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**WORKING CAPITAL MANAGEMENT IN TELECOMMUNICATION SECTOR
A CASE STUDY OF VGC TELECOMS**

By

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DEDICATION

In memory of my father, late Chief Amos Akinwande

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TABLE OF CONTENTS

Dedication	ii
Acknowledgement	iii
Table of contents	iv
Abstract	viii
Chapter One	
1.0 Introduction	1
1.1 Background of the study	2
1.2 Research Questions	5
1.3 Aims and Objectives	5
1.4 Research Methodology	7
1.5 Layout of the study	7
1.6 Summary	8
Chapter Two: Literature review	
2.1 Introduction	9
2.2 Working capital policy	9
2.3 Working capital cycle	12
2.4 Cash management	14
2.4.1 Cash positioning	17
2.5 Inventory management	18
2.6 Accounts payable	18
2.6.1 Accounts receivable versus Accounts payable	19
2.7 Financing decision	20
2.7.1 Late payments and credit management in the small firm sector	20

2.7.2 Cash flow and earnings volatility and firm value	26
2.8 Nature of Working Capital	28
2.8.1 Concepts and Definitions of Working Capital	29
2.8.2 The Common Definition of NWC and its Implications	30
2.8.3 Alternative Definition of NWC	31
2.9 Trade-off Between Profitability and Risk	31
2.9.1 Nature of Trade-off	31
2.9.2 Effect of the level of current assets on the profitability-risk trade-off.	32
2.9.3 Effect of Increase/Higher Ratio	32
2.9.4 Effect of Decrease / Lower Ratio	32
2.10 Conclusion	32
Chapter Three: Case study	
3.1 Background of the Company	34
3.2 Cash management	34
3.2.1 Cash forecasting	35
3.2.2 Management of cash	36
3.2.3 Surplus cash management	36
3.2.4 Cash control	37
3.3 Inventory management	38
3.4 Trade credit management	40
3.4.1 Terms and purpose of credit	40
3.4.2 Pricing of credit and cost consideration	41
3.4.3 Credit risk and collection policies	42
3.4.4 Control and financing of credit	43

3.5 Conclusion	44
Chapter Four: Methodology	
4.1 Introduction	45
4.2 Overview of research methodologies	45
4.2.1 Qualitative approach	45
4.2.2 Quantitative approach	46
4.2.3 A distinction of qualitative and quantitative approach	47
4.3 Justification for the use of triangulation	48
4.4 Method of data collection used	49
4.4.1 Primary data	49
4.4.2 Secondary data	49
4.5 Justification for using case study	50
4.6 Limitations	51
4.7 Justification for interview	51
4.8 Ethical issue	52
4.9 Conclusion	52
Chapter Five: Analysis, interpretation and description of result	
5.1 Inventory analysis	53
5.2 Accounts receivable analysis	53
5.3 Fixed assets analysis	54
5.4 Financial risk analysis	55
5.4.1 Short-term liquidity:	55
5.4.2 Long-term liquidity	56
5.5 Conclusion	63

Chapter Six: General conclusion, finding and recommendation	
6.0 Introduction	64
6.1 Summary findings with respect to research questions	64
6.2 General conclusion and summary findings	70
6.3 Recommendation	71
6.4 Limitation of the study	73
6.5 Contributions of the study	74
6.6 Area of further research	74
6.7 Conclusion	74
References	76
Appendix I: The interview Questions.	78
Appendix II: Five year financial summary of VGC Telecoms.	80

ABSTRACT

Title: Working Capital Management in Telecommunication sector: A case study of VGC telecoms

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Background and Problem Discussion: The efficient management of working capital is very vital for a business survival. This is premised on the fact having too much working capital signifies inefficiency, whereas too little cash at hand signifies that the survival of business is shaky.

Purpose: The purpose of this research is to study the working capital management in the small and medium scale businesses, using VGC Telecoms Company as a case study, so as to establish factors influencing working capital performance; examine how cash management, inventory management and trade credit management affects working capital management; company effectiveness in converting working capital to ready money; how working capital management impacts on the problem of slow development and to offer recommendations on possible ways of improving working capital management

Method: Literatures bordering on different areas of working capital management were reviewed. Thus, this research employed qualitative and quantitative analysis; and semi- structured questions were drafted based on the issues raised from the review of various literatures. In addition, materials from journal articles, textbooks, working papers and industry practitioners are put into consideration. The use of internet and e-mails to send out questions were explored where appropriate. Analysis on the company's financial statement was carried out in order to verify my findings.

Theory: In this research, the theory section looks at various concepts that come up when analyzing the consequences of working capital management for company value and the factors that influence a company's working capital management performance. I have therefore chosen the most common concept for the theory section. I have also tried to create a theoretical understanding for the company's sensitivity to a workable WCM policy

Analysis: In the analysis of the research findings, I employed qualitative approach to the data analysis whereby the impacts of the poor WCM on the company were discussed in depth.

Conclusion: The findings corroborate the postulation of Weston et al that a company's investment in working capital is a substantial percentage of its total investment. In case of VGC Telecoms, it is as high as 65 percent. An inefficient and ineffective management of this investment will result in slow pace of development and ultimately to the business failure. The performances of the company in the different spheres of working capital management were scored as follows:-

- Cash management – 65.4 percent
- Inventory management - 78.6 percent
- Trade credit management and financing decisions - 60.0 percent

This is an average performance of 68 percent. That is, the company's performance is above average. This is a good performance.

The financial statements as interpreted reinforce the validity of this result. The liquidity ratios are high; the collection period is short; and the cash cycle is not quite expansive. This makes it possible to sustain sufficient cash flow for the smooth running of the business.

The management of working capital impacts on liquidity, investment portfolio and profitability. All these three factors are decisive in the growth or failure of a business. Hence, good performances in working capital management affects these decisive factors favourably and thus, contribute to growth and success of the business.

CHAPTER ONE

1.0 INTRODUCTION

The knowledge and understanding of the working capital management practices of small, medium and large companies are presently not enough and many firms have gone into liquidation over the years as a result of running a deficit cash flow from operations.

Fact shows that relatively, only fraction of small and medium companies employ basic working capital management practices and they show a higher prevalence of subjective working capital decision-making. In line to the submissions of various researchers, the existence of 'finance gap' in the free enterprise economic system is one of the basic causes for the liquidation of small business.

The focus of working capital management (WCM) is sustenance of the optimum balance of each of the working capital component. According to Wilson (1996), smaller company should embrace formal WCM practice with the hope of minimizing the probability of business failure, as well as to enhance business performance [1].

Small Medium Enterprise (SME) is the live wire of any economy as cash is the live wire of any organisation. For instance, the office of National statistics report in 2005 stated that SME accounted for more than 58% of all UK employment out of which small enterprises accounted for 46.8% in 2004.

Cash deterioration affects the company's potential to finance operation, reinvest and meet up with capital requirements and payments. It implies that whenever working capital drops too low, such business may be at risk; this is why it is very necessary for company to have effective management of working capital so as to keep its economy alive.

The principal focus of this work is to investigate factors influencing working capital performance and factors responsible for inefficient working capital in small, medium and large companies and to explore means of improving the management of working capital in small and medium firms.

The relevant background of working capital management, the research question vis-à-vis the objectives, the methodological framework and layout of this research will be studied in this chapter.

1.1 BACKGROUND OF THE STUDY

The efficient management of working capital is very vital for an organisation. This is premised on the fact having too much working capital signifies inefficiency, whereas too little cash at hand signifies that the survival of business is shaky.

The concept of working capital management is all about the commercial and financial parts of credit, inventory, marketing, purchasing, royalty and investment policy. The greater the profit margin, the lesser is likely to be the level of working capital tied up in creating and selling titles.

The difference between current assets and current liabilities is known as working capital. The main current assets are stock, debtors and cash, while current liabilities are creditors and accrued expenses.

The main issue in the word "Current" is that it is anticipated to change into cash, or perhaps be paid from cash, within the period of twelve calendar months. As a rule of thumb, an organisation wishes to tie up little money as much as possible in working capital. Nevertheless, there are always trade-offs. One peculiar problem for business is running out of cash, which consequently leads to failure to make employees' payrolls, or business might be unable to offer services due to absence of essential resources [2].

As pointed out by Shin and Soenen (1998), a firm's working capital results from the time lag between the expenditure for the purchase of raw materials and the collection from sale of finished goods.

According to their submission, this entails various areas of company's operational management that includes receivables, inventories management, management and use of trade credit, etc. [3].

The aim of WCM is to sustain the optimum balance of all components of working capital; therefore, it is enormously necessary for companies to monitor overall trends so as to detect areas that necessitate closer management. In achieving this, different methods and strategies are applied to effectively control each component of working capital.

Harris (2005) submitted that for firms to minimise risk, effectively prepare for uncertainty and improve on overall performance, the core working capital drivers and the appropriate level of working capital must be understood [4]. .

As submitted by Peel et al (1996) that for small companies to manage and control their working capital effectively; both internal and external working capital drivers must be taken into consideration, and also consideration of how sensitive such drivers are to changes in the business or market. Thus, a firm must be able to minimise inventory, control supply and apply payment pressure on customers [1]. Due to inefficient management of working capital, many corporations lose billions annually. A good example is the study published by REL Consultancy Group on IT companies in 2002. A problem that is exacerbated when the economy worsens as it did during 2001.

REL examined operational data from 90 of the largest publicly traded IT companies in the United States, with annual minimum revenue of \$450 million. It took the companies an average of 69 days to convert sales into cash in 2001, nine days longer than the average in 2000, a lag that cost \$10 billion in lost cash flow, according to REL. This is to say, vendors took longer to collect on their sales.

Whenever the length of time between making a sale and receiving revenue stretches out, firms miss out on having that cash available for paying off debts, developing new products and making other investments. Decreasing working capital, the difference between a company's assets and liabilities frees up cash, thereby making it easier for companies to respond to market changes as early as possible. REL in London, focuses on working capital reduction, examined the quarterly cash flow of major firms and advising firms such as Hewlett-Packard, IBM Corporation, and Sun Microsystems.

Due to inefficient receivables, payables, and inventory practices many corporations in the United States and Europe stuck a huge sum that could be reclaimed with relatively little investment in transit (a staggering \$460 billion in the United States and some €469 million in Europe). Hackett-REL, which is part of The Hackett Group, a strategic advisory company, estimates that in the U.S. alone, getting this excess under control would reduce total net debt by 29 percent, increase net profit up to 11 percent and improve return on capital employed (ROCE) from 13.9 percent to 15.1 percent.

Liberating the billions in cash trapped on the balance sheet is easier than one may think. Dell Incorporation., as an example is extolled for overall strong corporate management and working capital performance by building a computer only when it has received payment for an order, and doesn't pay its own suppliers for an agreed-upon period of time thereafter. As a consequence, Dell benefits from negative working capital and, the more it grows, the more its suppliers finance its growth.

Although not all companies can function like Dell, but the most working capital position can be improved by at least 20 percent over time if it is managed, controlled efficiently and effectively [5].

1.2 RESEARCH QUESTION

A capitalist economic system all over the world relies seriously on the activities of small medium and large-scale business for its economic development. There is no economy that can develop without the activities of these companies since they contribute more to the gross domestic product, employment and innovations of the economy. It is of these reasons that it is very necessary for the managers of these companies be aware of the effect of poor working capital management. The research questions mainly laid emphasis on demand and supply risks as it affects working capital management?

The research questions are:

- i) What are the consequences of working capital management for company value?
- ii) What factors influence a firm's working capital management performance?
- iii) How efficient is the company at converting working capital to ready money?

1.3 AIMS AND OBJECTIVES

The problems and origins of the failure of the small, medium and large businesses have drawn a great deal of research. But in all, the central issue has remained finance. Meanwhile, finance as a factor has more often than not been viewed from the sourcing perspective. The issue of complexity stumbled upon by the small and medium businesses why sourcing for its medium and long term finance needs in the face of competition from the large business sector is the central focus of most researches, and thus is attracting the attention of more policy makers.

