KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY(KNUST)

EFFECTIVE MANAGEMENT OF WORKING CAPITAL IS THE LIFE BLOOD OF EVERY BUSINESS:

AN ASSESMENT OF WORKING CAPITAL MANAGEMENT PRACTICES WITHIN GHANA WATER COMPANY LIMITED

BY

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DECLARATION

CANDIDATE'S DECLARATION

I hereby declare that this thesis is the result of my own original research and no part of it has been presented for another degree in this University or elsewhere.

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STUDENT NAME & ID	**SIGNATURE**	**DATE**

SUPERVISORS' DECLARATION

I hereby declare that the preparation and presentation of this thesis was supervised in accordance with the guidelines on supervision of thesis laid down by the Kwame Nkrumah University of Science and Technology.

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SUPERVISOR(S) NAME	**SIGNATURE**	**DATE**

CERTIFIED BY:

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HEAD OF DEPARTMENT	**SIGNATURE**	**DATE**

DEDICATION

I dedicate this work to God Almighty for his guidance, protection and wisdom which has helped me to complete this project successfully.

More so, I dedicate this project to my wife Mrs. Felicia Obeng Ansah, all my children and also to my late wife Rose Beatrice Yeboah, whose inspiration and encouragement has brought me to this far.

ABSTRACT

This study examines the working capital management practices within the Ghana Water Company Limited and its impact on the organization's financial position. Liquidity and profitability are two vital aspects of corporate business life and as such working capital has been described as the life blood which flows through the veins and arteries of the entire Organization. Working capital management has thus, become a basic and broad aspect of assessing the performance of a corporate entity. It engages every part of the structure and it gives courage and morale to the management and personnel.

The survey was conducted in the Central Regional Offices of the company. In all six (6) top officials were interviewed for the study. The sample was selected by the purposive sampling technique and data were collected using a structured questionnaire. The data collected was analyzed using frequencies and percentages with the use of excel software.

The study revealed that the company offers its services on credit to its customers and it takes five weeks after product consumption before customers are expected to make payments. Then nine weeks before any action is taken against recalcitrant customers, by that time the real value of the debt would have been depreciated because of the nature of inflation in the country. The study realized that the separation of the Revenue and Accounting Department helped in improving revenue management as each department served as a check and balance mechanism for the other with the Internal Audit Departments playing only a supervisory and investigative roles when major discrepancies occurred. The study also revealed that management of the company believes in the effective management of working capital and will cautiously puts in place policies and practices that attempt to increase cash inflow and the overall profitability of the firm.

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ACKNOWLEDGEMENT

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CHAPTER ONE

1.0 INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Liquidity and profitability are the two vital aspects of corporate business life (Panwala, 2009). Liquidity measures the ability of a company to honor all the maturing obligations. No firm can endure without liquidity. Profitability is the rate of return on company's investment. An unwarranted high investment in current assets would reduce this rate of return. Working capital management has thus, become a basic and broad aspect of assessing the performance of a corporate entity. It is, therefore, essential to maintain an adequate degree of liquidity for the smooth running of the business operations. The liquidity should be neither excessive nor inadequate.

Excessive liquidity indicates accumulation of idle funds which do not earn any profit for the firm and inadequate liquidity not only adversely affects the credit worthiness of the firm but also disrupts the production process and impedes its earning capacity to a great extent. The importance of working capital in any industry needs no special emphasis. Working capital is considered to be a life-giving force to an economic entity. Management of working capital is one of the most important functions of corporate management. For its improper management can grind an Organization to a halt. Its management therefore demands proper attention.

The efficient management of working capital is the most crucial factor in ensuring the survival, liquidity, solvency and profitability of a business organization. Working Capital management is about the commercial and financial aspects of Inventory, credit, purchasing, marketing, royalty and investment policy. The higher the profit margin, the lower is likely to be the level of working capital tied up in the production and selling of products. The faster that a stationery manufacturing firm creates and sells books, the higher is likely to be the return on investment. Giving limited attention to the management of cash flow, working capital can never be an option in this current global recession and weakened financial system. This is especially true since working capital often accounts for more than one third of total capital employed. It has long been known that in the long run, effective management of cash flow is more important than profit, even profitable companies fail because of lack of cash and credit. Nevertheless, it is as true today as it has always been that there is significant potential for improved financial performance from the more effective management of working capital.

Decisions relating to working capital and short term financing are referred to as working capital management (Shaun, 2005). These involve managing the relationship between a firm's short term assets and its short term liabilities. By effectively managing these components, companies can sharply reduce their dependence on outside funding and can use the released cash for further investments or acquisitions. This will not only lead to more financial flexibility, but also create value and have a strong impact on a company's enterprise value by reducing capital employed and thus increasing asset productivity.

"Cash is the lifeblood of a business" is an often repeated maxim amongst financial managers. Choyal (1991) cited by Marfo (1999), describes working capital as a "life blood which flows through the veins and arteries of the structure of the organization. It engages every part of the structure, gives courage and morale to the brain (management) and muscles (personnel) digest to the best degree of raw materials used, its constraints and regular flow and returns to the heart (cash flow) for another journey and so on. When it is slowed up, the financial bodies have value only as junk".

The success of any business thrives on smooth cash flow. The top priority of any business is to stay solvent and ensure the availability of adequate working capital. This is utilized for the payment of rent, payroll, and other operating costs as is involved in the various stages of production and services. Irrespective of the success of any business, there is always a possibility of scarcity of funds on account of some unexpected circumstances. Therefore, the need for securing adequate funds to manage all your business obligations and provide enough financial security for the future as well.

The implementing of an effective working capital management system is an excellent way for any company to improve their earnings and also justify its existence. The two main aspects of working capital management are ratio analysis and management of individual components of working capital. Lack of adequate expendable cash makes it difficult for an organization to meet its day to day expenses and as a result, the total business collapses. Since every business always runs the risk of unexpected expenses, it becomes even more important to secure some funds in order to avoid unpleasant circumstances. Such phases of financial setbacks can be dealt with by availing the benefit of effective working capital management.

The quantity of working capital required for a business varies with its nature. The needs and circumstances of organizations also differ from each other. In an effort to remain solvent, organizations are always on the lookout for a positive working capital. Every company needs to manage its working capital well so as to reduce the burden of borrowing. Therefore, the need for proper management of working capital so as to ensure better returns on investment. A few key performance ratios of a working capital management system are the working capital ratio, inventory turnover and cash collection ratio. Ratio analysis will lead management to identify areas of focus such as inventory management, cash management, accounts receivable and payable management

A working capital thus makes business operations run smoothly. Working capital allows you to invest your money in your desired business. However, the success of an organization is to be judged by the surplus invested to generate appreciable returns. In other words, working capital to some extent serves as the parameter to judge the cash flow of a company.

A business that has no working capital or very little working capital will likely have difficulty in paying short-term debt obligations from operational sources of cash in sustained or sudden declines in sales. Therefore, the importance of maintaining an appropriate level of working capital and its contribution to business survival is a concept that any business manager should understand. Managers should develop a working capital philosophy that they can apply and monitor carefully; having the required working capital with you always and guarding against having excessive working capital.

1.2 STATEMENT OF PROBLEM

The importance of working capital to the success of any business cannot be overemphasized. One of the serious problems faced by most financial managers is how to effectively and efficiently manage working capital to the benefit of their organizations. This is because working capital comprises a number of different items and its management is difficult since these are often linked. Hence altering one item may impact adversely upon other areas of the business.

Poor Management of the working capital will result in cash flow problems highlighted by an organization exceeding its agreed overdraft limit, failing to pay suppliers on time, and being unable to claim discounts for prompt payment. In the long run, a business with insufficient working capital will be unable to meet its current obligations and will be forced to cease trading even if it remains profitable on paper.

This study therefore seeks to analyze the relationship between effective working capital management and the success of the Water Supply Industry in Ghana. The study covers only the Central Regional Office of the Ghana Water Company limited, for which an attempt will be made to provide an empirical support to the hypothesized relationship between working capital management efficiency and organizational success.

1.3 DEFINITION OF TERMS USED IN THE STUDY

***A. Working Capital* -** The portion of an organization's assets which is not invested in fixed assets or obligated to pay current liabilities, but is available to fund day to day working needs..

***B. Management* -** the act of getting people together to accomplish a desire goals and objectives.

***C. Inventories* -** the value of all the goods or physical items that a business uses in its production process or for sale in the ordinary course of doing business.

D. Cash- prompt payment for goods or services in currency or by cheques.

1.4 OBJECTIVES OF THE STUDY

The objective of the study is to examine the importance of working capital management to the efficiency of the operations of Ghana Water Company limited. The following are the specific objectives:

1. To analyze the Ghana Water Company limited’s efficiency in working capital management.
2. To analyze the relationship between working capital management efficiency and overall company development.
3. To analyze the impact of inventory, creditors, receivables and cash on working capital management.
4. Make recommendations to management on the effective and efficient management of working capital.

1.5 RESEARCH QUESTIONS

This research would seek to find answers to the following questions:

1. How does efficient working capital management affect organizational success and development?
2. How does excessive inventory affect working capital management?
3. How does revenue or cash collection affect working capital?
4. How does long outstanding receivable affect working capital?

1. 6 HYPOTHESES

The following are the Hypotheses:

H_O There is no significant difference between working capital and organization success.

H_A There is a significant difference between working capital and organization success.

H_O There is no significant difference between revenue collection, receivables and working capital.

H_A There is a significant difference between revenue collection, receivables and working capital.

H_O There is no significant difference between working capital management and organizational success.

H_A There is a significant difference between working capital management and organizational success.

1.7 SIGNIFICANCE OF THE STUDY

The research is significant in the following ways:

1. It would serve as a guide for policy makers and administrators of the company's finances in the formulation of policies concerning working capital management.
2. It would be useful for Human Resource Managers in structuring course outlines for staff in-service training.
3. It would serve as a guide for middle level managers who are put in charge of company finances.
4. It would serve as a guide for effective working capital management.
5. It would serve as a point of reference for future research.

1. 8 RESEARCH DESIGN

The research is a case study of the effective management of working capital in the Central Regional Office of the Ghana Water Company Limited. The case study approach will be adopted because of its ability to facilitate an in-depth study of the problem. According to Best and Kaln (1998), the case study probes deeply and analyses interactions between factors that explain present status or influence change or growth. Thus, data can be gathered in this regard through interviews or by observations by the researcher.

