WORKING CAPITAL MANAGEMENT IN PHARMACEUTICAL RETAILING:

A case study of Karu Pharmaceutical Company Limited, Zaria.

BY

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A project submitted to the post Graduate School, Ahmadu Bello University, Zaria.

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AHMADU BELLO UNIVERSITY, ZARIA.
DEPARTMENT OF BUSINESS ADMINISTRATION FACULTY OF ADMINISTRATION AHMADU BELLO UNIVERSITY, ZARIA.

1996.

DEDICATION

To the entire Muslim Ummah

DECLARATION

I hereby declare that this project work is the project of an Original Study conducted by me under the supervision and guidance of Mallam A.M Abu-Abdissamad. I therefore accept responsibility for all errors and omissions there in.

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CERTIFICATION

This project entitled "Working Capital Management in Pharmaceutical Reatailing A Case study of Karu Pharmaceutical Company Limited" by UMAR RAKIYA ALTINE. Meets the regulations governing the award of the Degree of Masters of Business Administration (MBA) of Ahamdu Bello Univeristy, Zaria and is approved for its contribution to knowledge and literacy presentation.

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ABSTRACT

Working capital represents the excess of current assets over current liabilities. Current assets comprise cash, inventories, accounts receivable, and marketable securities while current liabilities comprise notes payable, trade creditors, bank overdraft, short term loans and accruals. Various models by many authors on theoretical techniques of working capital management were considered on the need for adequate cash for expected and unexpected operations. The need for economic level of stock to avoid overstocking and stock out and the theories in respect of investment in marketable securities, Others include the formulation and implementation of policies with regards to accounts receivable to improve sales and to estimate opportunity costs of savings.

The empirical investigation of how Karu Pharmaceutical Company Limited managed its working capital was by interviews and personal observations. Using the firms financial statement for the year ended December, 1992, financial ratios were calculated to determine their successes and failures as compared with industry average. It was discovered that sub-optimality in the level of cash remained the major problem facing the company. Ratio analysis confirmed very low levels of quick ratio and current ratio.

An effective and efficient management of working capital components results in optimality in the level of these components. The importance of working cannot be over emphasised. According to Van horne J.C. Working capital Management is not only strategic but primary and pervasive.

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CHAPTER ONE

INTRODUCTION:

1.1 Background of the study:

Retailing is the buying and selling of good in small quantities to individual customers. The Nigerian economic system is a private, free enterprise, where businessmen follow their own inclination without control from the centre. Only those businesses that are consumer oriented succeed and those that are unable to serve their customers efficiently fail. Because of the freedom of choice existing between buyers and sellers, competition forces stores to be efficient, competition forces stores to be efficient, to keep facilities up to date and to sell at competitive prices.

A retail pharmacy falls into the above operational concept. The finished activities of a pharmacy consist of a series of economic events called transactions that serve as building blocks of accounting and financial systems. Transaction involves an exchange of cash for goods (stock) and services. Simply put, retail pharmacy is the dispensing of drugs to customers for an exchange of cash.

A pharmaceutical retailing outfit is part and parcel of a pharmaceutical industry. The pharmaceutical retail concern is a dealer to the pharmaceutical industry. They buy, distribute and promote drugs and allied products from the manufacturers and sell in units directly to the consumers. A pharmaceutical retail outfit operates in a registered premise approved by the pharmacy Board of Nigeria. Such premises must be under the control of a superintendent pharmacist. The pharmacist can and is licensed to sell, dispense, compound, store, import and export pharmaceutical preparations both as over the counter drug or ethical (prescription) drugs, cosmetics and other beauty products, household toiletries and other consumer products, these products feature prominently in a typical pharmaceutical shop.

Karu pharmaceutical (Nig) Ltd, the company under study is an example of a

pharmaceutical retail shop characterised by the above descriptions. Karu Pharmaceutical (Nig) Ltd is situated opposite the first gate of the Ahmadu Bello University Teaching Hospital. Tudun Wada, Zaria.

Drugs (Stock) in a pharmacy are speciality goods. They are compounds that have several effects on the body system and its invaders (i.e germs, viruses and bacteria) and therefore requires expert hands to handle. They are equally very expensive to procure and needs care to sell. Drugs constitute more than half of the total investment in a pharmacy. Therefore, management of inventory as well as cash, marketable securities and accounts receivable become very cardinal to the success of retailing pharmaceutical products.