Hence, it is imperative to look at other areas of consequence to the success or failure of the small, medium and some large-scale businesses. According to Weston et al (1977), the management of working capital which represents more than half the total assets of a business is one of such areas [6]. The central focus of this research is to study the working capital management in the small, medium and large scale businesses, using VGC Telecoms Company as a case study, so as to establish factors

influencing working capital performance, how working capital management impacts on the problem of slow development, the impacts of supply and demand risks on the management of working capital and to offer recommendations on possible ways of improving working capital management. These objectives will be achieved through:

- The review of extant literature on working capital and its management.
- Examination of the WCM in the small, medium and large business sector.
- Establish how cash management, inventory management and trade credit management affect working capital management.
- Establish how working capital management impacts on the development in the industry.
- The suggestion of policy recommendations to enhance WCM in the industry.

1.4 RESEARCH METHODOLOGY

Literature bordering on different areas of working capital management is reviewed.

Thus, this research will employ qualitative analysis, and semi- structured questions will be drafted based on the issues raised from the review of various literatures. In addition, materials from journal articles, textbooks and working papers will be also used.

The use of internet and e-mails to send out questions will be explored where appropriate. Analysis on the company's financial statement will be carried out in order to verify my findings. For this reason, the methodological framework is located within phenomenological paradigm.

1.5 LAYOUT OF THE STUDY

The rest of this study is organized as follows:

Chapter 2 introduces the core issues of concern that are connected with working capital management and reviews preceding works that tackled them analytically and empirically

Chapter 3 offers the case study analysis by reviewing the background data and historical development of the company. It analyzes various concentration measures in relations with a number of competitive related variables so as to assess the efficiency and effectiveness of working capital of the company.

Chapter 4 provides the research design and methodological frameworks employed to accomplish the stated aim and objectives of the study.

Chapter 5 presents the analysis, interpretation and descriptions of the results relating to the company with reference to the aims and focus of the study.

Chapter 6 draws the conclusion from the study and formulate policy recommendations as well as further research

1.6 SUMMARY

This chapter gives fundamental insight on working capital management, its significance in small, medium and large businesses, factors influencing working capital performance, what efficient and inefficient working capital management involve. The research questions hope to explore the consequences of working capital management for company value and the factors that influence a company's working capital management performance.

Thus, the aims and objectives of this study, the research methodology and the plan of the rest of the research are laid out in this chapter.

The next chapter (chapter 2) reviews the write-ups and findings of various authors and researchers on working capital management.

CHAPTER TWO

2.0 LITERATURE REVIEW ON WORKING CAPITAL MANAGEMENT

2.1 INTRODUCTION

The term working capital implies a company's investment in short term assets cash, short term securities, accounts receivables and inventories [6]. Precisely, these assets are financed by short-term liabilities, thus net working capital is current assets less current liabilities.

Working capital management is the decision relating to working capital and short term financing, and this includes managing the relationship between the company's short-term assets and its short-term liabilities. This enables the company to continue operations and to have enough cash flow at its disposal to satisfy both maturing short-term debt and upcoming operational expenses, which is the major objective of working capital management.

2.2 POLICY OF WORKING CAPITAL

The policy of working capital in accordance to Weston et al position is concerned with two sets of relationship among balance sheet items. Firstly, the policy question about the degree of total current assets to be held. Though current assets vary with sales, it should be noted that the ratio of current assets to sales becomes a policy issue. A company may hold relatively little proportion of stocks of current assets if it elects to operate aggressively. Such move is to lower the required level of investment and enhance the expected rate of return on investment. Thus, due to excessive tough credit policy, such aggressive policy may as well enlarge the possibility of running out of inventories and cash or sales loss.

The connection/relationship between types of assets and means such assets are financed is the second policy question. One policy requests for harmonizing asset and liability

maturities: financing short term assets with short term debt, and long term assets with long term debt or equity. If such policy is implemented, the maturity formation of debt is resolved by considering fixed versus current assets. Meanwhile, short-term debt is often less expensive to long term debt. This implies that the expected rate of return may be more if short term debt is employed.

By offsetting the return advantage shows that huge proportion of short term credit amplifies the risks as follows:

- First, having to renew this debt at much higher interest rates
- Second, not being able to renew the debt at all whenever the company goes through tough times.

Both areas of working capital policies entail risk/return tradeoffs. Therefore, the need to work-out a modality to establish the best possible levels of each type of current assets to hold, and the substitute methods to finance them is necessary. The procedure of accomplishing these optimal conditions is what may be termed as working capital management.

As pointed out by Shin and Soenen (1998) that Wal-Mart and K-Mart had comparable capital formations in 1994, but K-Mart's poor management of working capital contributed to its going bankrupt [3]. This is because K-Mart had a cash conversion cycle of about 61 days whereas Wal-Mart had a shorter conversion cycle of 40 days instead. K-Mart was with faced an extra \$193.3 million per year financing costs arising from long-term conversion cycle.

As pointed out in their 2005 U.S. survey report, there is a high positive correlation between the efficiency of a corporation's working capital policies and its return on invested capital.

Hence, Nunn (1981) employs the PIMS database to study the reason for some product lines having small working capital requirements, whereas some product lines are having large working capital requirements [7]. Moreover, Nunn has much interest in *permanent* rather than temporary working capital investment since he employed data averaged over four years. By employing factor analysis, he's able to identify factors connected with the production, sales, competitive position and industry.

While highlighting the function of industry practices on firm practices, Hawawini, Viallet, and Vora (1986) observe the influence of a company's industry on its working capital management. They resolved that there is a greater industry consequence on company working capital management practices which is stable over time; having used data on 1,181 U.S companies over the period 1960 to 1979. Their studies arrived at the conclusion that sales growth and industry practices are essential issues that influence company's investment in working capital [8].

The review above depicts that there are models to illustrate the way working capital refers to a company's investment in short term assets-cash, short-term securities, accounts receivable, and inventories [6]. Though, these assets are financed by short- term liabilities. Thus, net working capital is current assets less current liabilities.

Van Horne (1986) submitted that working capital management is a misnomer; if the working capital of the company is not managed. The term he stressed describes a set of management decisions that affect specific types of current assets and current liabilities [9]. In turn, those decisions should be rooted in the overall valuation of the company.

This submission does not disagree with the substance of the postulations of Weston et al. Thus, it strengthens their arguments that the idea of working capital management must

do with those management decisions which border on balancing of risk/return tradeoffs for current asset holdings and the liabilities that create those assets.

Weston et al then advised that working capital should be considered as an investment no less important than equipment and materials. They both argued that current assets embody more than half the total assets of a business, and since the investment is relatively volatile, it is worthy of careful consideration.

They argued that it is even more so for the small business. The small business may lower its investment in fixed assets by renting or leasing plant and equipment, but there is no way it can avoid an investment in cash, inventories and receivables. Further, since small and medium companies have relatively limited access to the long-term capital markets, it must necessarily rely heavily on trade credit and short-term bank loans, both of which affect net working capital by increasing current liabilities

2.3 WORKING CAPITAL CYCLE

In a business cycle, cash flows into, around and out of the business. Cash is life blood of a business, and a manager's key mission is to assist in keeping it to flow and to take the advantage of the cash-flow in making profits. A business that is operating profitably, in theory is generating cash surpluses. If it does not generate surpluses, then the business ultimately will run out of cash and expire.

The more speedily the business gets bigger the further cash it will need for working capital and investment. The cheapest and best sources of cash exist as working capital right within business. Better management of working capital generates cash, and will assist in improving profits and lessen risks. Hence, it is imperative to note that the cost of offering credit to customers and holding stocks may signify a significant percentage of a company's total profits.

There are two elements in a business cycle that absorb cash, these are - receivables (debtors that owe you money) and inventory (stocks and work-in-progress). Major sources of cash are Payables (payment from your creditors), and Equity and Loans

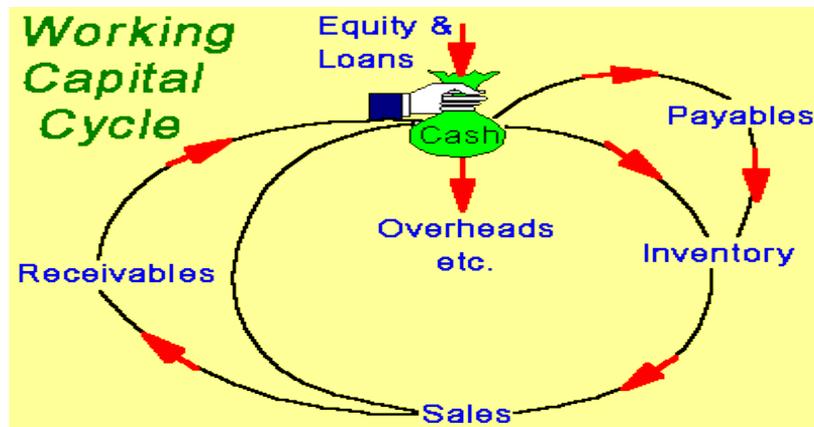


Fig. 2.1 Working Capital Cycle: Source from JPMorgan (2003) Fleming International Cash Management Survey in conjunction with the ACT

Every component of working capital, such as inventory, receivables and payables has two dimensions, which are *TIME* and *MONEY*. To manage working capital entails both time and money. A business will spawn more cash or will need to borrow less money to finance working capital if possible to get money to move faster around the cycle, i.e. getting monies due from debtors as fast as possible or lowering the sum of monies tied-up by lowering inventory levels relative to sales. As a consequence, one can lower bank interest cost or one will have extra free money that will be available to enhance more sales growth or investment. In the same way, negotiating improved terms with suppliers such as getting longer credit or an increased credit limit will effectively create free finance to assist funding future sales.

Working capital is referred to as the fuel powering global business activities, but often a greater percentage of this fuel is constantly stuck in the pump; tied up in aging invoices and lengthy Days Sales Outstanding (DSO) cycles. Those firms that are looking to enhance cash flow have primarily focused on collections. Whereas traditionally,

collections have always been a reactive process i.e. picking up on aging invoices after they are already late in payment, and then resolving the underlying issues in an effort to collect. Since it is not easy to go up-stream and systematically uncover and resolve the root causes of issues that actually drive the delayed payments. Hence, most of the collections efforts normally end up squarely emphasizing on dealing with symptoms, rather than addressing the real issues [12, 13].

As a result of process automation built around innovative dispute prevention technologies, it is now possible to take a more proactive approach to collections that are proving to yield enormous dividends that include the unlocking of millions in working capital, elimination of revenue leakage, and radical improvements in overall customer satisfaction. Many companies have already seen significant returns from their work in this area. As submitted by JP Morgan (2005); to optimise working capital globally, payment and information components of a transaction must be integrated.

2.4 CASH MANAGEMENT

Cash is the oxygen which enhances a business survival and prosperity, and is the basic indicator of business health. As a business can survive for a short time without sales or profits, it cannot survive without cash i.e. it will die. As a result the inflow and outflow of cash need careful monitoring and management.

Cash flow is a function of the time and sums of money that flow into and out of the business weekly and monthly basis. A good cash-flow implies that the method of income and spending a business employs, will enable it to have cash availability to pay bills on time.

Cash balances should not be confused with profit. Profit is known to be the difference between the total amount your business generates and all of its costs that is normally assessed over a year or other trading period. There is possibility of being able to

forecast a good profit for the year, but still face situations when you are strapped for cash[11,14].

For most businesses to make profit, they have to supply goods or services to their respective customers before being paid. But, no matter how profitable the bargain, lack of enough money to pay staff and suppliers before receiving payment, the business will be unable to deliver its own side of the bargain or make profit.

In trading and growing your business effectively, one must build up cash balances by ensuring that the timing of cash movements puts you in an overall positive cash flow position. Meanwhile, having a lot of cash in bank does not make any good business sense. If the cash is not needed to be used immediately, it is advisable to lodge it in an account where it will earn high interest, or maybe invest it in short term investment.