The case study allows the researcher to study selected issues, cases or events in details to explore and describe them. It also allows the researcher to study issues, which occur in their natural settings where human behavior occurs.

Feldman (1996), states that in contrast to survey in which many people are studied, a case study is an in-depth study, intensive investigation of individual or small groups of people. Case studies often include psychological testing in which a carefully designed set of questions are used to gain some insight into the personality of the individual or group being studied. When case studies are used as a research technique, the goal is often not only to learn about a few individuals but to use the insight gained to better understand people in general.

1 .9 LIMITATION OF THE STUDY

The major limitation of this study is that, the personnel of the GWCL may not be willing to co-operate by releasing sensitive information about their company's working capital and its management, since the implementing of an effective working capital management system is an excellent way for any company to improve their earnings and also justify its existence. Furthermore, since most of the data will be collected through questionnaires, the mood of respondents as well as how they understand the items on the questionnaires are likely to affect the responses they give. The above stated reasons coupled with the circumstances surrounding the time the respondents fill the questionnaires, the researcher believes could affect in the same way the validity of the data.

1.10 ORGANIZATION OF THE STUDY

The study would be organized into five chapters as follows. Chapter one will deal with the background of the study, definition of terms, objectives of the study, research questions and hypotheses, significance of the study, research design and limitation of the study. Chapter two would focus on the review of relevant literature. Chapter three focus on the methodology and will cover the target population, sample, instrument for data collection, pretesting, reliability of data collection instrument, procedures for data collection and data analysis. Chapter four would deal with the analyses of data and discussion of the analyses. Chapter five will be on the findings of the study, summary, conclusion and recommendations

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 DEFINITION.

Working capital is defined by Colquitt et al (1999), as current assets minus current liabilities. Hence, it "represents the firm's investment in cash, marketable securities, accounts receivable, and inventories less the current liabilities used to finance the current assets". Deloof (2003), also refers to working capital as the sum of current assets and current liabilities and define the difference (current assets minus current liabilities) as 'net working capital'.

Working capital is considered to be the life giving force for any economic entity (Mukhopadyay, 2003). Management of working capital is one of the most important functions of corporate management. Every organization, whether profit oriented or not, irrespective of its size and nature, needs sufficient amount of working capital. The efficient working capital management is the most crucial factor in maintaining the survival, liquidity, solvency of any business enterprise.

Working capital management is the administration of current assets as well as current liabilities (Creswell, 2003). Working capital management ensures a company has sufficient cash flow in order to meet its short-term debt obligations and operational expenses. It is the main part of a firm's short term financial planning since it encompasses the management of cash, inventory and accounts receivable. Implementing an effective working capital management system is an excellent way for many companies to improve their earnings. These components and the way in which they are managed determine some of a company's most vital financial ratios, e.g. the 'inventory turnover', the 'average collection period' and the 'quick ratio' (Dittmar, et al, 2003).

Working Capital Management is a very sensitive area in the field of financial management (Joshi, 1994). It involves the decision of the amount and composition of current assets and the financing of these assets. Current assets include all those assets that in the normal course of business returns to the firm in the form of cash within a short period of time, ordinarily within a year and such temporary investment as may be readily converted into cash upon need. The working capital management of a firm reflects a firm's short term financial performance.

Many companies still underestimate the importance of working capital management as a lever for freeing up cash from inventory, accounts receivable and accounts payable. By effectively managing these components, companies can sharply reduce their dependence on outside funding and can use the released cash for further investments or acquisitions. This will not only lead to more financial flexibility, but also create value and have a strong impact on a company's enterprise value by reducing capital employed and thus increasing asset productivity.

High working capital ratios often mean that too much money is tied up in receivables and inventories. Excessive balances of receivables are an indication of defective credit policy and slack collection period which may result in a higher possibility of bad debts which will ultimately affects profits. More so, excessive inventory results in mishandling, waste, theft and losses which may also result in management inefficiency. However, inadequate working capital stagnates growth, difficulty in undertaking profitable ventures and operating plans that will improve profits, a firm's inability to attract credit opportunities or discounts from suppliers and a firm unable to meet its short term obligations resulting in loss of reputation and tight credit terms.

Typically, the knee-jerk reaction to this problem is to apply the "big squeeze" by aggressively collecting receivables, ruthlessly delaying payments to suppliers and cutting inventories across board. But that only attacks the symptoms of working capital issues, not the root causes. A more effective approach is to fundamentally rethink and streamline key processes across the value chain. This will not only free up cash but lead to significant cost reductions at the same time.

"Cash is the lifeblood of business" is an often repeated maxim amongst financial managers. Working capital management refers to the management of current or short-term assets and short-term liabilities. Components of short-term assets include inventories, loans and advances, debtors, investments and cash and bank balances. Short-term liabilities include creditors, trade advances, borrowings and provisions. The major emphasis is, however, on short-term assets, since short-term liabilities arise in the context of short-term assets. It is important that companies minimize risk by prudent working capital management.

The management of current assets such as cash, receivables and inventory is of critical importance to the success of a business. The Implementation of an effective working capital management system is an excellent way for any company to improve their earnings and also justify its existence. The two main aspects of working capital management are ratio analysis and management of individual components of working capital.

The working capital in a firm generally arises out of four basic factors like sales volume, technological changes, seasonal, cyclical changes and policies of the firm. The strength of the firm is dependent on the working capital but the working capital is in itself dependent on the level of sales volume of the firm. The firm requires current assets to support and maintain operational or functional activities.

A business organization should be able to determine the exact requirement of working capital and maintain it evenly throughout the operating cycle. Mukhopadyay (2003) emphasized that, a firm should have neither excess nor inadequate working capital as both the phenomena of over capitalization and under capitalization of working capital have adverse effects on liquidity of the business entity. Therefore the effective management of working capital involves the careful management of current assets to ensure the short term liquidity and solvency of the business.

Generally organizations are more focused on cash and supply chain issues. On the other hand, external issues like exchange rates fluctuation, political and legal environment or internal matters like organizational structure and information system can significantly influence working capital. Due to market pressure, companies are misled to paying a lot of attention on presenting good quarterly results month after month. Undue focus on this issue may sometimes lead to flattering but inaccurate picture of working capital performance.

2.2 MODES OF ACQUIRING WORKING CAPITAL

Raising sufficient working capital is an essential requirement for any business start- up. However, raising working capital requirement may differ from the type of business the firm may find it in. For example working capital requirement for a sole proprietorship or partnership may differ from a limited liability company. That is, Limited liability companies can acquire working capital through floating of shares and debentures but sole proprietorship and partnerships are not allowed by law. Moreover, running a small business often calls for the need of financial boost in times of crisis. The business cash flow can be disrupted due to various unforeseen reasons. Payment of debts, purchases of new equipment or payment to creditors for the supply of raw materials can cause additional disruption of cash flow particularly of a small business. There are plenty of options for choosing the right service to acquire working capital. The mode of financing is an important element that determines the success of the Organization. Jones (2007) outlines these various ways of acquiring working capital.

Business cash advance is one of the most popular modes of acquiring essential business finance. It is almost similar to a payday loan however; payday loan requires an individual to provide proof of employment and salary whereas business cash advance is perfect for an entrepreneur to get funds when he lacks the ability to get funds by other means. The only requirement is for the Business to accept credit transactions. That is, it should allow customers to pay with visa or master cards and any time the business receives a payment, part of it is automatically forwarded to meet the repayment of the advance.

Accounts receivables factoring, is another mode of funding working capital. It involves buying and selling of accounts receivables in order to obtain immediate cash or working capital. This eventually increases the cash flow of the business. Accounts receivables factoring helps in acquiring cash for the product or the service rendered. It results in immediate cash inflow without creating any debt or transferring the business ownership. This practice helps in generating cash to fund payrolls, taxes due, increases inventory, buy new equipment, tools and helps the business to negotiate for discounts due to availability of cash.

Lastly, selling of the business obsolete assets is another way of funding working capital. In situations where the business has variety of obsolete equipment due to technological advancement can conveniently dispose such equipment to raise immediate cash for the purchase of new ones or turns to other pressing issues affecting the business.

2.3 WORKING CAPITAL MANAGEMENT COMMITTEE

Working Capital Management is as important as pooling together the financial resources to invest into a particular venture. In recent years banks have placed more restrictions on the flow of bank credit to industries due to the global recession for the purpose of regulating working capital loans. Governments in even the wealthiest nations have had to come up with rescue packages to bail out their financial systems. Governments in their attempts to rescue these institutions, most of which form the back bone of their economies, have developed bail out programs which requires the establishment of working capital committees to evaluate and scrutinize the operations of these companies. These committees were given the mandate to put in place measures to prevent an economic downturn from completely derailing these businesses in the future.

The establishment of working capital management committee has being in existence for the past decade even though not much is heard about it in our part of the world. From 1979 to 1983, the reserve bank of India appointed various committees to examine the need for revision of the inventory norms, cash credit systems, prevailing style of bank credit and consider the effectiveness of the monitoring and follow up systems adopted by banks (Kumar, 2001), in order to ensure effective working capital management and ease cash flow within the banking sector of India.

The prime objective of ensuring of adequate liquidity in most businesses depends largely on how their working capital is managed. Working capital management committees in most cases are responsible for the management of current assets, i.e., cash, accounts receivables and inventory. Unlike the management of fixed assets which may be arranged in special cases on long-lease basis, the working capital has no alternative except to arrange them and use them efficiently.

The problem of working capital management involves the problem of decision making regarding investment in various current assets with an objective of maintaining the liquidity of funds of the firm to meet its obligations promptly and efficiently. The prime focus of a working capital management committee is to decide upon the optimal level of investment in various current assets, optimal mix of short term funds in relation to long term capital and locate the appropriate means of short term financing (Lorenzo, 2010). The management of working capital is incomplete unless an over-all look on the management of current liabilities is taken. Determining the appropriate levels of current assets and current liabilities level of working capital involves fundamental decisions regarding firm’s liquidity and the composition of a firm’s debts.

The objective of most working capital management committees is to maintain working capital at appropriate level and make available ample funds for the operations of the business as and when they are needed. In the accomplishment of these objectives, the committee has to consider the composition of current assets pool. The working capital management committee sets the various policies in the business with respect to general operations like purchasing, financing, expansion and dividend etc. It is therefore paramount that companies in the country especially in the utility industry, form working capital management committees which comprises departments like Accounting and Finance, Budgeting, Marketing, Procurement, Production and Human Resources to ensure that there is a positive correlation between the Budget, Procurement, Staff cost, sale of products of the firm and current assets, which forms more than half of the total capital employed of the firm. In emergency situations, (unavailability of funds etc.) fixed assets can be acquired on lease but there is no alternative for current assets and working capital needs can more often be financed through outside sources, so it is necessary to utilize them in the best way possible.