Working capital components consist of cash, inventory, marketable securities and accounts receivable with cash being the most liquid and inventory the least liquid of current assets. They are volatile, as such require careful management. A Mismanagement of working capital component can lead to sub-optimality such as low or too high level of cash, excessive or insufficient level of inventory and/or high account receivable.

Sub-optimal levels of working capital of an orginisation can be evidenced in illiquidity; a situation where a firm is unable to meet its short-term obligation as and when due. These situations among others result in bankruptcy.

1.2 Statement of the Problem:

Working capital components are short-lived with life span not exceeding one year. They are even more volatile in retailing business. Worst still if the inventory components are represented by perishable merchandise like drugs and medicaments as obtained in Karu Pharmaceutical Ltd, keeping an optimum cash level becomes difficult.

Considering the very large variety of drugs necessary to be stocked, establishing an economic quantity in order to service the varied needs of the customers while at the same time

avoiding loses due to expirations, obsolescence, withdrawal from circulation due to discovered toxity or teratogencity have been elusive in Karu Pharmaceutical Company.

These problems are not peculiar to Karu pharmaceutical alone but typical to any pharmaceutical retail outfit.

1.3 Objective of the Study:

This project is meant to give a descriptive rendition of the operation of the working capital in Karu Pharmaceutical Company Limited, to pursue and present normative view on the operation of working capital as obtained in literature. This project also intends to analyse critically, the management of working capital in Karu Pharmaceutical Limited and make suggestions for its more efficient and effective operation based on the optimal style in the literature and the environmental factors contingent on Karu Pharmacy.

Finally, a careful generalisation of the study will be done on other pharmaceutical retailers.

1.4 Significance of the study:

The need for an organisation to have an optimum or near optimum level of liquidity at all time cannot be over-emphasised, however achieving optimality in working capital is a difficult task. Therefore, this study on working capital management in pharmaceutical retailing would investigate the extent to which businesses have been able to effectively handle the dilemma of eliminating idle cash as well as meeting their short term obligation as and when due.

A large percentage of Nigerian Businesses especially those in retail business are ignorant of the different types of current assets available to them for investment and the various current liability components which could serve as source of short term fund and how to effectively manage these working capital components, it is against this background that the researcher deemed it fit to undertake this study to increase the readers understanding of working capital

components, higlighting some means of achieving opptimalty.

Finally, the researcher believes that this study will stimulate further research in this important and interesting aspect of financial management and hopes it will help in advancement of learning and knowledge.

1.5 Scope and limitation:

The project is to cover one financial year of Karu Pharmaceutical Limited. This period is between 1991 - 1992. The scope is limited to one year because working components are characterised by life span of less than one year. We therefore noted human error that could arise from extraction of enormous fact and figures from an individual.

This work is a case study of only one retail pharmaceutical firm, hence it is not possible to compare the results with any other and hence generalisation of the analysed data would be done with caution.

Use of ratio analysis is fraught with other limitation for these reasons.

(a) Figure computed from ratio may not necessarily portray the firm s true financial status. Some could be assumed while others need going beyond to analyse properly the financial conditions.

(b) Companies in the same industry might have different size and capacity.

(c) The various companies with an Industry grouping may not be Homogenous. More products in a Company often defy precise Industry categorization.

(d) The financial condition and performance of an entire Industry may be less than satisfactory and a company s being above average may not be sufficient.

The researcher therefore notes the above limiting factors and hopes to analyse the data bearing in mind the above limitations.

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1.6 Research Methodology:

Methodology as conceptualised by Goods and Hatti refers to the application of the fundamentals of science Research while technique comprise of specific procedures by which a Social researcher gathers and orders his data prior to their logical and statistical manipulations.

Within the above framework in relation to the research area or topic, the study is essentially a case study. The term case study usually refers to a fairly intensive examination of a single Unit, Such as person, a small group of people or indeed a single company. Case study involves measuring and studying what is there and how it got there. It is therefore historical and can enable us explore, unravel and understand problem, hence the history and observation of the case are very important for example its ownership and management. The practical observation of an operation adds reality to the picture and makes the findings valid and more reliable.