Companies of various sizes have fluctuating cash balances. These fluctuations can occur at random or at expected intervals. It may occur on a monthly basis due to variations between payables and receivables, or seasonal basis depending to the nature of the business.

Regardless of the reason for fluctuations in the cash account, a company incurs costs in holding cash balances in excess of their immediate transactional needs.

The costs involved in holding cash are stated in terms of opportunities lost to invest these funds at a positive interest rate. The interest income lost becomes increasingly large as the amount of idle funds and the rate of interest increases. The managing of the funds of a company in order to maximise cash availability and interest income on any idle funds is the concern of cash management [9].

At one end, the role of cash management begins the moment a customer writes a cheque to pay the company on its account receivable. The role ends when a supplier, an employee or the government realizes collected funds from the firm on an account

payable or accrual. The activities between these two points fall within the realm of cash management.

A perfectly timed asset conversion cycle is completed when the firm collects cash exactly when its accounts payable and accrued expenses fall due or mature. In reality, hardly ever does a firm have its obligation maturing at the same as it collects cash, thus the need for financing.

As reported by *Fortune* magazine article of 29th November, 2004 S&P 500 non-financial corporations have amassed \$600 billion in excess cash. The Wall Street Journal of 1st December, 2004 cited one consultant who estimated that corporate liquidity now totals \$4.7 trillion, up from \$3.6 trillion in 1999, with a majority of surveyed U.S. companies viewing themselves as net investors rather than net borrowers. While at the same time GDP growth rates and interest rates are increasing. GDP growth necessitates increased investment to keep production apace with demand, while higher interest rates accentuate the value of cash reserves. Cash is a valuable asset that can spur financial growth, reducing more expensive debt, and working-capital requirements.

According to JPMF International Cash Management Survey, treasurers investing cash for short time periods, often overnight or less than one week may be because cyclical companies often generate volatile cash flows, making treasurers more comfortable to remain liquid so that they can react to unforeseen outflows. Inadequate cash flow forecasting and positioning, which leaves treasurers in the dark as to their true cash position and lacking the confidence to invest or borrow for longer time periods may also be the cause.

Average cash balances of short-term investment portfolio (US\$) equivalent

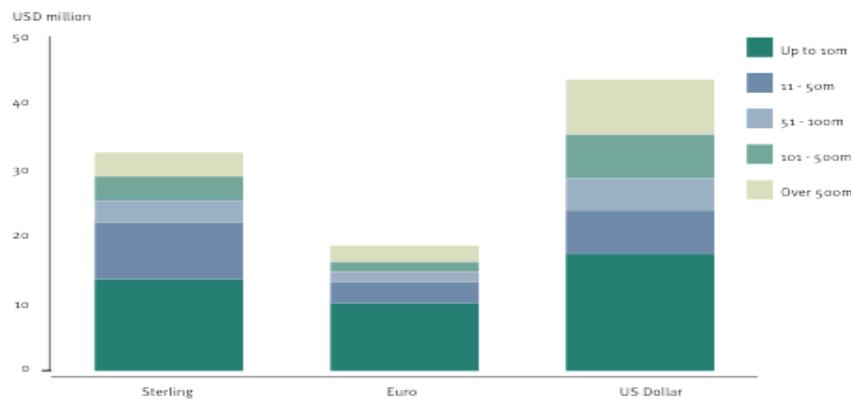


Fig.2.2. Cash Management Survey: Source from JPMorgan (2003) Fleming International Cash Management Survey in conjunction with the ACT

2.4.1 Cash positioning

Whichever form of business and however volatile the cash flows, treasurers can maximise the value of their cash holdings by more accurately identifying and predicting positions throughout the day to enhance investment or borrowing opportunities and therefore overall return.

Working capital expresses the liquidity of a business. A business with poor liquidity will have difficulty in paying its everyday expenses, such as salaries and wages, rent and telephone bills. If management refuses to constantly monitor, control and manage a business's liquidity (its amount of working capital), then the business may likely end up in a difficult situation with its creditors.

The following key points are important to working capital:

- The current assets (cash, inventories/stock and accounts receivable/debtors) in the business need to be monitored and kept at realistic levels.

- Current liabilities constitute all the short-term payments that need to be met by the business (obligations that need to be paid within one year). Short-term loans and accounts payable are examples.
- Most successful businesses keep the working capital ratio as low as possible, and keep cash circulating, so as to maximize profit.
- The size of the working capital ratio depends on the type of industry the business operates in, and on financial arrangements such as overdrafts and creditor policy. Ratios between 1.5:1 and 2:1 are acceptable for most businesses [15].

2.5 INVENTORY MANAGEMENT

It is the goal of inventory management to determine the optimum level of stock on hand under conditions of changing market demand, production requirements, and financial resources (Glos et al 1976). Effective inventory management enables an organization to meet or exceed customer's expectations of product availability while maximizing net profits or minimizing costs.

Inventory of materials, parts, goods and supplies represent a high investment in all businesses. The success of a business could be made or marred by its inventory policies. Before any decision rules can be applied to the management of stock, a proper system of control and recording of stocks must be instituted. If stocks are uncontrolled, costs of production will vary indistinctly and this will mean that information required for other financial management decisions will be inaccurate [10]

2.6 ACCOUNTS PAYABLE

Accounts payable or trade creditors as sometimes called form a major part of the outside debt of small businesses which have less access to long-term funds. According to Bates (1971), trade creditors form a heterogeneous group, and sums other than pure trade credit and debt are often included. As an example, hire purchase due, sums due for wages, rents, sums due for purchase tax, and income tax are all included, and loans to associated concerns, if of a fairly short-term nature, are frequently included in debtors. Because long-term credit is frequently unavailable to the small business, short-term credit is especially important.

2.6.1 Accounts Receivable versus Accounts Payable

Credit terms granted seem to depend to some extent on the traditions and customs of the trade in which the business is operating, and some trade associations have fairly strict rules about trade credit terms, and discounts; but there is little doubt that on occasion, the extension of trade credit on more favourable terms can be a way of extending sales (Bates, 1971).

Moreover, differences between industries also reflect the relationship between the company and its customer. According to Bates, businesses which work basically on specification orders for regular customer tend to give credit; businesses that make their own products and place them in the market without advance orders tend to receive credit. This suggests that firms working on contract for other firms are very much at their mercy when it comes to receiving payment for work done. Government institutions are frequently mentioned as bad payers of trade debt.

Net trade credit results when there is a difference between creditors and debtors; it represents net funds granted or received by the firm on this account. Part of the difference between the two is as a result of value added to materials in the process of

production, and it would be expected that the higher was value added and the lower were material costs as a proportion of total costs, the greater would be the difference.

Bates argued that if creditors exceed debtors, that is, the firm receives net trade credit; it is a sign of *over trading*, which consists of attempting the expansion of a business without adequate background of liquid capital. The danger of over trading is that the returns from trading lag behind expenditure, and after a time, creditors become restive and may, in time, enforce liquidation. On the other hand, the dangers of giving out net trade credit are fairly obvious; if a firm gives out too much in pursuit of sales, as is not uncommon in the early phases of the company's life, it is danger of overtrading and also runs the risk of acquiring bad debts.

2.7 FINANCING DECISION

As submitted by Weston et al (1977), one of the policies of working capital management is that investments with short-term gestation period be matched with funds of similar duration. Hence, it is preferred that investments in current assets be financed by short term liabilities.

2.7.1 Late Payment and Credit Management in the Small Firm Sector:

Peel and Wilson (1996) submitted that in small and growing businesses, efficient working capital management is a essential component of success and survival i.e. profitability and liquidity.

Managing cash-flow and the cash conversion cycle, is a critical component of overall financing management for all firms, and particularly small firms who are often more reliant on short-term sources of finance.

In recent times, policy initiatives have directed a large amount interest on one element of cash-flow management, the extension of trade credit and management of trade debts i.e. credit management. Trade credit entails the supply of goods and services on a deferred payment basis by giving the customer time to pay. The huge volumes of inter-company sales are by credit terms.

Trade credit is a key source of funding for smaller firms; since the stocks and flows of trade credit are usually twice the size of those for bank credit.

In the Nigerian corporate sector, more than 75% of daily business to business transactions are on credit terms. Evidently, trade debtors is one of the main assets on most corporate balance sheets, representing up to 30-35% of total assets, on average, for all firms.

The impact of the late payment of debts on the corporate firm, and most particularly small business sector, was a subject of debate for so many of years, which attracted significant media attention and a policy intervention (Late Payment of Commercial Debt Act 1998) that made mandatory a statutory right to interest on late payments, initially to small firms less than 50 employees).

Surveys conducted by several bodies such as the Institute of Directors, the Small Business Research Trust, the Forum for Private Businesses indicated that debt was a persistent problem for businesses during the recession of the early 1990s. It should also be noted that late payment of commercial debt is identified as a factor inhibiting corporate performance in most Government.

There are, of course, considerable variations between EU Member States' legislation on late payments, for instance, surrounding statutory rights to interest, redress procedures and the costs of pursuing debts. Indeed the recent proposed EU Directive to combat

aspect of trade credit, however, is the two-way nature of the transaction; many companies, particularly those at intermediate points in the value chain, both use trade credit as customers and provide it as suppliers. Managing the *net* trade credit position is critical. For small firms supplying trade credit can be an important strategic or competitive tool that plays a role in capturing new business, in building supplier-customer relationships, in signalling product quality, 'reputation' and financial health, and in price competition and price discrimination.

Nevertheless for small firms, supplying and financing trade credit, and managing trade debt, can cause cash-flow/financing incomplete and often established between supplier and buyers with asymmetric bargaining difficulties.

Trade credit contracts are by their nature incomplete and often established between supplier and buyers with asymmetric bargaining positions. Indeed enforcing credit terms can be a problem, particularly for smaller firms.

Indeed, the late payment of commercial debt has often been cited as a factor that precipitates financial distress and/or constrains growth amongst smaller firms. Given the importance of trade credit, credit management and the late payment of commercial debt to the small firm sector, it is perhaps surprising that relatively little research evidence has been published on these issues. Moreover, most policy interventions aimed at tackling the 'late payment problem', do not appear to have been informed by much empirical and/or theoretical research (White Paper 'Competitiveness: Helping Business to Win' (HMSO, 1994))

Empirical studies of businesses financial structures have shown that, in comparison to large firms, small ones are less liquid, exhibit more volatile cash flows and profits, and rely more heavily on short term debt funding. Moreover, they are more likely to be credit

rationed, with financial institutions restricting the flow of funds to sectors when they are unable to fully evaluate the risks involved. Given these characteristics, it is perhaps unsurprising that the efficient management of working capital, and more recently good credit management practice, have been stressed as being pivotal to the health and performance of the small firm sector (Peel and Wilson, 1996).

Various aspects of working capital have been repeatedly shown to represent constraints and problems to small firms. Dodge et al (1994) reported that, cash-flow management was one of the most important internal problems experienced by small US firms.

Working capital management has been shown to be a major problem both at start up (Moore, 1994) and for growing firms (Dodge et al, 1994). In addition, during the 1990s, managing cash flow was consistently reported as one of the most important problems (Survey of small firms by respondents of the NatWest UK quarterly) (SBRT, 1996).

Overall, research suggests that 'poor' or 'careless' financial management is a major cause of business failure (Richardson, Nwankwo and Richardson, 1994). The fact that rapid growth often consumes cash, rather than generating it, has often caused financial difficulties for financially unsophisticated small firm owners.

Reasons purported include the lack of time, resources and skills of small business managers who appear to prefer to expend their efforts in satisfying the requirements of external parties.

In EU, there had been serious debate on the late payment of commercial resources and skills of small business managers who appear to prefer to expend their efforts in satisfying the requirements of external parties. Credit management practice was required to alleviate the problems. Various lobbying groups, resources and skills of small business

managers who appear to prefer to expend their efforts in satisfying the requirements of external parties.