2.4 GUIDELINES FOR WORKING CAPITAL ALLOCATION

The strength of any business is dependent on its working capital. The working capital in a firm is generally affected by factors like sales volume, technological changes, seasonal, cyclical changes and policies of the firm. The success of any business in today's competitive environment and in an era of global financial meltdown is mainly dependent upon its ability to make available cash to fund the business' day to day operations. Most businesses fail because they see working capital as an accounting rather than a business issue, when in fact every employee can have a positive or negative impact on working capital. To guarantee survival, businesses must have the right processes, leadership and team approach to manage stock, creditors and debtors effectively (Mitchell, 2009).

Changes in a company's environment such as technological, economic or political change have an impact on the management of working capital. A technological change may require management to invest in the acquisition of new equipment, change the production process or its line of business. Economic and political changes such as seasonal or cyclical fluctuations, economic recession and in most African countries change in governments can adversely affect the sales pattern or functionality of the firm as well as the working capital requirements of a firm. Apart from this the policies of the firm also affects the pattern of working capital management.

Working capital management requires examination of maturity composition or liquidity of firm's assets as it involves fundamental decisions on the firm's liquidity and maturity composition of its debts therefore a tradeoff between liquidity and risk influences these decisions. In a nut shell the management of working capital proceeds with the aim of achieving adequate liquidity, minimization of risks and maximization of a firm's value (Renita, 2010).

The demands of working capital mean that even profitable companies can run out of the cash that's needed to meet current expenses such as payroll, benefits, rent, and other liabilities. If a company fails to meet its payment schedules, then it will be forced out of business, so managing working capital is a commercial imperative that needs leadership from the top (Mitchell, 2009). It is therefore imperative to put in place adequate guidelines for the effective and efficient allocation of working capital.

2.5 WORKING CAPITAL AND ORGANIZATIONAL SUCCESS

The term working capital has several meanings in business, economics and finance. In accounting and financial statement analysis, working capital is defined as the firm's short-term or current assets and current liabilities (Creswell, 2003). Net working capital represents the excess of current assets over current liabilities (Colquitt, 1999) and is an indicator of the firm's ability to meet its short term financial obligations (Brealey and Myers, 2002). Working capital is the life blood of business Choyal (1991) and therefore of major importance to internal and external analysis because of its close relationship with the current day to day operations of a business.

Working capital can be viewed from two main perspectives: a firm's investment in short term assets such as cash, accounts receivable, inventory, and other items listed as current assets on the firm's balance sheet that are necessary for the normal operation of the business and its investment in long term assets such as plants, machinery, lands, buildings, etc. Businesses need capital for construction, renovation, furniture, software, equipment, or machinery. Capital is also used often by businesses to put a down payment down on a piece of commercial real estate. Working capital is essential for any business to succeed (Mukhopadyay, 2004). A business firm must maintain an adequate level of working capital in order to run its business smoothly. Working capital is just like the heart of business (Kavitha, 2007), if it becomes weak, the business can hardly prosper and survive. No business can run successfully without an adequate amount of working capital.

When working capital is inadequate, fixed assets cannot efficiently and effectively be utilized on account of lack of sufficient working capital. Low liquidity position may lead to liquidation of a firm. When a firm is unable to meet its debts at maturity, there is a financial unsound position. Credit worthiness of the firm may be damaged because of lack of liquidity. Thus it will lose its reputation. There by, a firm may not be able to get credit facilities and may not be able to take advantages of cash discount.

Businesses often need to finance activities that do not involve assets measured on the balance sheet (Brealey, 2002). For example, a firm may need funds to redesign its products or formulate a new marketing strategy, activities that require funds to hire personnel rather than acquiring accounting assets. When the returns for these "soft costs" investments are not immediate but rather are reaped over time through increased sales or profits, then the company needs to finance them. Thus, working capital can represent a broader view of a firm's capital needs that includes both current assets and other non-fixed asset investments related to its operations.

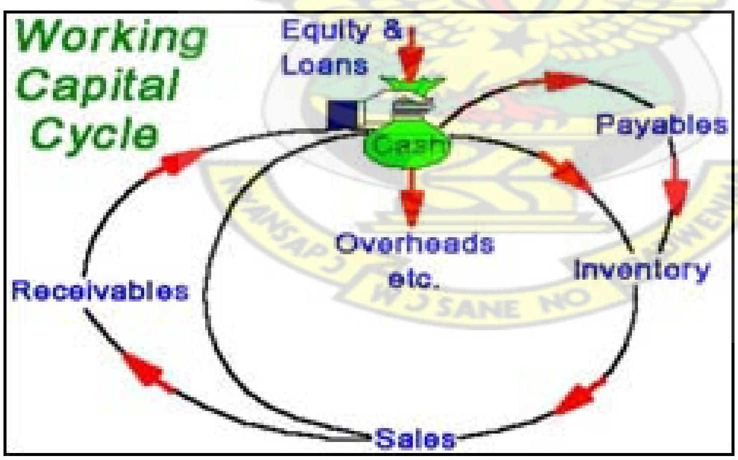
2.6 WORKING CAPITAL CYCLE

The working capital cycle is the measure of the amount of time that elapses between the moment when a business begins investing money in a product or service, and the moment the business receives payment for that product or service. Simply put is the measure of how cash flows into, around and out of a business (Kavitha, 2007). A good working capital cycle balances incoming and outgoing payments to maximize working capital. It is the life blood, therefore should be kept flowing and to ensure that cash flows into the business within the shortest possible time. A short working capital cycle suggests a business has good cash flow. For a business to grow it needs access to cash and being able to free up cash from the working capital cycle is cheaper than other sources of finance, such as loans. Kavitha (2007) stated that the cheapest and best sources of cash exist as working capital right within a business. She emphasized that, good management of working capital will generate cash which will help improve the business and reduce risks.

The key to understanding a company's working capital cycle is to know where payments are collected and made, and to identify areas where the cycle is stretched and can potentially be reduced (Jonson, 2004). The working capital cycle is a diagram rather than a mathematical calculation. The cycle shows all the cash coming in to the business, what it is used for, and how it leaves the business. There are two main elements in a working capital cycle. This is when a business has to pay for supplies, materials, finished goods inventory, and wages to workers who produce goods and services and when a company receives money from its debtors. Each stage of the cycle consumes time.

The ability of a business to move capital faster around the cycle or reduce the amount of money tied up will enable it generate more cash to fund working capital and minimize borrowing. As a consequence, the business could reduce the cost of bank interest and would free money available to support additional sales growth or investment (Kavitha, 2007).

FIGURE 1: WORKING CAPITAL CYCLE



It must be noted that the working capital diagram is different for every kind of business (Harper, 2002) and therefore should be customized to show the way capital moves around your business. The key thing to model is the time lag between each item on the diagram. For some businesses, there may be a very long delay between making the product and receiving cash from sales. Others may need to purchase raw materials a long time before the product can be manufactured. Once you have this information, it is possible to calculate your total working capital cycle, and potentially identify where time lags within the cycle can be reduced or eliminated.

2.7 INVENTORY MANAGEMENT AND WORKING CAPITAL

The Oxford Learner's Dictionary defines inventory as the list of goods and materials that are held available in stock by a business. A firm's working capital consists of its investments in current assets, which includes short-term assets cash and bank balance, inventories, receivable and marketable securities. In accounting inventory is considered as an asset. Since, working capital management refers to the management of current assets (Creswell, 2003), there is therefore the need to explore the impact of inventory on working capital. Inventory, which is one of the important elements of current assets, reflects the investment of a firm's fund. Hence, it is necessary to efficiently manage inventories in order to avoid unnecessary investments. A firm, which neglects the management of inventories, will have to face serious problems relating to its long term objectives and survival. According to Singh (2008), with effective and efficient inventory management, a firm can reduce its levels of inventories to a considerable degree of about ten to twenty percent without any adverse effect on production and sales.

Hedrick, et al (2000), state that inventory management involves balancing the costs of inventory with the benefits of inventory. This process usually involves controlling the transfer of units in order to prevent the inventory from becoming too high, or dwindling to levels that could put the operation of the company into jeopardy. Competent inventory management also seeks to control the costs associated with the inventory. It also makes it possible to prepare accurate records that are used for accessing any taxes due on each inventory type. Without precise data regarding unit volumes within each phase of the overall operation, the company cannot accurately calculate the tax amounts. This could lead to underpaying the taxes due and possibly incurring stiff penalties in the event of an independent audit.

Hedrick, et al (2000), states that one of the most important aspects of inventory control is to have the items in stock at the moment they are needed. This includes informing suppliers early enough to ensure delivery at the proper time. Thus, buying requires advance planning to determine inventory needs for each time period and then making the commitments without procrastination. This means understanding how long it takes for a supplier to process an order and execute a delivery. Inventory management also demands a solid understanding of how long it will take for those materials to be transferred out of the inventory. Having credible information on these two important lead times makes it possible to know when to place an order and how many units must be ordered to keep production running smoothly.

The creating of a buffer stock is also key to effective inventory management. Essentially, buffer stock is the inventory of inputs held as a reserve against short term shortages and to dampen excessive fluctuations in the prices of commodities (Emma, 1966). Thus, keeping the units above and beyond the minimum number required to maintain production levels and helping to minimize the chance for production to be interrupted due to a lack of essential parts in the operation supply inventory. To maintain an effective buffer stock, there is the need to maintain a reliable inventory stock record. Inventory management is not limited to documenting the delivery of raw materials and the movement of those materials into operational processes. The movement of those materials as they go through the various stages of the operation is also important. Typically known as a goods or work in progress inventory, tracking materials as they are used to create finished goods also helps to identify the need to adjust ordering amounts before the raw materials inventory gets dangerously low or is inflated to an unfavorable level.

An inventory stock record is in error when the stock record is not in agreement with the physical stock (Iglehart and Morey, 1972). These discrepancies are due to time lags between the flow of material and information, incorrect units of issue, keypunching errors, and pilferage. Iglehart (1972) stated that these inaccuracies are further compounded by counting errors introduced while attempting to reconcile balances through physical inventories (inventory counts). This creates a situation where inventory records indicate that there is enough stock for production but in reality insufficient units of the physical stock can be found. Therefore, there is the need for a system or mechanism to determine the level of stock records adequately and economically, in order to ensure that production runs smoothly and efficiently.

