher level than								
	the current liabilities								
2	Inventories constitute a large position of the total								
	current assets								
3	Cash and marketable securities are maintained at a								
	higher level than the current liabilities								
4	Liquidity ratios are maintained at optimal level								
5	The firm always prepares a cash budget								

6	The firm has been aided by Cash flow prediction in			
	financial planning			
7	The firm has an optimum cash balancepolicy			
8	The firm regularly assesses the optimum and			
	minimum levels of liquidity			

# PART - F

## **Working Capital Levels**

For the following questions you are requested to indicate whether you Agree (A), Disagree (D), Strongly Agree (SA), Strongly Disagree (SD) or Neutral (N) about investment and financing policies in your firm

	Statement		Statement         Response							
		SA	А	Ν	D	SD				
1	The firm maintains a low level of current assets as a percentage of total assets									
2	The firm maintains a high level of current assets in relation to current liabilities									
3	The firm always maintains current ratio of 2:1									
4	The firm maintains a high level of current liabilities in relation to total liabilities									
5	The firm maintains a high level of current liabilities against total assets									
6	Current assets are financed by long term funds of the company									

Appendix X Turnitin Similarity Report

# THE IMPACT OF WORKING CAPITAL MANAGEMENT ON FIRM'S PROFITABILITY: EVIDENCE FROM NIGERIA CEMENT INDUSTRY

by Mary Omodolapo Olapade 20195434

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## B L MSEL ARA TIRMALAR ET K KURULU

06.07.2022

Dear Olapade Mary Omodolapo

Your application titled **"The impact of working capital management on firm's profitability: Evidence from Nigeria Cement Industry"** with the application number NEU/SS/2021/1228 has been evaluated by the Scientific Research Ethics Committee and granted approval. You can start your research on the condition that you will abide by the information provided in your application form.

Rapporteur of the Scientific Research Ethics Committee

Direne Kanol

**Note:** If you need to provide an official letter to an institution with the signature of the Head of NEU Scientific Research Ethics Committee, please apply to the secretariat of the ethics committee by showing this document.