Others stressed the need for a greater awareness of and training in 'best practice' credit management. For example, the Institute of Directors (IOD, 1993) argued that the majority of overdue debtors can be reduced by improved credit management. However, the Forum for Private Business (FPB), a representative of small UK businesses, was amongst the most vociferous advocates of government intervention to mitigate the effects of late payment on the smaller firm sector. The policy prescription favoured by the FPB was the statutory imposition of interest on late payment by debtors. It was posited that such a provision would simultaneously bind all firms into paying promptly, create a level playing field in payment behaviour and ease the cash flow problems of small firms, compensated for any overdue payments (HMSO, 1998).

Arguments against the statutory imposition of interest for late payment were formulated in terms of 'contractual freedom'; in that trade credit is often used as a competitive tool and as a means of building trading relationships. Suppliers may wish to retain the flexibility to vary (informally) credit terms for specific customers and customers may value the freedom to negotiate payment periods with their suppliers as financial circumstances dictate (Gray, 1997). A further powerful argument against legislative intervention contended that the imposition of statutory interest may in fact, dwindle key source of short term finance for the small firm sector. Small firms have been shown to value trade credit as a source of finance for its flexibility and freedom from formal restrictions (Cosh and Hughes, 1994). It is also posited that trade credit is used widely by small firms who are unable to obtain sufficient finance from other sources such as financial institutions (Peterson and Rajan, 1997).

Keasey and Watson (1992) in their study of small firms in the north of England (Yorkshire), found a negative relationship between bank finance and trade credit (meaning that they are used as substitutes), and a positive relationship between external finance and profits.

Wilson, et al (1997) in an empirical study of the demand for trade credit by small UK firms, also found strong evidence of a financing demand for trade credit. They surmised that small firms that pay trade credit liabilities late appear to do so when they reach their limit on short-term bank finance. These 'credit rationed' firms were, typically, growing and export oriented. In consequence, if the imposition of statutory interest significantly reduces the trade credit offered to smaller firms, this may lead to severe liquidity problems and increased failure rates unless alternative finance is readily available.

A number of other solutions to the problem of late payment have been put forward. For example it has been argued that credit management is a neglected function in many problems and increased failure rates unless alternative finance is readily available. Wilson et al (1995) identified poor credit management practices as one of the underlying causes of late payment.

In addition to poor credit management practices, causes were considered to include over reliance on trade credit and short term finance and consequently an increased sensitivity to late payments. The Bank of England report on finance for small firms (BOE, 1996) observed a similar occurrence of ad hoc credit management which was viewed as being inefficient. They concluded that this was due to the inherent lack of administrative resources in the small firm sector.

It has been argued that policies that emphasise the provision of financial and credit management training for smaller businesses would have a beneficial impact. This may

also raise awareness of the services and potential benefits of credit insurance and factoring, and the returns to investments in information technology.

2.7.2 Cash flow volatility, earnings volatility and firm value.

The theory of corporate risk management argues that shareholders are better off if a firm maintains smooth cash flows. For instance, Froot, Scharfstein, and Stein (1993) argued that smooth cash flows can add value by reducing a firm's reliance on costly external finance. Empirically, Minton and Schrand (1999) showed that cash flow volatility is costly as it affects a firm's investment policy by increasing both the likelihood and the costs of raising external capital. One recurring theme in this literature is that, all things being equal, firms with smoother financial statements should be more highly valued. While previous research finds that cash flow volatility is costly, no direct evidence exists linking financial statement volatility to firm value. Such a link is important because, in order for risk management to matter, smooth financials must be valued at a premium to more volatile ones. Investors value firms with smooth cash flows at a premium relative to firms with more volatile cash flows. Consistent with risk management theory, strong evidence shows that cash flow volatility is negatively related to proxies for firm value.

There are a number of reasons why earnings volatility may matter to the firm, independent of cash flow volatility. For instance, prior empirical work suggests that analysts tend to avoid covering firms with volatile earnings, as it increases the likelihood of forecast errors. Similarly, it is imperative that institutional investors avoid companies that experience large variations in earnings. High earnings volatility also increases the likelihood of negative earnings surprises; in response, managers have engaged in extensive earnings smoothing. It should be noted that earnings smoothing may likely reduce a company's perceived probability of default and therefore a firm's borrowing costs. Goel and Thakor (2003) suggest that a firm may smooth earnings so as to reduce

the informational advantage of informed investors over uninformed investors, and therefore protect these investors who may need to trade for liquidity reasons. Last but not the least, Francis, Lafond, Olsen, and Schipper (2004) find firms with greater earnings smoothing have a lower cost of capital even after accounting for cash flow volatility.

In fact, under certain specifications the market appears to punish firms for undertaking smoothing behavior preferring earnings volatility mirror cash flow volatility. These results are important and suggest Managers focus their actions on smoothing cash flows rather than necessarily utilizing accruals to smooth earnings.

Of course, there are a number of other ways in which financial uncertainty interacts with firm value. According to the CAPM, systematic risk should be negatively related to value, since higher discount rates yield a lower value, all things being equal.

Further, recent empirical work suggests that not only does systematic risk affect value, but also idiosyncratic risk may be priced (Shin and Stulz, 2000). Empirical evidence suggests that there is a negative relation between systematic risk and firm value, as well as a negative and significant association between unsystematic risk and firm value.

The two alternative types of risk, namely, cash flow and earnings volatility are of primary importance since unlike financial market variables they reflect the actual stability of the firms' financial statements and are directly affected by managerial decisions and the firms' risk management policies.

2.8 NATURE OF WORKING CAPITAL

Working capital management is centred on problems arising in attempting to manage the current assets, the current liabilities and the interrelationship that exists between them. As explained earlier, the term current assets refer to those assets which business will be

converting into cash within one year without experiencing a dwindling in value and upsetting the operations of the company. Most major current assets are cash, marketable securities, accounts receivable and inventory.

Current liabilities are referred to those liabilities that are intended at the beginning, payable in the ordinary course of business, within a year, out of the current assets or earnings of the concern. Among the essential current liabilities are accounts payable, bills payable, bank overdraft, and outstanding expenses. The Principal objective of working capital management is to manage the company's current assets and liabilities in such a way that a satisfactory level of working capital is maintained. It is so due to the fact that if the company cannot sustain an acceptable level of working capital, it is certainly may lead into what is termed insolvency and may end up into bankruptcy.

Current assets must be large as much as necessary to be able to cover its current liabilities to guarantee a reasonable margin of safety. All of the current assets are to be managed efficiently so as to maintain the liquidity of the company; while not keeping too high a level of any one of them. Every of the short-term bases of financing must be managed continuously to guarantee the possible best way usage. Hence, the interaction between current assets and current liabilities is the main premise of the theory of working management

The central elements of the theory of working capital management includes its definition, need, optimum level of current assets, the trade-off between profitability and risk which is associated with the level of current assets and liabilities. In addition to financing mix strategies and so on [33].

2.8.1 Concepts and Definitions of Working Capital

The two concepts of working capital are gross and net. The term gross working capital is also known as working capital, implying the total current assets. The term net working capital can be defined in two ways: The most common definition of net working capital (NWC) is the difference between current assets and current liabilities.

Alternate definition of NWC is that portion of current assets which is financed with long-term funds.

Most task of the financial manager in managing working capital proficiently is to guarantee adequate liquidity in the operation of the company. The liquidity of business enterprise is determined by its ability to satisfy short-term obligations as they become due.

Three basic measures of company's overall liquidity are:

- the current ratio,
- the acid-test ratio, and
- the net working capital.

The suitability of the first two measures is discussed in detail in chapter 5. Net working capital (NWC) as a measure of liquidity is not very useful for comparing the performance of different companies, but it is quite of liquidity that is not really essential for comparing the performance of various companies, but it is very helpful for internal control. The NWC contributes enormously while comparing the liquidity of the same company over time. For the main reason of working capital management, therefore NWC is expected to measure the liquidity of the company. Meanwhile, the focus of working capital management is to manage the current assets and liabilities in such a way that an acceptable level of NWC is sustained

2.8.2 The common Definition of NWC and its Implications

NWC is commonly defined as the difference between current assets and current liabilities. Efficient working capital management requires that company should operate with some amount of NWC, the exact amount varying from firm to firm and depending, among other things, on the nature of industry. The theoretical justification for the use of NWC to measure liquidity is based on the premise that the greater the margin by which the current assets cover the short-term obligations, the more is the ability to pay obligations when they become due for payment. The NWC is necessary because the cash outflows and inflows do not coincide. In other words, it is the non synchronous nature of cash flows that makes NWC necessary.

In general, the cash outflows resulting from payment of current liabilities are relatively predictable. The cash inflows are however difficult to predict. The more predictable the cash inflows are, the less NWC will be required. A company like electricity generation company, with almost certain and predictable cash inflows can operate with little or no NWC. But where cash inflows are uncertain, it will be necessary to maintain current assets at a level adequate to cover current liabilities, that is there must be NWC [33].

2.8.3 Alternative Definition of NWC

NWC can alternatively be defined as that part of the current assets which are financed with long-term funds. Since current represent sources of short-term funds, as long as current assets exceed the current liabilities, the excess must be financed with long-term funds. This alternative definition, as shown subsequently, is more useful for the analysis of the trade-off between profitability and risk

2.9 TRADE-OFF BETWEEN PROFITABILITY AND RISK

While carrying out the evaluation of a company NWC position, one important consideration is the trade-off between profitability and risk. This is to say that the level of NWC has a bearing on profitability and also on risk. The term profitability employed in this framework is a measure of profits after expense. Risk is the probability that a company will develop into technically insolvent so as not be able to meet its obligations whenever they are due for payment. The risk of becoming technically insolvent is measured using NWC. It is assumed that the greater the amount of NWC, the less risk prone the company is. Or, the greater the NWC, the more liquid is the company and, therefore, the less likely it is to become technically insolvent. On the contrary, lower of NWC and liquidity are connected with rising levels of risk. The correspondence between liquidity, NWC and risk is such that if either NWC or liquidity increases, the Company's risk decreases.

2.9.1 Nature of Trade-off

If a company is to increase its profitability, its risk must also be increased. Similarly, if it is to decrease risk, it must decrease profitability. The trade off between these variables is that in spite of how the company increases its profitability in the course of the manipulation of working capital, the effect is a corresponding increase of a related increase in risk as determined by the level of NWC. The consequences of changing current assets and current liabilities on profitability-risk trade-off are discussed first and afterwards they have been integrated into an overall theory of working capital management [33].

While evaluating the profitability-risk trade-off related to the level of NWC, three basic assumptions, which are generally true, are:

- that we are dealing with a manufacturing company
- that current assets are less profitable than fixed assets; and
- that short-term funds are less expensive than long-term funds

2.9.2 Effect of the level of current assets on the profitability-risk trade-off.

The effect of the level of current assets on profitability-risk and trade-off can be shown, using the ratio of current assets to total assets. This ratio indicates the percentage of total assets that are in the form of current assets. A change in the ratio will reflect a change in the amount of current assets. It may either increase or decrease [33].

2.9.3 Effect of Increase/Higher Ratio

The increase in the ratio current assets to total assets produces a decline in profitability since the current assets are believed to have lower profitable compared to fixed assets. One other effect of the increase in the ratio will be that the risk of technical insolvency would also decrease because the increase in current assets, assuming no change in current liabilities, will increase NWC.

2.9.4 Effect of Decrease / Lower Ratio

The decrease in the ratio of current assets to total assets produces an increase in profitability along with risk. Increase in profitability is basically as a result of the consequent increasing in fixed assets that may produce higher returns. Since the current assets decrease without a resultant decrease in current liabilities, the amount of NWS will decrease, and consequently increasing risk

2.10 CONCLUSION

This chapter looks deeply into various authors and researchers view of the causes of failure in many firms and what constitute an efficient working capital management in those firms doing well. Cash management, Inventory management and Trade management are extensively analyzed as main contributors to efficient working capital management.