2.8 INVENTORY CONTROL

Arsham (2006) defines inventory control as the process concerned with the minimization of the total cost of inventory. This means keeping the overall costs associated with having inventory as low as possible without creating problems. Correctly managing inventory control is a process of keeping a delicate balance at all times between having too much and too little in order to maximize liquidity. The costs associated with holding stock, running out of stock, and placing orders must all be looked at and compared in order to find the right formula for a particular business.

In recent years, two approaches have had a major impact on inventory management:

Material Requirements Planning (MRP) and Just-In-Time (JIT and Kanban). Their application is primarily within manufacturing but suppliers might find new requirements placed on them and sometimes buyers of manufactured items will experience a difference in delivery.

Material Requirements Planning (or MRP) is an inventory system that is computer based and used to manage the manufacturing process. It is designed to assist in the scheduling and filling of orders for raw materials that are manufactured into finished products. A material requirements planning is basically an information system in which sales are converted directly into loads on the facility by sub-unit and time period. The basic philosophy of MRP is the ability to schedule materials that are needed (Plenert, 1999). This leads to greater flexibility in product customization. Materials are scheduled more closely, thereby reducing inventories, and delivery times become shorter and more predictable. MRP schedules and tracks every production or purchasing order. It works on the assumption that every order is potentially unique (Plossal and Wight, 1967). There may be problems with employees who, before MRP, were not disciplined in their record keeping. One of the most obvious shortcomings of MRP usage is its focus on labour efficiency (Plenert, 1999).

Just in time inventory, is an inventory management strategy that is aimed at monitoring the inventory process in such a manner as to minimize the costs associated with inventory control and maintenance. The just in time inventory process relies on the efficient monitoring and forecasting of the usage of materials in the production of goods and ordering replacement goods that arrive shortly before they are needed. This simple strategy helps to prevent incurring the costs associated with carrying large inventories of raw materials at any given point in time. Manufacturers, over the years have continued to try to improve their forecasting methods such as applying a trailing 13 week average as a better predictor for JIT planning (Gilliland, 2002).

Plenert (1993) states that the advantage associated with JIT occurred when large inflation increases resulted in the large increases in the cost of inventories. However current studies have indicated that basing JIT on the presumption of stability is inherently flawed (Ruffa, 2008).

Sconberger and Schiederjans (1984) states that the greatest benefit of JIT is its ability to enforce problem solving. Emphasizing the point that without extra inventory, small ripples in the rate of production or delivery at one stage of the manufacturing stage appears as large waves, since all hands rally to correct the problem causing the ripple because the next stage of production is being starved of materials. According to Sconberger (1984), since many of the problems associated with production are quality related, each time a problem is solved quality is improved and therefore improving productivity and maximizing profits. The idea of a just in time inventory is not new. Henry Ford of the Ford Motor Company is known to have applied this principle to the purchase of raw materials for automobile manufacturing in the early years of the 20th century (Shingo, 1989). Many small businesses engage in the use of a just in time inventory approach out of necessity. With limited resources on hand, maintaining a small inventory of materials and parts simply makes sense. However, even large corporations today realize that the savings associated with this type of approach can save a significant amount of financial resources, making it possible to redirect those resources toward other revenue generating processes.

It must be noted that one crucial factor that keeps reoccurring in both MRP and JIT inventory control systems is forecasting. Forecasting is a critical activity since the accuracy of the forecast significantly impacts the quality of operation plans. Accurate forecasts are an integral part of effective product, facility, process, and production planning (Lee, 1986). Hogarth and Makridakis (1981) states that, forecasting is encouraging for short-term planning. They suggest that in short-term forecasting (three months or less), there is considerable inertia in most economic and natural phenomena. For this reason, simple mechanistic time series forecasting can be expected to perform well and improve planning efforts. Therefore, the effectiveness of either MRP or JIT control systems depends largely on the ability of the production and operational manager to forecast accurately.

2.9 IMPACT OF REVENUE ON WORKING CAPITAL

Revenue is the sum total of the resources a company or business receives from the sale of its products or services over a specific period. Some companies receive revenue from interest, dividends or royalties paid to them by other companies (Williams, 2008). Decisions relating to working capital and short term financing are referred to as working capital management. These involve managing the relationship between a firm's short term assets and its short term liabilities (Deloof, 2003). The goal of working capital management is to ensure that the firm is able to continue its operations and that it has sufficient cash flow to satisfy both maturing short term debt and upcoming operational expenses.

Businesses need cash to finance their day to day activities, as well as perform those activities that are not measured on the balance sheet (Brealey, 2002) but which invariably contribute to the success of the business. For example, a firm may need funds to redesign its products or formulate a new marketing strategy, activities that require funds to hire personnel rather than acquiring accounting assets. When the returns for these "soft costs" investments are not immediate but rather are reaped over time through increased sales, then the company needs to finance them. Thus, working capital can represent a broader view of a firm's capital needs that includes both current assets and other non-fixed asset investments related to its operations. To ensure that a firm is able to achieve all these, there is the need for effective revenue management.

Revenue management is the process of understanding, anticipating and influencing consumer behavior in order to maximize revenue from a fixed, perishable resource (Talluri, 2001). Other scholars define it as the application of disciplined tactics that predict consumer behavior at the micro market level and optimize product availability and price to maximize revenue growth (Robert, 1997). An effective revenue management system is aimed at preventing revenue leakage, increase cash flow and reduce costs. This focus is designed to increase cash flow, reduce bad debt, and decrease costs resulting in opportunities to deliver greater value to customers and growth for the organization. Revenue management emanated from the air line industry and was particularly suitable when selling products that become unsellable at a point in time; a typical example is an air ticket just after a flight takes off (Talluri, 2004). It has since then been adopted by many companies in the service industries and other high volatile and uncertain industries such as fashion, hospitality, manufacturing and retailer industries. According to Talluri, a firm's demand has multiple dimensions which include the different products it sell, the type of consumers it serves, their preferences and purchase behaviors' and time. With an advance forecast of demand and pricing flexibility, buyers will sell-short based on their price sensitivity, their demand sensitivity or their time of purchase. In this way, revenue management's overall aim is to provide an optimal mix of goods at a variety of price points at different points in time.

Good revenue management maximizes revenue production for the same number of units, by taking advantage of the forecast of high or low demand periods, effectively shifting demand from high demand periods to low demand periods and by charging a premium for late payments. While revenue management systems tend to generate higher revenues, the revenue streams tends to arrive later in the booking horizon as more capacity is held for late sale at premium prices. Firms faced with lack of pricing power sometimes turn to revenue management as a last resort. After a year or two practicing revenue management, many of them are surprised to discover by offering high discounts frequently for off peak times and raising prices only marginally for peak times they have actually lowered prices for the majority of their opera seats or hotel rooms or other products, resulting in higher revenue overall. By doing this, they have actually increased quantity demanded by selectively introducing many more price points, as they learn about and react to the diversity of interests and purchase drivers of their customers.

2.10 IMPACT OF INFLATION ON WORKING CAPITAL

Inflation is the change in purchasing power in a currency from one period to another relative to some basket of goods and services (Aswath, 2001). This means that money loses its value because there is too much money available to purchase too few goods and services, or that demand in the economy is outpacing supply. In general, this situation occurs when an economy is so buoyant that there are widespread shortages of labour and materials. Inflation can also be caused by a rise in the prices of imported commodities, such as oil. However, this sort of inflation is usually transient, and less crucial than the structural inflation caused by an oversupply of money. Since the main aim of working capital management is to maintain a balance between liquidity and profitability while conducting its day to day operations (Kesseven, 2006), it is therefore important that the financial manager factor the cost of inflation when budgeting for products and services.

In today's complex business environment, making capital budgeting decisions are among the most important and multifaceted of all management decisions as it represents major commitments of company's resources and have serious consequences on the financial stability of a company (Kannadhasan, 2005). Since inflation contributes to the rise in the average price of all goods and not just one item, it is essential that the managers takes into consideration the cost of inflation when budgeting to ensure that there are rapid cash flow within the working capital cycle. Capital budgeting results would be unrealistic if the effects of inflation are not correctly factored in its analysis (Khan and Jain, 2004).

Inflation is a common problem, every finance manager encounters during his capital budgeting decision making process (Kannadhasan, 2005). It also depends on whether inflation is anticipated or unanticipated. When making capital budgeting decisions with inflation, it is required to distinguish between expected and unexpected inflation (Kannadhasan, 2005). If the inflation rate corresponds to what the financial manger is expecting, then he or she can put in place strategies to compensate for the raising cost in products and services and to ensure the sustainability of the business.

When inflation is volatile from year to year, it becomes difficult for businesses to correctly anticipate the rate of price inflation in the near future. Unanticipated inflation occurs when economic agents such as businesses and governments make errors in their inflation forecasts. The actual inflation may end up well below, or significantly above expectations causing losses in real incomes and a redistribution of income and wealth from one group in society to another. This leads to money illusion, so that people's expectations of inflation turn out to be some distance from the correct level. This makes it extremely difficult for the financial managers to make sound capital decisions that would lead to the optimum utilization of the business limited resources. Inflation distorts the operation of the price mechanism and can result in an inefficient allocation of resources. When inflation is volatile, consumers and firms are unlikely to have sufficient information on relative price levels to make informed choices about which products to supply and purchase. It is therefore, imperative, that the finance manager takes into cognizance the effect of inflation on every decision he or she makes to ensure that the business maintains a fair balance between liquidity and growth while conducting its day to day operations.

2.11 IMPROVING UPON WORKING CAPITAL BALANCES: THE PROCEDURES AND PROCESSES

Managing working capital on a day to day basis is probably the most important task for financial managers. To neglect any component can cost money and can affect relationships with customers and suppliers. In a credit crunch environment, where access to liquidity is restricted, cash management becomes critical to survival. Studies conducted by Protiviti Business consult in 2009 indicated that during recessionary times more companies elect to cut discretionary and capital spending and also consider capacity reduction, store and facility closing and layoffs due to major challenges in funding business operations, particularly when there is reduced access to short term credit. However, credit is not the only solutions to increase working capital availability. Instead, companies could put in place certain procedures and processes that take a closer look at how they are managing their working capital to determine where they can achieve greater efficiencies and cost savings (Protiviti Business consult, 2009).