In conducting this research both primary and secondary data were utilised. The Primary data were sourced from unstructured interview with the managing Director and one of the Directors of Karu pharmaceutical limited, A review of relevant and related literature, finance Texts, finance journals and unpublished materials provided the secondary data which formed the bulk of the data.

The collection data were summarised and subjected to critical analysis to draw meaningful conclusions and suggestions. In measuring the data financial ratios were used in most cases and compared with industrial averages. As earlier mentioned observation was considered very important in this study because it allowed the researcher to see at first hand how Karu pharmaceutical Company Limited operated.

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CHAPTER TWO.

LITERATURE REVIEW:

2.0 Introduction:

Karu pharmaceutical Company Limited is a private Limited liability Company Registered to trade in, supply, distribute on whole sales and dispense pharmaceutical and Allied products. Established in 1983 Under the name of Waliyi Pharmaceutical Company with an initial capital of ₦10,000.00 (Ten thousand Naira). Waliyi Pharmacy was the first to be located opposite the Ahmadu Bello University Teaching Hospital, Zaria. The name was later changed to Karu Pharmaceutical Limited in 1987.

The business is jointly owned and managed by a family of husband and two wives.

Mrs Hannatu Ojile, a pharmacist is the managing Director, while Dr Joseph Ojile a Doctor of pharmaceutical Technology and Mrs Roseline Ojile a professional Nurse serve as Directors. The Company is a medium scale retail outlet that employ six staff who work in shifts from 8.00am to 3.00pm and from 3,00p.m to 8.00p.m every day except on Sundays.

It will be easier to present the data collected from Karu under the Topic of various working capital components essentially to state how these components are managed. They are classified as cash, marketable securities, Inventories and accounts receivable management.

2.1 Origin of Retail Pharmacy:

The Origin of pharmacy could be traced back to the time when man first applied Herbs to relieve pains or dress wounds. Subsequently man started to blend different Herbs with each other or with other Chemicals such as mercury or sublimed-sulphur. In the 12th and 14th Centuries the crusaders introduced the combination of herbs and Arabian Spices, then the function of grocer and

apothecaries were often combined.

However, with time these functions were separated due to increasing need for specialised skills (as unfamiliar Drugs came into being) to manufacture and Blend. This led to the splitting in 1617 of the Joint London Guild and led to the formation of society of apothecaries.

Over the next couple of centuries that followed, there was a gradual shift of emphasis from pharmacy to medicine. A vacuum was thus created in the supply of Drugs, this was later filled however, by retailing chemists and Druggists. Many of these Druggists and chemists later developed into wholesalers and manufactures for example the 19th century Allen, Hanbury s and Barry is today Allen and Hanbury s Limited.

2.2 A General Picturesque of a Pharmacy:

A Retail pharmacy is a licensed business. It buys and distributes pharmaceutical products. It sells in Units to customers by dispensing tablets, capsules, syrup/solution/ suspension, creams and ointment and injectables to customers either as proprietary (Over-the counter) Drugs or as ethical preparations (prescription Drugs).

A pharmacy is governed by a body of pharmacists called pharmacy Board of Nigeria (PBN). It can only operate when certified and duly recommended by the state ministry of Health after inspection. By law it must be manned by a superintendent pharmacist who may double as a manager.

A Retail Pharmacy is usually located in densely populated areas or around General Hospitals which usually do not sufficiently stock most Drugs prescribed to patients.

The store is neatly arranged with wooden shelves or glass shelves on which the Drugs and other Wares are displayed. Over-the -counter Drugs are usually screened away from ethical or scheduled Drugs. The latter may be dispensed only on authority of the pharmacist in attendance. Drugs classified as DDA, that is, Dangerous Drugs Act or poison are locked up in cupboards or

labelled Poison.

Most Drugs maintain their potency when stored at room temperature while others are termolabile and require special storage, such drugs are stored in Cold Rooms or refrigerators.

The Pharmacist Office is in-built, usually at one corner of the store. The Pharmacist keeps the normal required texts and Official reference Books for example martindale and British pharmacopoes (BP) or British pharmaceutical Coodex (BPC), these Texts are necessary for on the spot checks for dosage, dosage form Manufacturers stability and so on.