Chapter three provides the case study analysis and analyses different concentration measures to assess the efficiency of working capital management in the company

CHAPTER THREE

CASE STUDY

3.1 BACKGROUND OF THE COMPANY

VGC Telecoms Limited was incorporated as a private liability company in April 1995. The company is established to provide communications-related services across Nigeria. The company offers both wireless and wire line services across the country.

The company recognises the importance of high standard of corporate governance. The Board consists of two (2) executive and five (5) non-executive directors chaired by Yaakov Chai. The Board met three times in the year 2008 under review. The board has focused on its responsibilities and has perfected its operational strategies to achieve reasonable performance of the company.

The issued and fully paid up capital is N76,893,006 (£310052.44) divide into N153,786,012 (£62000.05) ordinary shares of 50 kobo (£0.002) each .Of this amount, N76,831,048 (£309802.61) shares equivalent to 49.96% was held by Volker Securities & Investment Limited, while N15,548,188 (£62694.31) shares equivalent to 10.11% was held by the Nigerian Social Insurance Trust Fund(NSITF) as at 31 December 2008

WORKING CAPITAL MANAGEMENT IN THE COMPANY

3.2 CASH MANAGEMENT.

A total of 13 questions were answered by the CFO under cash management, covering the areas of (1) cash forecasting (2) management of cash (3) surplus cash management and (4) control of cash. The data are analysed below:

Please see appendix I (page 65) for the questions indicated in tables 1 – 9. There is only one answer to choose out of the three or two likely possible alternatives available to each question. Alternative (a) is not an acceptable working capital policy, alternative (b) is in-between and alternative (c) is the acceptable working capital policy. Alternative (a) attracts 0 point, alternative (b) attracts 2.5 point and alternative (c) attracts a full point of 5 being the acceptable WCM policy.

Table 1

3.2.1 **CASH FORECASTING**

Questions	Total Points	Points to Options (a)	Points to Options (b)	Points to Options (c)	Score
Question 1	5	0	2.5	5	2.5
Question 2	5	0	2.5	5	5
Question 3	5	0	2.5	5	2.5
Total	15				10

For cash flow forecasting, the company obtained 10.0 points out of the 15 points reserved for the 3 questions. The company's cash flow could sometimes be predicted due to the nature of the business. This is in the company's favour as it will aid cash planning. So it scored the 2.5 points allocated to the (b) optional answer. Also, it can be seen that the company plan its operation by budgeting hence it scored 5 points allocated to the (c) optional answer and by scoring 2.5 in the last question it can be deduced that the company sometimes forecast its cash flow.

Table 2

3.2.2 **MANAGEMENT OF CASH**

Questions	Total Points	Points to Options (a)	Points to Options (b)	Points to Options (c)	Score
Question 4	5	0	2.5	5	2.5
Question 5	5	0	2.5	5	2.5
Question 6	5	0	2.5	5	5
Total	15				10

The company score in the management of cash is 10 points out of 15 points. The company has a provision of sourcing immediately needed short-term funds and the source is reliable. Hence, the company obtained the 5 points reserved to the option(c) answer. The 2.5 scored in each of questions four and five shows that the company has a determined optimal and minimal cash balances.

Table 3

3.2.3 **SURPLUS CASH MANAGEMENT**

Questions	Total Points	Points to Options (a)	Points to Options (b)	Points to Options (c)	Score
Question 7	5	0	2.5	5	5

Question 8	5	0	2.5	5	5
Question 9	5	0	2.5	5	0
Total	15				10

The company obtained 10 points in surplus cash management. There are periods when the company experiences surplus cash management. This point is easily determined since it has optimal and minimal cash balance policies.

However, the surplus cash points must be when it has cash in excess of immediate requirements. It is the policy of the company to move part of the surplus cash to savings deposits that yield interest and the other part to finance capital assets. Hence it scored 5 points reserved for option(c) in each of the first two questions. However, the aim of investing in capital assets is high profit only, hence it scores zero (0) point.

Table 4

3.2.4 **CASH CONTROL**

Questions	Total Points	Points to options(a)	Points to options(b)	Points to options (c)	Score
Question10	5	0	2.5	5	2.5
Question11	5	0	2.5	5	5
Question12	5	0	2.5	5	2.5
Question13	5	0	2.5	5	2.5

Total	20				12.5
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With control of cash, it obtained 12.5 out of the 20 points allocated to the 4 questions. Sometimes, the company use accelerated cheque-clearing system where it pays extra charges to the bank. Some other times, under special arrangements, the banks give value to their cheque before clearing. Because it is not done all the time, the score is 2.5 points. The issue of slowing down disbursements is common in the company. Hence, the whole 5 points that question is awarded. The company takes other forms of credit from time to time, but not often enough. It also scored 2.5 points there. It also scored 2.5 points in the use of float, because, it sometimes ensures there is positive float.

A total of 65 points is allocated to the 13 questions under cash management (5x13). The company scored 42.5 out of the 65 points. This is a percentage performance of 65.4 percent (42.5/65).

3.3 INVENTORY MANAGEMENT

Seven questions were answered in this section; all seven bordering on the control of inventory and determination of re-order levels and quantities. The answers are shown in table 5

Table 5

Questions	Total points	Points to options(a)	Points to option(b)	Points to option(c)	Score
Question14	5	0	2.5	5	5

Question15	5	0	2.5	5	5
Question16	5	0	2.5	5	2.5
Question17	5	0	2.5	5	5
Question18	5	0	2.5	5	5
Question19	5	0	2.5	5	2.5
Question20	5	0	2.5	5	2.5
	35				27.5

For inventory management the company obtained 27.5 points against the 35 points reserved for the seven questions. The record keeping system was described as accurate and this attracted 5 points. It has an inventory control policy or an institutionalised system of control.

The system of control employed fit into one of Lin's model. It is not a traditional system that relies on judgement and experience and thus it scored 5 points.

There are also planned re-order level for the company's stocks and does not wait until stock is completely exhausted before placing a new order. In both areas (i.e. questions 4 and 5) it obtained 5 points. The order quantities are determined and such are varied from time to time. So it obtained 5 points. The re-order quantities and points are determined not by any definite system as suggested by Lin [16], but by rule of thumb. It scored 2.5 points in each of the last two questions.

The seven questions for inventory management have 35 points allocation. The company scored 27.5 points. This is a percentage performance of 78.6 percent (27.5/35).

3.4 TRADE CREDIT MANAGEMENT

Seventeen (17) questions were answered in trade credit management, in the areas of (1) purpose and terms of credit, (2) the price credit (3) determination of credit risk and collection policy, (4) control and financing of credit. The analysis was as follows.

Table 6

3.4.1 TERMS AND PURPOSE OF CREDIT

Questions	Total points	Points to option(a)	Points to option(b)	Points to option(c)	Score
Question21	5	0	2.5	5	2.5
Question22	5	0	2.5	5	2.5
Question23	5	0	2.5	5	2.5
Question24	5	0	2.5	5	2.5
Question25	5	0	2.5	5	2.5
Question26	5	0	2.5	5	2.5
Total	30				15

The company obtained 17.5 out of the 30 points reserved for the 6 questions in credit terms and purpose of credit. Its policy regarding how much credit to extend to buyers (as a proportion of total sales) and how much credit should be extended to any one customer. In both cases, it scored 2.5 points. It has definite credit period stated to be 28 days. Usually the shorter the period, the better (except where the incremental gain of the longer period is higher than the marginal cost of carrying the amount of receivables). It scored 2.5 for the 28 days period. There is a planned discount policy in the company but this policy could sometimes be bent to win new accounts. It scored 2.5 in each respectively. The credit sales for the period covered by the study were about 40 percent of total sales.

Table 7

3.4.2 PRICING OF CREDIT AND COST CONSIDERATION

Questions	Total Points	Points to options(a)	Points to options(b)	Points to options (c)	Score
Question27	5	0	2.5	5	2.5
Question28	5	0	2.5	5	2.5
Question29	5	0	2.5	5	5
Question30	5	0	2.5	5	0
Total	20				10

The score for pricing of credit is 10 against the total points of 20 allocated to the 4 questions.

From the data, between 6 and 10 percent of the bills is spent on collection expenses. At the end of the 28 days credit period, between 21 and 40 percent of the bills still remain outstanding. This means that about 12 to 20 percent of the bills receivable are spent on collection efforts before all bills are collected. The proportion collected and the proportion spent, each scored 2.5 points. Bad debt incidents are negligible. It scored 5 points there.

In pricing credit, the costs of additional billing and record keeping, high collection expenses (between 12 and 20 percent in this case), the time value of the capital tied up, etc are considered. The company simply prices credit like cash sale and not higher than cash sales. There it scored zero (0).

Table 8

3.4.3 CREDIT RISK AND COLLECTION POLICIES

Questions	Total points	Points to option(a)	Points to option(b)	Points to option(c)	Score
Question31	5	0	2.5	5	5
Question32	5	0	2.5	5	5
Score	10				10

In credit risk and collection policies the company obtained 10 points out of the 10 points reserved for the 2 questions. This implies that the company does analyze the credit risk of customers before granting credit. That is the issues of collateral, capital and condition

are taken into consideration before deciding who to extend credit to, hence the company scored 5 points.

The bill collection policy of the company combines the procedures of letters, phone calls, personal visits, threats to cut off services, hence scoring 5 points also.

Table 9

3.4.3 **CONTROL AND FINANCING OF CREDIT**

Questions	Total points	Points to option(a)	Points to option(b)	Points to option(c)	Score
Question33	5	0	2.5	5	2.5
Question34	5	0	2.5	5	2.5
Question35	5	0	2.5	5	2.5
Question36	5	0	2.5	5	2.5
Question37	5	0	2.5	5	2.5
Total	25				12.5

The company obtained 12.5 points against the 25 points allocated to the 5 questions in control and financing of trade credit. As established under risk determination, the company has institutionalized credit analysis system. So it interprets the financial statements of prospective customers to guide its credit policies. There, it scored 2.5 points. It takes trade credit from some customers and the quantity of trade credit it takes

is almost equivalent to the quantity it grants. Hence trade credit is recognized as one of the source of short-term finance.

The company also factors the bills receivable to fund operation and also insure same to enhance their collateral value. Hence using other form of financing is indicative of the fact that it does not rely heavily on bank facilities to finance its operation.

The seventeen (17) questions for this section have a total of eighty-five (85) points. The company scored 47.5 points, which is an overall percentage score of sixty (60%) percent.

3.5 CONCLUSION

After critically analyzing the performance of VGC Telecoms Ltd in the year 2007/2008 through the concentration measures vis-à-vis cash management, inventory management and trade credit management; it scored 60%. This indicates efficient working capital management in the company.

Chapter four gives detail explanation of different research design and methodological procedure used in achieving aim and objectives of a research work.

CHAPTER FOUR

METHODOLOGY

4.1 INTRODUCTION

The focus of this thesis is to examine the working capital management in the small, medium and large business sectors, establish how inefficient working capital management (WCM) impacts on the problem of slow development in the sector and suggestion of policy recommendations to enhance WCM in this sector.

This chapter focuses on the research design and the methodology procedures used in this research work. The chapter begins with the discussion of the quantitative and qualitative research design and methodology, which is then followed by a full description of the mixed methodologies (triangulation) used in this study. Also included are the data collection methods and how these data are analysed.

4.2 OVERVIEW OF RESEARCH METHODOLOGIES

Basically, there are two distinct methodologies that inform the gathering of data in any research project. These are the qualitative approach and the quantitative approach.

4.2.1 QUALITATIVE APPROACH

Qualitative approach is centred on the interpretive social sciences paradigm. Qualitative methodology of investigation tends to be based on recognition of the importance of the subjective, experiential 'life-world' of human beings [17].

Shaw (2006) said that qualitative research seeks to come to terms with meaning rather than frequency because they discover or uncover issues in order to generate ideas and

hypothesis [18]. This paradigm therefore focuses on context and capture ways in which people interpret events, experiences and relationship.

Easterby-Smith et al (1991) describe the task of the qualitative methodologist as to capture what people say and do as a product of how they interpret the complexity of their world, and to understand events from the viewpoints of the participants.