In its simplest form, cash flow is the movement of money in and out of your business. It is not profit and loss, although trading clearly has an effect on cash flow. The effect of cash flow is real, immediate and, if mismanaged, totally unforgiving. Cash needs to be monitored, protected, controlled and put to work (C.I.M.A, 2010). Early recognition of problem areas can reduce or eliminate the likelihood of disasters and enable the organization to increase working capital while other factors remain constant. Any procedure or process put in by management to improve upon the financial or operational management of working capital or cash flow should take into consideration the following indicators:

- *Liquidity constraints*
- *Excessive, obsolete or growing inventories*
- *Inadequate forecasting and demand planning*
- *Firms credit policy*
- *Aging receivables*

- *Payable leakages*
- *Poor working capital ratios*

Proper cash flow forecasting is the most prominent principle in working capital management. This includes estimating the impact of unforeseen events, fluctuating market cycles, loss of a large customer and competitor reactions. Putting in place contingency plans or risk management procedures would serve as insurance for the company just in case of unexpected events. An efficient contingency plan should be based on an objective and realistic view of how working capital would be incorporated into the company's operations (Kleban, 2010). On a co-operate level, the cash generated at one end of the business can be used at another location provided one is feaseble than the other. However, such internal business exchange would require the business to have an efficient banking channels, an open line of communication between production and billing as well as an internal systems to move cash to and from the locations.

Setting up business targets and performance levels for employees is also a sure way of improving working capital. In setting up these targets, the business should take into consideration the operational and financial skills of its employees, as well as have an overall outlook of the operations of the company. These have shown to improve the identification and implementation strategies used to generate short term cash (Kleban, 2010). For this strategy to work effectively, management should put reward systems in place to reward employees who perform satisfactorily as well as hold people accountable for their actions.

Effective dispute management procedures in relation to customers would help in freeing up cash otherwise locked in due to disputes. It will also improve customer service and free up time for legitimate activities like sales, order entry and cash collection. Overall, efficiency will increase due to reduced operating costs (Gordon, 2011). Adapting a customer oriented operations would also yield good results. Where feasible, helping them to plan their inventory requirements efficiently to match your production with their consumption will help reduce inventory levels.

Working capital management is an important yardstick to measure a company operational and financial efficiency. Therefore it must form part of the company's strategic and operational thinking. Efforts should constantly be made to improve the working capital position. This will yield greater efficiencies and improve customer satisfaction.

2.12 MANAGING A HEALTHY WORKING CAPITAL: THE IMPERATIVES

Working capital has a great effect on the general financial health of a company and for most companies especially in the utility industry, the management of working capital is extremely crucial. Despite its importance, working capital seems to be the most mismanaged aspect of the business finances (C.F.O, 2008). The three most important principles to consider in managing healthy working capitals are; receivables (debtors), payables (creditor) and inventory management.

Debt management is an extremely important part of any business enterprise in that the slow paying of accounts will invariably put stresses on the working capital ratios of the business. The credit policy of a firm would affect its debt management procedures. An efficient credit policy would serve as a guide to enable management control debtors and make balance between liberal and strict credit. A liberated credit policy will increase the amount of sale and liquidity in flows. But risk will also increase with increasing of sale. On the other hand, if company’s credit policy is strict, then it will also increase liquidity and security.

The process of credit management begins with accurately assessing the credit-worthiness of the customer base. This is particularly important if the company chooses to extend some type of credit line to certain customers. Proper credit management calls for setting specific criteria that a customer must meet before receiving any type of credit arrangement. As part of the evaluation process, credit management also calls for determining the total credit line that will be extended to a given customer (Tatum and Harris, 2010).

The length of credit period is an important element to consider when creating a credit policy or managing debtors. Finance managers can increase or decrease the length of credit period according to reputation of customers. Therefore a firm should adopt a credit policy at optimum level where liquidity is paramount. Obtaining information from customer's financial statements of previous years, bank reports, and information given by credit rating agencies would also serve as guide as to which credit policy the firm should adopt. This information will also be useful for knowing the capability of customers to pay the debt and whether or not the company should facilitate to sell goods on credit.

Inventory management is also crucial in maintaining a healthy working capital. This tries to balance inventory needs and requirements with the needs to minimize costs resulting from obtaining and holding inventory. Inventory, which is one of the important elements of current assets, reflects the investment of a firm's fund. Hence, it is necessary to efficiently manage inventories in order to avoid unnecessary investments (Singh, 2008).With the help of better inventory management, a firm can reduce the levels of inventories to a considerable degree without any adverse effect on production and sales and therefore secure funds to finance other current expenditures. This can be done by complying strictly on minimum levels, economic order levels, re-order levels and maximum levels of inventory.

Maintaining a healthy working capital is essential to ensure that the company is financially sound not only on paper but able to meet its short-term debts when they fall due. It must be remembered that the shorter an organization's working capital cycle, the faster cash from credit sales will be realized. In order to achieve this, an organization must regularly review its debtors, creditor and inventory management policies and procedures.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

Methodology provides a sound foundation to a research regarding how the research is conducted. The validity and reliability as well as the generalization of the research findings are highly dependent on the research methodologies employed. This chapter deals with the research design, target population, sample size, sampling procedure, data collection procedures and methods of data analysis.

3.2 Research Design

The case study approach was adopted because of its ability to facilitate an in-depth study of the problem. According to Best and Kaln (1998), the case study probes deeply and analyses interactions between factors that explain present status or influence change or growth. Thus, data can be gathered in this regard through interviews or by observations by the researcher.

The case study allows the researcher to study selected issues, cases or events in details to explore and describe them. It also allows the researcher to study issues, which occur in their natural settings where human behavior occurs.

Feldman (1996), states that in contrast to survey in which many people are studied, a case study is an in-depth study, intensive investigation of individuals or small groups of people. Case studies often include psychological testing in which a carefully designed set of questions are used to gain some insight into the personality of the individual or group being studied. When case studies are used as a research technique, the goal is often not only to learn about a few individuals but to use the insight gained to better understand people in general.

3.3 Target Population

The target population of a survey is defined by Jaeger (1988) as "the group of persons, objects or institutions that define the objects of the investigation". Frankel and Wallen (2000), states that the population is a group to which results of the study are intended to apply. That is the target population to which the researcher is interested in gaining information and drawing conclusion. In this study, the target population comprises the officials of both the Regional and District Offices of the Ghana Water Company Limited in the Central Region and some key officials from other regions.

Since an essential requirement of survey research is the "explicit and equivalent definition of the target population" (Jaeger, 1988), some boundaries were set for the selection of the respondents for the research. Thus, the questionnaire was administered to only top ranking managers within the organization.

3.4 Sampling Procedure

Sampling is necessary because in dealing with a large number of respondents, there is the need to get a fair representation of the people since everybody in the study cannot be studied. However, the question about the right sample size in a quantitative research is one that is of prime importance for most social investigators. In simple terms it refers to basic questions such as how large or small must a sample be for it to be representative (Sarantakos, 1997).

Due to the nature of the study and the target population the researcher was interested in gaining information and drawing conclusion, a non random sampling technique was adopted for the study.

3.4.1 Sample Size

A sample enables the researcher to study a relatively small number of units in place of the larger unit. Fowler (1993) admits that the size of a sample is one of the most common questions posed to survey methodologists. To Fowler (1993), one familiar misconception people have is that, the adequacy of the sample size depends heavily on the population included in that sample.

Fink and Kosecoff (1995) also stated that, the size of a population from which the sample of a particular size is drawn has virtually no impact on how well a sample is likely to describe a population. Fowler (1993), reports that a sample size of one hundred and fifty (150) respondents will describe a population of fifteen thousand (15,000) or five million (5,000,000) with virtually the same degree of accuracy, assuming all other aspects of the design and sampling procedure were the same.

The Ghana Water Company Limited in Central Region has a Regional Office, five District Offices and five major Head works. The regional manager and his five district managers were selected for the study. In all, six (6) respondents were surveyed for the study. All the questions were grouped according to the issues raised in the research questions. Responses to open-ended questions were coded for analysis.

3.4.2 Sampling Technique.

The researcher used the Judgmental or Purposive sampling technique to sample six (6) respondents for the study. Judgmental or Purposive sampling, targets key individuals who can give the information required for the study. When the desired population for the study is rare or very difficult to locate and recruit for a study, purposive sampling may be the only option (Patton, 1990). Because of the fewer number of personnel that deals with working capital in an organization, the researcher had to access a particular subset of people with similar responsibilities in the organization.

3.5 Types of Data.

The researcher used primary data for the research because the information is going to be collected afresh.

3.5.1 Data Collection Method.

Questionnaires were used to collect the data. The Oxford Learner's Dictionary defines a questionnaire as a form containing a set of questions, especially one addressed to a statistically significant number of subjects as a way of gathering information for a survey. Questionnaires are an inexpensive way to gather data from a potentially large number of respondents. Often they are the only feasible way to reach a number of respondents large enough to allow the researcher statistically analyzed the results of the study. A well designed questionnaire that is used effectively can gather information on both the overall performance of the test system as well as information on specific components of the system such information about the practices, conditions, opinion, and the attitudes of the subjects.

Amedahe (2002), defines questionnaire as consisting of a list of questions or statements relating to the aims of the study, hypothesis and the research questions to be verified and answered to which the respondents are required to answer by writing, ticking, marking or circling the response necessary.

Questionnaires are very cost effective when compared to face to face interviews. This is especially true for studies involving large sample sizes and large geographic areas. Questionnaires become even more cost effective as the number of research questions increases. Questionnaires are easy to analyze. Data entry and tabulation for nearly all surveys can be easily done with many computer software packages.

3.5.2 Data Collection Instrument

The researcher personally administered a close ended questionnaire which required the respondent to choose "*Yes or No*" from questions designed by the researcher for easy purposes. He obtained a letter from the department of distance education to enabled him introduce himself as a student of the Kwame Nkrumah University of Science and Technology who is conducting the research as part of her academic work. All the respondents were informed of the objectives and design of the study. Emphasis was placed on the fact that the findings are primarily for academic purposes.

Respondents were familiar with answering of questionnaires. All the respondents had some experience in completing questionnaires and were generally not apprehensive. There was uniform question presentation and no middle-man bias. The researcher's own opinions did not influence the respondent to answer questions in a certain manner. There were no verbal or visual clues to influence the respondent.

3.6. Data Presentation and Analysis.

Data obtained from the study was quantitatively analyzed using frequencies and percentages. The responses were grouped according to their various categories. In the case of open ended items the responses were coded for analysis. This was done by putting similar responses under one heading. Similar responses were considered as belonging to the same category. All the questions were grouped according to the issues raised in the research question.

The data presentation was done in line with the University's format for presentation of research works. Tables and text was used to demonstrate some of the data collected.

3.7 Pre-Testing of Instrument

There was a pilot study, which preceded the main study. The pilot test of the instrument was conducted in the Brong Ahafo Regional office of the Ghana Water Company Limited in Sunyani. The choice of the Sunyani Regional Office is because of the fact that its operations and procedures are similar to that of all the Regional Offices.

The objective of the pilot study was to check whether there were flaws in the instrument used in data collection prior to the main study. The pilot testing was done between 30th March and 13th April, 2011.

3.10 Routine of Work

The study begun with a pilot study to enable the researcher asses' flaws in the instrument prior to the main study. The pilot testing was done between 30th March and 13th April, 2011. This was analyzed into simple frequencies and percentages.

The main study would commence from 1st to 31st of May, 2011, after all the needed correction and adjustment had been done.

CHAPTER FOUR

DATA COLLECTION AND ANALYSIS

4.1 RESULTS AND DISCUSSION

This chapter of the research focuses on the results from data collected from personnel occupying various top positions in the Ghana Water Company Limited. Because of the specialised nature of the study, three questionnaires were developed to cover inventory, material and financial management practices within the organisation. The results are thus discussed in relation to the research questions and hypotheses. The characteristics of respondents are discussed as preliminary data. The results for research questions are presented first and then the results for hypotheses.

4.2 Characteristics of Respondents

Table 1: Working Experience

Response	Frequency	Percent
10 -15 years	2	33.0
11 and above years	4	67.0
Total	**6**	**100.0**

Field data, 2011

Four (67%) of the respondents surveyed had worked in the organisation for 11years and above whiles 2(33%) had worked within 10-15 years. This indicates that, the majority of the respondents had been with the organisation for a long time therefore, clearly understands the operations of the Organisation.

Table 2: Level of Education

Response	Frequency	Percent
Secondary	-	-
Tertiary	6	100.0
Total	**6**	**100.0**

Field data, 2011

Data in table 2 indicate that all the (100%) of the respondents had some form of tertiary education and therefore had a clear understanding of the impact of their departmental activities on organizational success and working capital.

Table 3: Age

Response	Frequency	Percent
31-40 years	1	17.0
41 - 50 years	3	50.0
51-60 years	2	33.0
Total	**6**	**100.0**

Field data, 2011

Data from the table indicate that most (50.0%) of the employees were within the age range of 41 years and 50 years whiles 1(17%) were within the age range of 31-40. The results indicate that the organisation has an aging work force.

4.3 Main Results and Discussion

This section of the chapter takes a critical look at the main research questions and hypotheses guiding the study. This section presents the research questions and hypotheses systematically. These are presented with regards to the results generated from the data collected from respondents.

4.4 Research Question One:

4.4.1 How does efficient working capital management affect organizational success and development?

This research question sought to find out how working capital affects the day to day running of the organization. The indicators of the various categories of working capital were given in the instrument. Tables 4 to 12 give details of their responses and their percentages.

Table 4: Maximum amount of Cash kept at the Office

Response	Frequency	Percent
GH¢ 500	2	33.0
GH¢ 1000	2	33.0

GH ¢1500	1	17.0
GH¢ 2500	1	17.0
Total	**6**	**100.0**

Field data, 2011

Table 4 gives the details of the responses of respondents to the various indicators on the need to keep monies at the facility for the running of impress.

Table 5: Management investigation into all substantial Variances

Response	Frequency	Percent
Yes	5	83.0
No	1	17.0
Total	**6**	**100.0**

Field data, 2011

For efficient management of working capital, management must take keen interest in any variances whether positive or negative. Table 5 gives indications on the various investigations conducted by Management when there are substantial variances in the accounts. Finance Managers must be invited by management to explain these variances after an internal audit had been conducted.

Table 6: Organizational Preparation of Budget

Response	Frequency	Percent
Yes	6	100.0
No	-	0.0
Total	**6**	**100.0**

Field data, 2011

For organizational success, there is the need for the organization to prepare a financial document that projects future income and expenses. Table 6 indicates that financial managers provide a forecast of revenues and expenditures, that is, construct a model of how the organization might perform financially if certain strategies, events and plans are carried out.

Table 7: Departmental Budget Preparation

Response	Frequency	Percent
Yes	6	100.0
No	-	0.0
Total	**6**	**100.0**

Field data, 2011

Table 7 indicates that the various departments prepare their own budgets. These budgets covered departmental forecasts of revenues and expenditures. This also enables the actual financial operations of the organization to be measured against the forecasts.

Table 8: Departmental Authorization to spend after budget approval

Response	Frequency	Percent
Yes	5	83.0
No	1	17.0
Total	**6**	**100.0**

Field data, 2011

Table 8 indicates that the various departments sought for authorization to spend after the initial budgets have been approved by head office.

Table 9: Communication of overall financial plan to Departments

Response	Frequency	Percent
Yes	6	100.0
No	-	0.0
Total	**6**	**100.0**

Field data, 2011

Effective organizational communication focuses on openness in communication between senior management and employees, resulting in improved employee engagement and productivity. Table 9 indicates that the overall financial plan of the organisation is well communicated to the various departments, thereby building and maintaining rapport among the various business units and Head Office.

Table 10: Departmental Targets for the Financial year

Response	Frequency	Percent
Yes	6	100.0
No	-	0.0
Total	**6**	**100.0**

Field data, 2011

Table 10 indicates that the various departments set targets for each financial year which is reviewed and approved by Head Office.

Table 11: Departmental Expenditure strictly to the Budget

Response	Frequency	Percent

Response	Frequency	Percent
Yes	6	100.0
No	-	0.0
Total	**6**	**100.0**

Field data, 2011

Departments are required to spend strictly according to their approved budgets. As indicated in table 11, this helps the organisation to spend in an orderly and planned manner.

Table 12: Disciplinary actions taken against Departments unable to meet Targets

Response	Frequency	Percent
Verbal Caution	1	17.0
Query	2	33.0
Sanctions	3	50.0
Total	**6**	**100.0**

Field data, 2011

Table 12 indicates that disciplinary actions are taking against departments that could not meet their set targets for each financial year. These are in the form of queries and personnel reshuffle.

4.4.2 DISCUSSION

In this time of economic hardship, businesses are among those being hardest hit particularly with their inability to access lines of credit to help maintain effective cash-flow. Therefore, it is imperative that these businesses take the steps necessary to budget and effectively manage funds they do have available. Budgets and forecasts provide a feasibility analysis. They can help develop a business model, review your key assumptions, and identify resources and capital needs. Budgets and forecasts can be used to seek funding, thereby increasing the organizational working capital. This is because budgets and forecasts are management tools that demonstrate the potential of your business to investors and lenders. Tables 6 to 10 clearly show that the organization believes in the importance of having an organizational budget and its implications on working capital. This enables that organization to make the necessary adjustments to avoid the risks, to reach set targets and to measure up to benchmarks.

In drawing up a budget, the G.W.C.L takes into consideration its investment in short term assets such as cash, accounts receivable, inventory, and other items listed as current assets on the firm's balance sheet that are necessary for the normal operation of the business and its investment in long term assets such as plants, machinery, lands, buildings, etc. The organization also needed capital for construction, renovation and expansion of their water supply systems. The budget should enable the business firm maintain an adequate level of working capital in order to run its business smoothly. Working capital is just like the heart of business (Kavitha, 2007), if it becomes weak, the business can hardly prosper and survive. Therefore, a budget helped maintain adequate working capital and disciplinary measures such as queries and sanctions were put in place by management to ensure that the various departments perform up to their optimum as shown in Table 12.

Communication is key to the attainment of any organization's objective(s). Good communication leads to personal power, motivation, resolving conflict, solid delegation, and smooth facilitation and collaboration among the various business units. As indicated in table 11, the organization's objectives and targets are clearly communicated to the various departments by the Head Office and therefore contributed in improving organizational working capital.

4.5 Research Questions Two:

4.5.1 How does Excessive Inventory affect Working Capital Management?

Since this research question deals with inventory, only the Store/Material Managers were surveyed for this study. Below are their responses.

Table 13: Tracking of Inventory

Response	Frequency	Percent
Internal control system	5	83.0
Suppliers	1	17.0
Total	**6**	**100.0**

Field data, 2011

Accuracy and immediate tracking of items is one of the important tasks any company can perform, and inventory personnel should be able to quickly add the warranty data to items that are received on invoices in combination with other stock. Once received with assigned data, stock in your system carries that data permanently, allowing for your customers' satisfaction and providing valuable data about those items that may have a consistent record of required repairs and/or replacements. Table 13 indicates that the Ghana Water Company Limited has Internal control measures for tracking inventories.

Table 14: Management of damage/ stolen inventories

Response	Frequency	Percent
Disposed off after approval	6	100.0
Other	-	0.0
Total	**6**	**100.0**

Field data, 2011

The organization set up a committee that investigates the circumstances surrounding the damage or missing of inventories after which appropriate actions are taken against culprits. The stolen or damaged inventory is then disposed off after approval by the management or board.

Table 15: Security at Stores

Response	Frequency	Percent
Perfect	2	33.0
Very good	3	50.0
Good	1	17.0
Total	**6**	**100.0**

Field data, 2011

Table 15, indicates that the majority (50%) of the respondents found the security at the stores to be either very good whiles 17% found it to be good.

Table 16: Obsolete Items in Stock

Response	Frequency	Percent
Yes	6	100.0
No	-	0.0
Total	**6**	**100.0**

Field data, 2011

Table 17: Management of surplus inventory

Response	Frequency	Percent
Add to stock	6	100.0
Written off	-	0.0
Total	**6**	**100.0**

Field data, 2011

Table 17 indicated that surplus inventory was managed by adding them to existing stock which will result in excessive stock level.

4.5.2 DISCUSSION

Inventory management is also crucial in maintaining a healthy working capital. This tries to balance inventory needs and requirements with the need to minimize costs resulting from obtaining and holding inventory. Inventory, which is one of the most important elements of current assets, reflects the investment of a firm's funds. Hence, it is necessary to efficiently manage inventories in order to avoid unnecessary investments in inventory (Singh, 2008).With the help of better inventory management, a firm can reduce the levels of inventories to a considerable degree without any adverse effect on production and sales and therefore secure funds to finance other current expenditures. This can be done by complying strictly on minimum levels, economic order levels, re-order levels and maximum levels of inventory.