Qualitative reports are not presented as a statistical summation, but rather it adopts a more descriptive, narrative style, this type of research is likely to be of particular benefit to the practitioner [19].

Qualitative research method draws on data collection methods such as in-depth interview, participant observation et cetera. One of the major limitations of the qualitative research is the time required for data collection, analysis and interpretation. The researcher has to spend a considerable amount of time in the research setting in order to examine holistically and aggregately, the interactions, reactions and activities [20]. This methodology is inductive in nature.

4.2.2 QUANTITATIVE APPROACH

This approach is grounded in the positivists that primarily reflect the scientific method of the natural sciences. This paradigm adopts a deductive approach to the research process. The researcher gathers data from the real world setting and then analyses the data statistically to support or reject the hypotheses [17]. Researchers who adopt a more deductive approach use theory to guide the design of the study and the interpretation of the results. The overall objective is to test or verify a theory, rather than to develop one. Thus the theory offers a conceptual framework for the entire study, serving also as an organising model for the entire data collection procedure [21].

Shaw [18] sees quantitative techniques as an attempt to test an hypothesis by incorporating it into the research design and responding to it by measuring its strength and weaknesses that give numerical measurements to the data collected.

A quantitative methodology abstracts data from the participants into statistical representations rather than textual pictures of the phenomenon. The entire research process is objectively constructed and the findings are usually representative of the population being studied. The main strengths of the quantitative approach lie in precision and control. Also experimentation leads to statements about causation effect on another when other variables have been eliminated or controlled [20]. Hypotheses are tested through a deductive approach, and the use of quantitative data permits statistical analysis [21].

One of the limitations of this method is that it belittles human individuality and the ability to think

For the purpose of this research, regression method will be used to measure some variables. The variables that will be measured include profit and sales. A series of software statistical package for social sciences (SPSS) will be used to calculate the regression

This method is also useful in my research analysis.

4.2.3 QUALITATIVE AND QUANTITATIVE TECHNIQUES:A DISTICTION

The differentiation between qualitative and quantitative methods can be stated by showing the differences in emphasis in a tabular form which is presented below [22, 23, 24].

QUALITATIVE METHODS	QUANTITATIVE METHODS
Emphasis on understanding	Emphasis on testing and verification
Focus on respondents'/informants' point of view	Focus on facts and/or reasons for social Events
Interpretation and rational approach	Logical and critical approach
Observations and measurements in natural settings	Controlled measurement
Subjective 'insider view' and closeness	Objective 'outsider view' distant from data
Explorative orientation	Hypothetical-deductive; focus on hypothesis testing
Process oriented	Result oriented
Holistic perspective	Particularistic and analytical
Generalisation by comparison of properties context of individual organism	Generalisation by population and membership

4.3 JUSTIFICATION FOR THE USE OF TRIANGULATION

Triangulation is about exposing potentially conflicting perspectives to analysis and showing that data can be integrated and cross-referenced to highlight consistency. Pervez & Kjell (2005) stressed that to enhance validity, there is a need to collect or analyse data through triangulation and where correctness or precision is important; it is quite logical to collect information through different methods and angles [25].

Bowen (2003) contends that a combination of qualitative and quantitative approaches should be viewed as an acceptable methodological approach for research occupying a variety of epistemological positions. Decrop (1999) is of the opinion that when methods are combined, the advantages of each methodology complement those of the other, making a stronger research design that will yield more valid and reliable findings. The inadequacies of individual methods are reduced.

In selecting an approach for my research work, I consider the benefits and shortcomings of the various methodologies, and an integrated approach combining elements of both qualitative and quantitative data was decided upon, thus making triangulation possible. Both qualitative and quantitative methods would make it possible to gather the most needed data to address the researcher problem and to ensure that the objectives of the study were successfully met.

4.4 METHOD OF DATA COLLECTION USED

4.4.1 PRIMARY DATA

These are data collected by the researcher himself for a particular need. It is used when secondary are not available or not enough to help answer his research questions. Some sources of primary data include observations, experiments, surveys and interviews. One of advantages of primary data is that they are collected for a particular use, but sometimes, it may be difficult to gain access to the target. For the purpose of this research primary data is obtained through personal interview with senior management staff of the company under study. This will help to gain first hand information about the performance of their company. The reason for using interview is to gain insight into the company's performance.

4.4.2 SECONDARY DATA

Zikmund (1997) defines secondary data as data gathered and recorded by someone else prior to the current need of the researcher [26]. Therefore, I use the financial data from the company's annual financial statements to measure their performance. I also make use of textbooks, journals, magazines and the company's bulletins to collect data about the companies.

4.5 JUSTIFICATION FOR USING CASE STUDY

Yin (2003) argued that case study approach is preferred when 'how' and 'why' questions are being asked [27]. Ryan et al (1992) said that case studies are often referred to as small sample size used to draw some inferences about that population by studying the samples. For the purpose of this study literature bordering on various areas of working capital management is reviewed. From the review, a questionnaire is constructed with a total of 37 questions. The questions are close-end type of questions, and 3 optional answers are provided for each question. The answers are also drawn from the literature review. Each question is allocated with a maximum of 5 points. Based on the literature review, option (a) is not an accepted working capital management practice; option (b) is close to the accepted practice. Option (c) is the accepted practice. Accordingly, 0(zero) points is allocated to option (a), 2.5 points to option (b), and 5 points to option (c). This order is maintained for the 37 questions and their optional answers.

The questionnaire is divided into parts I, II, and III. Part I has 13 questions centring on Cash Management; Part II has 7 questions on Inventory Management and part III has 17 questions on Credit Management and Trade Credit Financing. In the data analysis, the score of each part is divided by the total points allocation to get the percentage performance of the company in that area, and the overall score is divided by the total points in the questionnaire to get the percentage performance of the company generally. The financial statements of the company for 2007/08 are analysed to verify the findings.

The focus of the study is on VGC Telecoms Ltd. It covers the operating years of 2007 and 2008. The primary data is generated from interview with the management staff of the company, while the secondary data is from the company's 2007 and 2008 audited accounts.

Through the result, we will be able to make policy recommendation on the analysis. One of the advantages with the use of case study research is the opportunity for the holistic view of a process.

4.6 LIMITATIONS

Since this study is based on one company only, the findings might not be representative of what obtains in the whole sector. Therefore having used the literature review as the only control the result of the study is acceptable only to the extent the literature review is acceptable.

The questions are equally weighted, and this assumes that all the areas of working capital management are equally important or needs equal attention. This might not be in practice.

Furthermore, since the company's management staffs are very busy, all the interviews are done under limited time period. Finally, the conclusions and recommendations are based on the data analysed, hence they are valid only to the extent of the validity of the data.

4.7 JUSTIFICATION FOR INTERVIEW

Jon Dowel et al (1995) defines an interview as any verbal communication between researcher and the subject that provides information or further understanding through a two-way discussion. Mark Saunders (2003) says that the use of interview can help us to gather valid and reliable data that are relevant to a research question or objective and that

qualitative interviews are essentially important where it is necessary for us to understand the reasons for their attitudes and opinions.

Therefore, semi-structured interview will be conducted to probe further into the subject area in order to infer performance evaluation. The population will target through a purpose sampling method. Those to be interviewed include management staff of the company. This will be juxtaposed with some academics, which is in line with the Delphi technique that requires the opinion of experts. The questions will be open ended in order to further explore answers deeply. A sample represents a larger group and it is chosen to reflect the characteristics of the population.

4.8 ETHICAL ISSUE

Jill and Roger (2003) said that there is need to consider a number of different ethical issues and find out what rules there maybe for conducting research at an early stage in our studies [28]. Several ethical issues were addressed during the course of this research work. The ethical approval to conduct the interview will be sought. Letters will be sent to respondents to seek their consent for an interview.

The questions will be drafted and pilot-tested. This will help to eliminate flaws in the questions and to determine whether the questions are in line with the intention of researcher

4.9 CONCLUSION

This chapter explains different methodological procedures and research design that can be used to achieve stated aim and objectives of a study. It gives in-depth explanation and distinction between qualitative and quantitative analysis and also interview method which is also use in this study.

Chapter five presents the analysis as well as the interpretation and description of the result relating to the company with reference to the aim and objective of this research work.

CHAPTER FIVE

5.0 ANALYSIS, INTERPRETATION AND DESCRIPTION OF RESULT

5.1 INVENTORY ANALYSIS

A telecommunication's inventory is usually broken down into three (3) components: vendor equipment, work in progress and rendered services.

Evaluation of this breakdown may point out an imbalance that could indicate problems in a company's ability to liquidate the inventory. There are several other tools like ratios that can be applied in evaluating the quality of inventory and management efficiency in the use of its inventory investments.

$$\text{Inventory Turnover} = \frac{\text{cost of services/goods sold}}{\text{Inventory}}$$

The inventory turnover ratio is calculated by dividing the cost of goods or services sold by inventory. The resulting figure indicates the number of times during the period the inventory was converted to cash or receivables.

$$\text{Inventory Days on hand} = \frac{\text{Inventory} \times 365}{\text{Cost of services/goods sold}}$$

The inventory turnover figure can be compared with the turnover figure of similar companies in the industry as an indicator of whether the company liquidates its inventory more times or fewer than others.

5.2 ACCOUNTS RECEIVABLE ANALYSIS

Accounts receivable represents a company claims against its customers for goods sold or services rendered for which cash has not yet been received. The primary objective of an analysis of receivables is to reach a decision regarding the quality of the receivables i.e. that they will be converted into cash.

Factors to be considered in an evaluation of accounts receivables include the following [2]:

- Credit terms
- Quality and concentration of customers
- Costs of carrying the accounts receivable
- The company's historical experience.

Certain tests can be applied to accounts receivables to assist in judging their quality. These include: Ageing Schedule, Accounts receivable turnover, Accounts receivable ratio, Allowance for bad debts and charge offs (i.e. accounts the company has deemed uncollectible).

The rate of accounts receivable turnover gives an indication of their quality and management efficiency in collecting the receivables.

Accounts receivable = $\frac{\text{Receivable} \times 365}{\text{Days on hand}}$

Days on hand Sale

Accounts receivables turnover is often converted into the number of days receivable and outstanding before cash is collected.

5.3 FIXED ASSETS ANALYSIS

The fixed assets of a business consist of the tangible properties of a company that facilitates production or operation but are not subject to regular purchase and sale as a normal business activity. The adequacy and efficiency of plant or equipment is a major concern in credit analysis. Plant provides the means of production inventory of sufficient quality to be sold to and converted to cash necessary to repay the obligations of the company. It also provides the means of producing the inventory with sufficient efficiency so that costs are minimized and profits are generated. A judgement as to the adequacy and efficiency of plant/equipment requires knowledge of the types of facility necessary

to produce a particular product/service [29, 30]. A test that can be applied to assist in determining the adequacy of the plant or equipment investment is Net Plant turnover.

$$\text{Net Plant turnover} = \frac{\text{Sales}}{\text{Average Net Plant}}$$

While it is generally true that there is a direct relationship between fixed assets and the value added or services extended by a company's operations, there are numerous exceptions e.g. leases.

5.4 FINANCIAL RISK ANALYSIS

The objective of this evaluation will be to identify risks in a company's financial structure. Financial risk from the banks point of view may be defined as the possibility that a company may not be able to meet its debt obligations in a timely manner or at all.

Analysis of financial risk concentrates on two areas:

- Short term liquidity, and
- Long term solvency.

5.4.1 *Short-term liquidity*: This is the ability of the company to meet its current obligations out of its available cash or non cash resources. Working capital (i.e. current assets-current liabilities), current ratio (i.e. current asset ÷ current liabilities) and the quick ratio (i.e. cash+ market securities+ acct. receivable ÷ current liabilities) are the bank's tools to assess short term liquidity.

The nature of the product/service and the length of the production cycle are also important considerations when evaluating the adequacy of working capital. The competitive and economic climate in which a company operates will also affect the level of working capital required to protect creditors.