Maintaining the right inventory levels is a tough challenge. If not properly managed, your inventory can result in a significant expense which can affect profitability. Tables 13 to 16 suggest that there are adequate inventory management practices within the organization. It must be noted that the internal control systems for tracking of inventory are manually operated as indicated in table 13. However, there is the need to improve the inventory management process for greater efficiency. Fortunately, there are management information systems that exist which use microcomputers and a variety of industry specific software. The study reveals that the G.W.C.L's expenditure for carrying inventory was very high, which requires immediate attention. According to Singh (2008), with effective and efficient inventory management, a firm can reduce its levels of inventories to a considerable degree of about ten to twenty percent without any adverse effect on production and sales.

Table 16 indicate that obsolete items in stock are properly managed. This is in accordance with studies conducted by Hedrick et al (2000), which state that inventory management involves controlling the transfer of units in order to prevent the inventory from becoming too high, or dwindling to levels that could put the operation of the company into jeopardy. Competent inventory management also seeks to control the costs associated with the inventory. It also makes it possible to prepare accurate records that are used for accessing any taxes due on each inventory type. Without precise data regarding unit volumes within each phase of the overall operation, the company cannot accurately calculate the tax amounts.

However, it must be noted that G.W.C.L had high levels of absolute inventory in its stock as indicated in table 16. Also, they have surplus inventory as indicated in table 17. Hedrick, et al (2000), state that one of the most important aspects of inventory control is to have the items in stock at the moment they are needed. This includes informing suppliers early enough to ensure delivery at the proper time. Thus, buying requires advance planning to determine inventory needs for each time period and then making the commitments without procrastination. This means understanding how long it takes for a supplier to process an order and execute a delivery. The study revealed that the management of Ghana Water Company Limited (G.W.C.L) had a fair understanding of how long it will take for materials to transfer out of the inventory. It is the view of the researcher that management put in place systems that would offer credible information on these two important lead times to enable them asses efficiently and effectively when to place an order and how many units must be ordered to keep production running smoothly to avoid over and under stocking.

The creating of a buffer stock is also key to effective inventory management. Essentially, buffer stock is the inventory of inputs held as a reserve against short term shortages and to dampen excessive fluctuations in the prices of commodities (Emma, 1966). Thus, keeping the units above and beyond the minimum number required to maintain production levels and helps to minimize the chance for production to be interrupted due to a lack of essential parts in the operation supply inventory. To maintain an effective buffer stock, there is the need to maintain a reliable inventory stock record. Inventory management is not limited to documenting the delivery of raw materials and the movement of those materials into operational process. The movement of those materials as they go through the various stages of the operation is also important. Typically known as a goods or work in progress inventory, tracking materials as they are used to create finished goods also helps to identify the need to adjust ordering amounts before the raw materials inventory gets dangerously low or is inflated to an unfavorable level. Any reduction in inventories, whether it is raw material, work-in-process, finished goods or supplies, can have a dramatic impact on your bottom line.

4.6 Research Question Three:

4.6.1 How does Revenue or Cash Collection / Receivables affect Working Capital?

Table 18: Separate Departments for Accounting and Customer Care Cashiers

Response	Frequency	Percent
Yes	6	100.0
No	-	0.0
Total	**6**	**100.0**

Field data, 2011

Table 18 indicates that the accounting department is separated from the Revenue Cashier department. This was done to ensure proper reconciliation of accounts.

Table 19: Usage of Accounting Software

Response	Frequency	Percent
Yes	6	100.0
No	-	0.0
Total	**6**	**100.0**

Field data, 2011

Table 19 indicates that the personnel of organization uses accounting software such as excel and other spread sheet programs to enhance the ease of their work, however there is no centralized accounting program that is used by the organization.

Table 20: Receipts Identification Number

Response	Frequency	Percent
Yes	6	100.0
No	-	0.0
Total	**6**	**100.0**

Field data, 2011

Receipts are very important for the day to day running of any business establishment. Receipts identification number is vital for verification purposes. One thing that provides for the genuineness of a business is the ability to issue official receipts. To ensure that companies are reporting the exact amount of income and pay the correct amount of taxes they are required to give an official receipt. Table 20 indicates that receipts had identification numbers that enabled the accounts department track all funds received by the Customer Care department.

Table 21: Reconciliation of Cash Receipt

Response	Frequency	Percent
Yes	6	100.0
No	-	0.0
Total	**6**	**100.0**

Field data, 2011

Table 21 indicates that all cash received by the Customer Care department reconcile with the receipts submitted to the accounts department.

Table 22: Personnel Responsible for Cash Deposits

Response	Frequency	Percent
Cashier	5	83.0
Accounts officer	1	17.0

Response	Frequency	Percent
Cashier	5	83.0
Accounts officer	1	17.0
Total	**6**	**100.0**

Field data, 2011

Majority of the respondents (83.0%) indicate that the cashier is responsible for cash deposits whiles 17.0% indicated that the Account Officer is responsible for cash deposits.

Table 23: Periodic check of fund by independent employee

Response	Frequency	Percent
Yes	6	100.0
No	-	0.0
Total	**6**	**100.0**

Field data, 2011

Table 23 indicates that funds were periodically counted and certified by an independent employee from the Accounts Department before deposits are made at the bank.

Table 24: Investigation of discrepancies by Internal Audit Department

Response	Frequency	Percent
Yes	6	100.0
No	-	0.0
Total	**6**	**100.0**

Field data, 2011

Investigating the discrepancies in accounts is vital to the smooth running of any business establishment. This also helps curb fraudulent activities occurring in the business, therefore almost all disputes relating to the business or corporation accounts are handled by the Internal Audit Department as indicated in Table 24.

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Table 25: Management investigation into all substantial Variances

Yes	5	83.0
No	1	170
Total	**6**	**100.0**

Field data, 2011

Majority of the respondent (83.0%) are of the view that management must investigated all substantial variances and take disciplinary actions against culprits whiles 7.1% were of the view that no such investigation takes place.

Table 26: Revision of Credit limits

Response	Frequency	Percent
Monthly	1	12.5
Over a year	5	87.5
Total	**6**	**100.0**

Field data, 2011

Majority of the respondents (87.5%) indicate that credit limits are revised over yearly while 12.5% were of the view that credit limits are revised monthly as indicated in Table 26.

Table 27: Bill delivery after meter reading

Response	Frequency	Percent
Two weeks	5	87.5

A month	1	12.5
Total	**6**	**100.0**

Field data, 2011

Majority of the respondents (87.5%) indicate that bills are delivered a week after the meter has been read while 12.5% were of the view that bills are delivered a month after the meter has been read as indicated in table 27.

Table 28: Customer's expected period of payment

Response	Frequency	Percent
Two weeks	-	0.0
Three weeks	6	100.0
A month	-	0.0
Total	**6**	**100.0**

Field data, 2011

Customers are expected to make payment three weeks after submission of bills as indicated in Table 28.

Table 29: Period beyond which a customer's account is disconnected

Response	Frequency	Percent
Two weeks	1	12.5
A month	5	87.5
Total	**6**	**100.0**

Field data, 2011

Majority of the respondents (87.5%) indicate that it takes a month after excepted due date of payment before customer accounts are discontinued while 12.5% are of the view that it takes a month after excepted due date of payment before customer accounts are discontinued as indicated in table 29.

Table 30: Penalty for default customers

Response	Frequency	Percent
Yes	6	100.0
No	-	0.0
Total	**6**	**100.0**

Field data, 2011

Table 30 indicates that the company has sanction or penalties for customers who refuse to pay on time. The penalties are in the form of disconnections and court actions taken against customers who default in payments.

Table 31: Period before penalty action

Response	Frequency	Percent
A week	-	0.0
Two weeks	-	0.0
A month	6	100.0
Total	**6**	**100.0**

Field data, 2011

Table 31 indicate that it takes a month before any of the above stated sanctions/penalties in table 30 is taken against customers who default in payments.

Table 32: Services of private revenue collectors

Response	Frequency	Percent
Yes	2	25.0
No	4	75.0
Total	**6**	**100.0**

Field data, 2011

Majority of the respondent (75%) are of the view that, the services of private revenue collectors are not sought because most of them retrieve the debt from customers but refuse to pay it into the company's account while 25% use the services of private revenue collectors as indicated in table 32.

4.6.2 DISCUSSION

Most companies receive revenue from interest, dividends or royalties and direct payments paid to them by other companies or customers (Williams, 2008). Debt management is an extremely important part of any business enterprise in that the slow paying of accounts will almost invariably put stresses on the working capital ratios of the business. The credit policy of a firm would affect its debt management procedures. An efficient credit policy would serve as a guide to enable management control debtors and make balance between liberal and strict credit. A liberated credit policy will increase the amount of sale and liquidity. But risk will also increase with increasing of sale. On the other hand, if company's credit policy is strict, then it will increase liquidity and security of the company.

The process of credit management begins with accurately assessing the credit-worthiness of the customer base. This is particularly important if the company chooses to extend some type of credit line to certain customers. Proper credit management calls for setting specific criteria that a customer must meet before receiving any type of credit arrangement. As part of the evaluation process, credit management also calls for determining the total credit line that will be extended to a given customer (Tatum and Harris, 2010).

The length of credit period is an important element to consider when creating a credit policy or managing debtors. The study showed that G.W.C.L provided it's services on credit to its customers and operated a credit period of between four (4) and eight (8) weeks as indicated in table 26 to 30, which made the company's operations to be centered around customers ability and wiliness to pay up on time. It is therefore the view of the researcher that the G.W.C.L adopts a credit policy at an optimum level where liquidity is paramount. Obtaining information from customer's financial statements of previous years, bank reports, and information given by credit rating agencies would also serve as a guide as to which credit policy the firm should adopt. This information will also be useful for knowing the capability of customers to pay the debt and whether or not the company should facilitate to sell goods on credit.

The goal of working capital management is to ensure that the firm is able to continue its operations and that it has sufficient cash flow to satisfy both maturing short term debt and upcoming operational expenses. Businesses need cash to finance their day to day activities, as well as perform those activities that are not measured on the balance sheet (Brealey, 2002) but which invariably contribute to the success of the business.

Revenue management is the process of understanding, anticipating and influencing consumer behavior in order to maximize revenue from a fixed, perishable resource (Talluri, 2001). Other scholars define it as the application of disciplined tactics that predict consumer behavior at the micro market level and optimize product availability and price to maximize revenue growth (Robert, 1997). The study revealed that revenue management system adopted by G.W.C.L is aimed at preventing revenue leakage, increase cash flow and reduce cost. According to (Talluri 2001), a firm's demand has multiple dimensions which include the different products it sell, the type of consumers it serves, their preferences and purchase behaviors' and times. With an advance forecast of demand and pricing flexibility, buyers will self-sought based on their price sensitivity, their demand sensitivity or their time of purchase and therefore increasing a firm's receipt of cash.

In order to early identify possible discrepancies that can show up in further accounting, the separation of the Accounting and Customer Care departments serves as a check and balancing system. As indicated in table 18 this would help improve on revenue management since discrepancies are detected on time and dealt with accordingly. This in the long run helps improve the organizational working capital management as revenue management involves the forecast of high or low demand periods and its corresponding inventory levels, all of which involves revenue.

CHAPTER FIVE

5.0 SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUSION

This chapter of the research report focuses on the overview of the study, summary of major findings, the conclusion drawn from the study and the recommendations. It also looks at the suggestions for further studies.

5.1 Overview of the Study

The purpose of the research was to find out how working capital is managed at Ghana Water Company Limited in Central Region of Ghana. Specifically, the study sought to find out the impact of revenue, credit management and inventory on working capital management. This led to the formulation of four research questions and six hypotheses to guide the study. In all, six (6) respondents were surveyed for the study.

The researcher used questionnaires to collect data for the study. These questionnaires included the Likert scale (rating) type of items for the respondents to respond to. Close-ended items were also included in the questionnaire. The questionnaire was administered by the researcher.

The research questions and the data collected from respondents were analyzed using simple frequencies and percentages.

5.2 Summary of Major Findings

From the analysis, it was found that the company offers it services on credit to its customers. The study showed that it takes five weeks after a product's consumption before customers are expected to make payments and nine weeks before any action is taken against recalcitrant customers, by that time the real value of the debt would have depreciated because of the nature of inflation in the country.

The results from the study also indicate that there are a lot of obsolete and surplus items in the stock which are written or disposed off after approval from management. Most of these items have diminished in value, leading to large losses for the company.

The study revealed that the separation of the Customer Care and Accounts Department helped in improving revenue management as the departments served as a check and a balance mechanisms for which the Internal Audit Department plays only a supervisory and investigative role when major discrepancies occur.

It was again revealed that spending is controlled centrally, with departmental spending given approval even after their budgets have been approved. This indicates there is a centralized control on how money is spent within the organization. The advantage of this system is that departmental spending should always fit into the overall organizational spending objectives before monies are approved.

5.3 Recommendations

Based on the findings of the study conducted, the following recommendations are made:

1) It is suggested that the management of the Ghana Water Company Limited find an efficient and effective way of introducing prepaid water meters. This would help increase cash flow since consumers would pay upfront and conserve monies spent on litigation or for hiring credit collectors. However, it is worth noticing, that studies conducted on prepaid water meters in the United Kingdom and other developing countries such as Philippines, Namibia, Swaziland, Tanzania, Brazil, Nigeria, and Curacao, found it to have negative social impact such as Cholera outbreaks, Guinea worm disease, diarrhea, etc.
2) It is suggested that the management of the Ghana Water Company Limited puts in place

proper and efficient inventory forecasting systems as they help reduce the quantity of surplus inventory which may turn up to be obsolete in the future.

3) It is suggested that management invests excess bank balances into risk free investments such as treasury bills rather than leaving such huge balances with the banks.

4) Maintaining standardized minimum cash levels for all Regional and District Offices to avoid cashiers keeping huge sums of monies as imprests.

5) It is suggested that management reviews its credit policies at least once a year in order to enable a flow of more cash into the system.

6) It is suggested that management constitutes a Working Capital Management Committee which will involve all stakeholders who will be responsible for the formulating of policies that facilitate the effective management of working capital in the Organization.

7) It is also suggested that management sets realistic revenue targets or performance levels for the various departments so as to improve efficiency and productivity.

8) It is also suggested that management arranges for more credit days from suppliers to minimize the outflows of cash.

9) It is suggested that management resort to alternative disputes resolution mechanisms in order to retrieve bad debts and also to offer good customer care services.

10) It is also suggested that management considers the Factoring of its long outstanding debtors. This involves selling of long outstanding accounts receivables in order to obtain immediate cash or working capital. This will eventually increase the cash flow of the business.

11) Selling of the business's obsolete assets is another way of adding up to working capital. In situations where the business has a variety of obsolete equipment due to technological advancement and surplus items in stock, can conveniently dispose such equipment to raise immediate cash for the purchase of new ones or turns to other pressing issues

affecting the business.

12) Proper cash flow forecasting is the most prominent principle in working capital management. This involves estimating the impact of unforeseen events, fluctuating market cycles, loss of a large customer and competitor reactions.

13) Management should also ensure an efficient utilization of resources by putting in place quality assurance measures to ensure that quality is in built into the system from the planning stage so as to maximize output.

14) Management should also to put in place measures to cut down expenditure by ensuring that all departments spend within their budget allocated to them.

5.4 Conclusion

Working capital is the life-blood and nerve centre of any business firm. The sufficiency of working capital assists in raising credit standing of a business because of better terms on goods purchased, lesser costs of manufacturing due to the acceptance of cash discounts, favorable rates of interest etc. Based on the findings of the study above, it can be concluded that efficient management of working capital is the life blood of Ghana Water Company Limited and that there is no doubt that Ghana Water Company Limited is a firm believer of this fact.

Examination of all the policies and practices of the organization indicates a cautious attempt to efficiently manage working capital and increase cash flow. It also confirms that inventory, revenue, inflation and debtors have an effect on working capital management and the overall liquidity of the firm.

5.5 Suggestions for Further Studies

A critical look should be taken at the introduction of prepaid water meters and its social economic impact on the consumer in Ghana as this has the potential to increase organizational cash flow immensely.

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APPENDIX

KWAME NRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

Questionnaire for the Assessment of the working capital management in the Ghana Water Company limited

The researcher is pleased that you have been selected for this study and hopes that interacting with you will yield useful results. Your willingness to respond to this questionnaire and the genuineness and accuracy of your responses will be very much appreciated. You are assured of the confidentiality of your responses.

INSTRUCTIONS: ***Please read the items carefully and tick the appropriate option***

PART ONE: PERSONNEL PROFILE

1. How long have you been working in this establishment?

   1-5 years ☐

   6-10 years ☐

   11-15 years ☐

   16 years and above ☐

2. Level of education?

   Primary ☐

   Secondary ☐

   Tertiary ☐

3. Age?

   20-30 years ☐

   31-40 years ☐

41-50years

50-60years

PART TWO: CASH AND CREDIT MANAGEMENT

4. Is there an accounting department separate from the cashier? Yes No

5. Does the cashier assume full responsibility for the receipts from the time they are received until the time they are handed over for deposit? Yes

6. Is the cash adequately safeguarded (physically) within the facility?

7. If Yes, what is the maximum amount that is kept in the facility (range)...................................

8. Are cash funds periodically counted on a surprise basis by an independent employee?

Yes No

9. Are all resulting discrepancies investigated and resolved by internal audit department?

Yes No

10. Does management investigate all substantial variations from norms such as cash register voids, no sales, refunds, errors, revenue levels, etc.? Yes No

11. Does your organization prepare a budget for the financial year? Yes

12. Is the budget prepared by each department and sent to management for approval?

Yes No

13. If No, please state how it's done...

....

....14. Do the departments seek authorization to spend after their budgets have been approved?

Yes No

15. Is the overall financial plan / forecast communicated to each department? Yes

16. Are the departments given targets for each financial year? Yes ☐ No ☐

17. Are the department required to spend strictly according to the budget? Yes ☐ No ☐

18. What happens to departments which are not able to achieve their targets? ……

PART THREE: INVENTORIES

19. How are inventories tracked?………………………………………………………………………………

……

……………………………………………………………………………………

20. What happens to Surplus /damaged and stolen inventories? ……………………………………………

……

………

21. Is there a process of informing the purchasing agent that more inventories should be ordered?

Yes ☐ No ☐

22. If ***yes,*** How would describe the process? Effective ☐ Non effective ☐

23. How is inventory surplus managed? …………………………………………………………………………

……

21. How would you describe the security at the stores? ……………………………………………

……………………………………………………………………………………

PART FOUR: REVENUE / RECEIVABLES MANAGEMENT

22. Is there an accounting department separate from the cashier? Yes ☐ No ☐

23. Does the organization use Accounting software? Yes ☐ No ☐

24. If NO, what system of accounting does the organization use? ……………………………………………

……………………………………………………………………………………

25. When cash sales occur, do all receipts have pre-numbered identification? Yes

26. Are authenticated duplicates of the deposit slips retained and reconciled to the corresponding amounts in the cash receipts records? Yes

27. Are cash funds periodically counted on a surprise basis by an independent employee?

Yes No

28. Are all resulting discrepancies investigated and resolved by internal audit department?

Yes No

29. Does someone independent of the cash receipts process reconcile payment receipts to deposit slips on a daily basis? Yes

30. Does management investigate all substantial variations from norms such as cash register voids, no sales, refunds, errors, revenue levels, etc.? Yes No

31. Do you have any credit policy? Yes No

32. Are credit limits set for all accounts? Yes No

33. If ***yes***, how are credits limits maintained and monitored?

....

....

34. How often is credit limits revised?

Weekly Monthly Yearly

35. How soon after reading meter is the bill sent to the customer?

A week

Two weeks

Three weeks

A month

COLLECTION PROCEDURE

36. How soon after delivery of bill is the customer required making payment?

A week ☐

Two weeks ☐

Three weeks ☐

A month ☐

37. How many days beyond due dates are Customer accounts discontinued?

A week ☐

Two weeks ☐

Three weeks ☐

A month ☐

38. Is there any penalty for default customers? Yes ☐ No ☐

39. If yes, what is the penalty? …………………………………………………………………………………………

………

………

40. What happens if a Customer refuses to pay after disconnection? ………………………………………

………

………

41. How many days beyond the due date is a Customer placed with a Collection agency, Court or Attorney for collection.

A week

Two weeks

Three weeks

A month

Thank you