The quick ratio is a more severe indicator of short-term liquidity in that it attempts to assess current creditor coverage without relying on the sale of existing inventory. The

reliability of the quick ratio as an indicator of short-term liquidity depends on the quality of receivables and the market value of the securities [31].

5.4.2 *Long term solvency*: This may be defined as a company's ability to meet interest and principal payments on long term debt and similar obligations as they become due.

The best indicator of long-term solvency is the ability of a firm to generate cash profits over a period of years [32]. Financial leverage provides another means of evaluating long-term solvency.

This is defined as:

$$\text{Leverage} = \frac{\text{Total Liabilities}}{\text{Tangible Net Worth}}$$

Leverage is a means of how much a company is relying on condition to fund its assets at any point in time.

Firms with high leverage rely heavily on external funding to finance their assets, investments, while firm with low leverage generate most of their funding internally.

In general, the higher the ratio, the greater the financial risk, i.e. the likelihood that the firm might be unable to meet interest and principal payments in the future.

A total of ten (10) tables will be shown and each will be analysed to show the efficient use of working capital management of VGC Telecoms.

TABLE 10

	Group(N'000)	Group(N'000)	Company(N'000)	Company(N'000)
Year	2008	2007	2008	2007
Turnover	2,477,005	2,085,446	2,060,023	1,900,800

Cost of sale	(1,521,416)	(1,293,958)	(1,215,558)	(1,164,279)
Gross profit	955,589	791,488	844,465	736,521
Distribution expenses	(164,182)	(142,325)	(164,182)	(142,325)
Administrative expenses	(534,705)	(411,896)	(473,325)	(380,250)
Other income	43,819	36,980	43,189	36,980
Operating profit	300,521	274,247	250,777	250,926
Interest payable and similar charges	(91,028)	(114,351)	(91,028)	(114,351)
Profit on ordinary activities before taxation	209,494	159,896	159,748	136,575
Tax on profit on ordinary activities	(88,129)	(64,960)	(68,745)	(54,242)
Profit on ordin. activities after taxation transferred to general reserve.	121,365	94,936	91,003	82,333
APPROPRIATION: proposed dividend	(53,825)	(46,136)	(53,825)	(46,136)
Retained profit transferred to general reserve	67,540	48,800	37,178	36,197

The group recorded a positive turnover from ₦2, 085 in 2007 to ₦2, 477 in 2008 (see table 10). This results in a growth of 15.8% between 2007 and 2008. Despite this increase, the company continues to show resilience and to strengthen its global footprint as the number one in the fixed and wireless telecoms services.

The superior quality of VGC Telecoms networks and the intense advertisement and marketing conducted regularly has served as the leverage required to continue to grow sales.

Operating Income increased by 8.7% from ₦274, 247 in 2007 to ₦300, 521(see table 10) in line with the expanded activities in 2008. Working capital requirements due mainly to inventory build up and increased expenditure on capital projects impacted income.

However due to astute management, the pay out of interest payable and similar charges reduced by 25.6% from ₦114,351 in 2007 to ₦91,028 in 2008, this gives credence to efficient use of resources by the management team(see table10).

In order to encourage existing shareholders of the company, dividend payout increased by 14.3% from ₦46, 136 to ₦53, 825, this shows shareholders returns on their investment and to support management plans in the near future.

TABLE 11

	Group (N'000)	Group (N'000)	Company (N'000)	Company (N'000)
Year	2008	2007	2008	2007
Fixed assets	729,770	716,312	725,529	714,113
Investments	140,760	135,817	281,948	231,027
Intangible assets	137,339	134,569	137,339	134,569

Deferred payments	29,643	39,525	-	-
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VGC Telecoms continuous investment in the state of the art equipments and also refurbishment of the existing fixed assets has led to a slight increased by 1.8% from ₦716, 312 in 2007 to ₦729, 770 in 2008. Also in a bid to generate income VGC Telecoms floated two companies namely Modern Communications Technologies Limited and HFP Engineering Limited; though their contribution to the company is minimal, it is being expected to increase significantly in the near future.

TABLE 12

Current assets	Group(N'000)	Group(N'000)	Company(N'000)	Company(N'000)
Year	2008	2007	2008	2007
Stocks	823,273	722,651	640,248	596,952
Debtors	476,211	373,566	436,487	314,943
Bank & cash balances	13,637	44,563	8,992	40,492
	1,313,121	1,140,780	1,085,727	952,387

In order to remain a key player in the telecommunication industry and also reduced cost, VGC Telecoms was able to source for its telecom equipments from a Chinese vendor known as Huawei, hence the cost dropped above hundred percent from ₦399, 900 in 2007 to ₦197, 176, while there was increase in inventory build from N34, 859 in 2007 to N51, 879.

TABLE 13

Creditors:	Group(N'000)	Group(N'000)	Company(N'000)	Company(N'000)
Amount falling due within one year				
Year	2008	2007	2008	2007
Trade creditors	(95,094)	(170,187)	(82,073)	(68,633)
Bank overdraft	(266,408)	(238,123)	(266,408)	(238,123)
Commercial papers	(90,078)	(110,169)	(90,078)	(110,169)
Taxation	(149,503)	(89,306)	(120,223)	(78,927)
Other creditors	(436,319)	(344,004)	(402,317)	(333,972)

There was a slight increase in bank borrowing from N238, 123 to N266, 408; this was used to finance importation and network equipment upgrade and expansion; however commercial papers fell from N110, 169 to N90, 078, which shows a reduction in over reliance on bank borrowings. Bank refinancing helped to meet a portion of total cash requirements for the period.

TABLE 14

Capital and Reserves	Group(N'000)	Group(N'000)	Company(N'000)	Company(N'000)

Year	2008	2007	2008	2007
Share Capital	76,893	76,893	76,893	76,893
Share Premium	377,339	377,339	377,339	377,339
Revaluation Reserve	256,850	256,850	256,850	256,850
General Reserve	416,741	349,201	373,776	336,598
	1,127,823	1,060,283	1,084,858	1,047,680

The effective management of resources by VGC Telecoms has led to an increase in general reserve by 16.2% from N349, 201 in 2007 to N416, 741 in 2008.

TABLE 15

Cash flows from operating activities	Group(N'000)	Group(N'000)	Company(N'000)	Company(N'000)
Year	2008	2007	2008	2007
Cash receipts from customers	2,417,916	2,059,929	1,982,034	1,933,902
Payments to suppliers & employees	(2,131,232)	(1,644,707)	(1,652,894)	(1,475,019)
Income tax paid	-	(10,000)	-	10,000
Net cash provided by	286,684	405,222	329,140	448,883

operating activities				
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The cash receipt from customers increased

TABLE 16

Cash flow from investing activities	Group(N'000)	Group(N'000)	Company(N'000)	Company(N'000)
Year	2008	2007	2008	2007
Purchase of fixed assets	(135,931)	(260,963)	(132,985)	(258,359)
Proceeds from sale of fixed assets	265	314	265	314
Purchase of investments	(4,943)	(7,665)	(50,921)	(58,001)
Net cash provided by investing activities	(188,623)	(294,838)	(231,655)	(342,570)

TABLE 17

Cash flow from financing activities	Group(N'000)	Group(N'000)	Company(N'000)	Company(N'000)
Year	2008	2007	2008	2007

Dividend Paid	(46,152)	(53,405)	(46,152)	(53,405)
Interest Paid	(91,028)	(114,351)	(91,028)	(114,351)
Net cash provided by financing activities	(137,180)	(167,756)	(137,180)	(167,756)

To make maximum use of existing working capital, the company ensures that the interest payout to banks was reduced from N114, 351 in 2007 to N91, 028 in 2008. This is about 79.6% reduction.

5.5 CONCLUSION

From the analysis above, all the indices in the financial statement under the year 2008 shows significant improvements that attests to the efficient use of working capital by VGC Telecoms management team; be it directly from shareholders or indirectly from lending institutions. However, the management need to critically reduce dependence on borrowings and rather source for funds in the capital market, which in the long run will be beneficial to the company, and will reduce pressure on their cash flow which will also strengthen its working capital position, so as to meet its obligations as when due. VGC Telecoms five year financial summary is presented in appendix II.

Chapter six draws the final conclusion of this study. It also gives policy recommendations for effective working capital management as well as suggested future research work.

CHAPTER SIX

GENERAL CONCLUSION AND RECOMMENDATION

6.0 INTRODUCTION

This study is aimed at investigating the impact of working capital management on a firm's failure or success. The research work has enabled us to see the effect of efficient working capital management on VGC Telecoms Ltd profitable performance between 2007 and 2008. This chapter meets the final objective of the research work, namely, to formulate policies, guidelines and recommend approaches that will help firms to put in place a sustainable working capital management policy that will maximize the firm's value and the wealth of its shareholders.

6.1 SUMMARY FINDINGS WITH RESPECT TO RESEARCH QUESTIONS

The three research questions are:

- What are the consequences of working capital management for company value?
- What factors influence a firm's working capital management performance?
- How efficient is the company at converting working capital to ready money?

In line with industry surveys and evidence gave by the company's senior executive, I find evidence that companies over-invest in working capital. Given this evidence, it is imperative then to focus on what factors influence corporate working capital management. I discover that industry practices, company size, future company sales growth, the proportion of outsider directors on a board, executive compensation, and CEO share ownership significantly influence the efficiency of a company's working capital management. Overall, as applicable in VGC Telecoms evidence suggests that managers respond positively to incentives and monitoring in managing the company's working capital.

I examine both of these issues: what are the consequences of working capital management for a company value, and factors that influence a firm's working capital management performance. The third is how efficient is the company at converting working capital to ready money. The third research question has already been dealt with section 3.4 of this work.

The importance of these issues can be illustrated by a couple of examples according to the CFO. First, Shin and Soenen (1998) indicate that Wal-Mart and Kmart had similar capital structures in 1994, but because Kmart had a cash conversion cycle of roughly 61 days while Wal-Mart had a cash conversion cycle of 40 days, that Kmart likely faced an additional \$198.3 million per year in financing expenses. Evidently Kmart's poor management of its working capital contributed to its going bankrupt. But, this is not the case of VGC Telecoms Ltd, which has sound working capital management policy.

In what influences a firm's management of working capital, I discover during my interview with the CFO that a company's working capital policy is influenced by its industry's working capital policies, its size, its expected sales growth, the proportion of outside directors on its board (five of them in the case of VGC Telecoms), the current compensation of its CEO, and its CEO's share ownership. Consequently, managerial incentives and the monitoring of management are significant influences on a firm's working capital management performance.

Since VGC Telecoms manages its working capital more efficiently (i.e., shorter net trade cycle), the company experiences higher operating cash flow as stated in chapter 3. However, this does not necessarily follow because companies that have longer net trade

cycles are also investing in short-term assets which may pay off in subsequent periods. So the valuation issue is whether such investment earns a return above the cost of capital.

Given the above evidence that working capital management significantly influences company value; let now turn to the question of what factors influence a firm's working capital management. I conduct this analysis in a series of steps. First, I examine the company model, and then explore the influence of board characteristics, and CEO compensation and ownership.

For the company model, I conjecture that the following factors are significant influences on its working capital management. First, prior research such as Hawawini, Viallet, and Vora (1986) suggests that industry practices are significant determinants of a firm's working capital management practices. The working capital policies of say a telecom company like VGC Telecoms are going to be quite different from those of a retail clothing company. Consequently, it is important to control for the influence of industry practices on a firm's working capital practices.

Secondly, the size of firm may influence the efficiency of a firm's working capital management. Bigger companies may need bigger investments in working capital due to large sales levels. Or, otherwise, bigger companies might use their size to build relationships with suppliers which are required to reduce in investments in working capital. Presently supply chain management practices involve too much coordination between companies and are easier for bigger companies to apply than for smaller companies to execute. Hence, firm size is likely influence the efficiency of a firm's working capital management.

Thirdly, the amount of a firm's assets accounted for by fixed assets might exercise an influence on a firm's working capital performance. For example, the inventory difficulties of an automobile parts manufacturer may be quite different from that of a service provider like VGC Telecoms. In addition, the receivables issues of these types of companies may also be different. In measuring this variable, the ratio of a company's property, plant and equipment to its total assets are taken.

Fourthly, in line with Nunn's (1981) evidence, I do expect company sales to influence a company's working capital management and this is the case with VGC Telecoms. It is expected that a company's expected future sales to influence its working capital investment, and as well as its cash conversion cycle. For example, the company might build up inventories with expectation of future sales growth, and consequently increases its use of trade credit. To proxy for this type of growth, the firm's percentage sales growth over the future two years is used.

Finally, companies with some degree of market power such as VGC Telecoms are able to negotiate with suppliers and customers that gives them an advantage over competitors. The more concentrated the industry the more likely this will influence the cash conversion cycles of companies within it. To determine the relevance of the above core factors to the efficiency of a firm's working capital management, we can regress the firm's cash conversion cycle (*CCC*), on the above factors. But, before conducting this analysis, we must address the specification of the data generating process as *CCC* is a non-negative random variable. While it would be preferable to use the same data generating process specification used in the valuation analysis, it does not appear appropriate for these data.

Evidence suggests that VGC Telecoms never use its size or market power to decrease their cash conversion cycle. For all factors examined, industry practices are the key determinant of the company's working capital practices. In addition, positive future sales growth is related with increased investment in net working capital. Last, but not the least, corporation with more tangible long-term assets trims down its investment in net working capital. Remarkably, this result appears to mirror the conclusion of the ITworld.com survey of IT firm's working capital practices mentioned earlier as firms with more intangible long-term assets appear more lax in their management of their working capital.

With these results, I will now introduce the board characteristics of the company. Two characteristics are used to capture the important features of a corporation's board: its size measured by the number of directors, and its proportion of outsiders on the board. Prior literature guides us to expect that larger boards might be lax in monitoring management and so be associated with longer cash conversion cycles than other firms in the industry. Conversely, prior literature suggests that more outsiders on the board lead to greater monitoring of management, which we expect will result in shorter cash conversion cycles for these firms, as is the case of VGC Telecoms. These results suggest that board size is not a significant influence, but that board composition is. The more the proportion of outsiders on the board, the better the performance of the company's working capital management. This result is in conformity with the monitoring role of outsider directors.

Continuing this line of inquiry, we may then introduce the compensation and share ownership of the CEO. The better the CEO is remunerated, the higher likely they will have incentives to lower the firm's cash conversion cycle. Consequently, we should expect the firm's cash conversion cycle to be negatively correlated with the CEO's total

current compensation. It should be noted that in this situation we will exclude their current period stock option grants from this measure and only focus on their current non-stock compensation. According to the CFO, VGC Telecoms conforms to the principle of well remuneration of its CEO

The reason of excluding their current stock option grants is rather focus on their total unexercised stock option holdings. Stock options granted in the past might be just as important an influence as current stock option grants. Therefore, it might be better to identify a CEO's total unexercised stock option arrangement.

Lastly, the CEO's current shareholdings are likely anticipated to influence the management of the firm's cash conversion cycle. Sorry to say, the consequence of this variable is less clear as it may either generate incentives for manager of firmly control this cycle, or it may produce incentives for managers to use less effort on this activity if they are in position to evade the costs of such effort.

While both CEO compensation components have a negative influence on their company's cash conversion cycle, it is only the total current compensation component has a statistically major consequence. Partially, this is consistent with the prior anticipation that a company's investment in working capital mainly influences its performance in the current and near future periods.

Thus, it expected that the current CEO compensation to have a larger influence on the company's cash conversion cycle, while it is expected that their unexercised stock options to influence their long-term investment decisions. Surprisingly, the CEO share ownership is highly positively related to their company's cash conversion cycle. So, the

incentive effect of stock ownership appears to be dominated by other effects of CEO stock ownership.

6.2 GENERAL CONCLUSION AND SUMMARY OF FINDINGS

The findings corroborate the postulation of Weston et al that a company's investment in working capital is a substantial percentage of its total investment. In case of VGC Telecoms, it is as high as 65 percent. This high investment must thus be taken seriously. An inefficient and ineffective management of this investment will result in slow pace of development and ultimately, business failure.

The performances of the company in the different spheres of working capital management were scored as follows:-

1. Cash management – 65.4 percent
2. Inventory management - 78.6 percent
3. Trade credit management and financing decisions - 60.0 percent

This is an average performance of 68 percent. That is, the company's performance is above average. This is a good performance.

The financial statements as interpreted reinforce the validity of this result. The liquidity ratios are high; the collection period is short; and the cash cycle is not quite expansive. This makes it possible to sustain sufficient cash flow for the smooth running of the business.

This situation is being enhanced by the high amount of trade credit taken by the company; since it has other means of securing short – term fund apart from bank overdraft. Hence, the company is secured from the inherent risks of higher cost and failure of the bank to renew facilities on time.

The high level of activities in the company also contributes to its efficient working capital. The high inventory turnover and the short days in inventory indicate high rate of activities. High activities also impact positively on profitability.

More than anything else, the apparent efficient planning of the company contributes to the profitability. Where there are no long term objectives, there will not be long term plans; where there are no long term plans, there will not be short term goals and targets; where there are no short term goals, there will not be short term plans. Without objectives and plans of any sort, then the organisation cannot stand the challenges of a dynamic world. Here in lies the root of this good performance of the company in working capital management.

The management of working capital impacts on liquidity, investment portfolio and profitability. All these three factors are decisive in the growth or failure of a business. Hence, good performances in working capital management affects these decisive factors favourably and thus, contribute to growth and success of the business.

6.3 RECOMMENDATION

In the light of the findings of this study, there is need to sustain a larger percentage the working capital management of the company and to improve on some aspects if the company is to grow beyond its present state and to be more relevant in the market. Towards this goal, I will make the following recommendations (in addition to continuing those practices that have been found to be in agreement with the postulations of the literature reviewed).

- The company should reduce total dependence on a single vendor i.e the company should source equipment from other vendors.
- It will also be of great benefit for the company to minimise its credit facilities to customers in order to reduce the pressure on the company's cash flow.
- The credit policies of the company should also be reviewed. There must be a policy, incorporated in the company's corporate plan, stating what proportion of the total sales within a period should be on credit. Such a limit must take into consideration the finances of the company and other commitments. The policy must also state what volume of credit could be granted any customer within the period.
- Proper cash flow forecasting is essential to successful working capital management. Therefore the company should take into account internal and external working capital drivers and the sensitivity of those drivers to changes in the business or market should be considered.
- Having working capital as a ready source of cash will help in the context of challenging situation. The company should implement contingency plans that take a holistic view of the organisation in order to minimise the adverse effects of unforeseen events and provide financial flexibility in uncertain times
- The possibility of making additional working capital investments should also be considered by the company in order to take care of any events that may affect non-operational cash requirements such as investments, ability to service debt et cetera.

6.4 LIMITATION OF THE STUDY

In the course of the research certain problems were encountered which will likely have effect on the work. One of such constraint is time. The period of interview sometimes

coincide with the time the top management in VGC Telecoms were occupied. Few others also decline my request for interview because of the sensitive nature of the topic and the need to protect the firm's information.

Finally, the conclusions and recommendations are based on the data analysed, hence they are valid only to the extent of the validity of the data.

6.5 CONTRIBUTIONS OF THE STUDY

The most important contribution of this research work is its ability to show practically that the way working capital is managed, will have a significant impact on the profitability of firms and thus determines the market value of its shareholders' wealth. Efficient working capital management increases firms' value and shareholders' wealth; while inefficient working capital management may lead to a firm's failure.

The research method used helped to understand the phenomenon from the point of view of experts and authors in the field and this has helped to make appropriate recommendations that will go a long way to help firms to maintain an efficient working capital management that will maximise firm's value and shareholders' wealth.

6.6 AREA OF FURTHER RESEARCH

This research work focussed on a single firm in the telecoms industry to analyse the influence of working capital management on a firm's value. However, further research could be done in this area by benchmarking with other companies, or else by looking at the impact of working capital management in the whole telecommunication industry of a particular country e.g. Nigeria in order to find out if working capital management has a positive impact on the industry's value as a whole and if not, recommend necessary steps to be taken by the industry.

6.7 CONCLUSION

This chapter presented the summary of my findings and the recommendations proffer based on the filtered opinions of the experts interviewed and the result I got from the company of study's financial statement analysis. Furthermore, the views of previous researchers on effective working capital management were added to my recommendation. This chapter has also shed light on further areas of research and the limitation of the present study.

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APPENDIX I

Interview Questions on Working Capital Management

Section I: Cash Management

1. Is your cash-flow predictable?
2. Do you have an institutionalized budgetary system?
3. Do you forecast cash –flow?
4. Do you have a determined minimal cash balance?
5. Do you have a determined optimal cash balance?
6. Do you have a standing arrangement for sourcing funds to save unexpected cash flow problems?
7. Do you invest surplus cash?
8. What is the nature of the investment?
9. What are the investment criteria?
10. Do you have any special arrangements for expediting the collection and clearing of cheque?
11. Do you slow disbursements deliberately to ease pressure on cash flow?
12. Do you take other forms of trade credit (like hire purchase, leasing etc)
13. Do you make deliberate efforts to ensure your received cheques clear faster than your issued cheques?

Section II: Inventory Management.

14. How would you assess your inventory record keeping?
15. Do you have any system of inventory control?
16. What is the nature of control?
17. Do you have determined re-order points?
18. Do you have determined re-order quantities?

19. How do you determine re-order quantities?

20. How do you determine re-order points?

Section III: Trade Credit Management

21. Do you have a determined credit limit?

22. What proportion of sales was on credit during the period?

23. Do you have a determined credit period?

24. Do you have a determined credit limit for any one customer?

25. Do you extend discounts?

26. Why do you extend discounts?

27. What proportion of bills receivable do you spend on collection?

28. What proportion of bills receivables remains outstanding at the end of credit limit?

29. What proportion remains uncollectible?

30. Do you price credit sales higher than cash sales?

31. What criteria do you use in determining the credit risk of customer?

32. What combination of procedures do you employ in collecting bills?

33. Do you interpret the financial statement of customers?

34. Do you take trade credit?

35. What proportion of receivables to payables?

36. Do you factor your receivables?

37. Do you insure your receivables?

APPENDIX II

FIVE YEAR FINANCIAL SUMMARY OF VGC TELECOMS LTD

	Group2008	Group2007	Company2006	Company2005	Company2004
Employment of capital	N'000	N'000	N'000	N'000	N'000
Fixed assets	729,770	716,312	560,247	571,342	518,092
Investments	140,760	135,817	173,026	169,293	169,293
Intangible assets	137,339	134,569	155,962	13,541	19,148
Deferred payments	29,643	39,525	-	-	-
Net current assets	275,719	188,991	250,617	342,593	339,811
Deferred tax	(169,134)	(141,201)	(116,025)	(92,021)	(50,603)
Provision for liabilities and charges: Gratuity	(16,274)	(13,730)	(12,344)	(8,661)	(7,670)
	1,127,823	1,060,283	1,011,483	996,087	988,071
Source of capital: share capital	76,893	76,893	76,893	76,893	76,893
Reserves	1,050,930	983,390	934,590	919,194	911,178

	1,127,823	1,060,283	1,011,483	996,087	988,071
Turnover, profit and loss: turnover	2,477,005	2,085,446	1,603,313	1,439,659	977,168
Profit before taxation	209,494	159,896	124,751	95,090	39,336
Taxation	(88,129)	(64,960)	(63,219)	(56,317)	(34,872)
Dividend	(53,825)	(46,136)	(46,136)	(30,757)	-
Retained profit for the year:	67,540	48,800	15,396	8,016	4,464
Earnings per share(kobo)	79	62	40	25	3
Dividend per share(kobo)	35	30	30	20	-
Net assets per share(kobo)	733	689	658	648	642