A retail pharmacy buys Drugs and other goods (referred to as inventory) on cash or on credit. They sell for cash and occasionally on credit to their regular customers (accounts receivable). Funds are sourced from trade credit or short term facilities from Banks in-form of overdraft, excess cash could be lodged in fixed Deposit Account to yield interest or to serve as collateral when matured.

2.3 Working Capital Management:

Working Capital, according to Weston and Brigham, is a firm's investment in short-term assets. The upper panel of the asset side of a balance sheet is the working capital these include cash accounts, receivable, marketable securities, inventories, prepayment and so on in order of liquidity. The Administration of these current assets is known as working capital management. However, it must be noted that working capital management extend to the administration of current liabilities, therefore, net working capital becomes the difference between current assets and current liabilities.

Working capital policy involves decisions with respect to the mix of current assets versus fixed assets, the mix short-term debt versus long term debt and the relationship between current assets and current liabilities.

Vanhorne defines working capital management as the administration of both current assets and current liabilities, observing that so much of a financial managers time is devoted to the day to day internal operation of the firm and that current assets represents more than 50% of total assets and that small firms such as Karu Pharmaceutical Company invest heavily in current assets and less in fixed assets. He also noted that small firms have little access to long term capital markets relying heavily on trade credits and short term loans which increase their liabilities and affect their net working capital, he therefore concluded that working capital management represent the efforts of the firm to make adjustments to short-term changes. These represent developments, which the firms make prompt and effective response.

Working Capital Cycle:

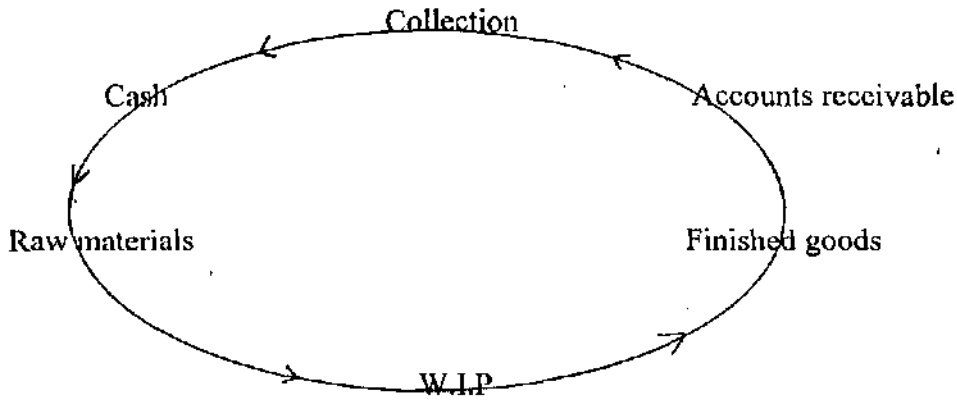


FIG 2.1

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2.3.1 Characteristics of working Capital:

Working capital components include Cash, Accounts receivable, Marketable securities, inventories, prepayments in order of liquidity, cash being the most liquid and prepayment the least liquid of working capitals components. These components have the following characteristics.

1. Safe for only a few exceptions, all components of working capital have life span of not more than one year.
2. The components are easily transformed into other forms, Thus Cash is used to replenish inventory or to offset part of short term credit.
3. Their life span depends upon the extent to which three basic activities viz. production, distribution, collection are non-instantaneous and unsynchronised.
4. Decisions involving working capital are frequency because of the volatility of the components and their span of life. The decisions are however, repetitive.

2.3.2 Current Asset Management:

By accounting definition current assets are convertible to Cash within one year. The management of each component may result in optimum level of each. In a retail business cash and inventory are the most important as a pharmacists assets are basically cash and goods (i.e drugs).

The ratio of each asset depends on the manager/pharmacist, the management philosophy, environment and the market being served. They could decide to operate a high inventory if the inventory turn over is high enough. Seasons when different afflictions are more rampant requires high inventory in drugs for treating such cases for example during hot season incidences of meningitis rises requiring high supply of CSM vaccines.

2.3.3 General determinants of current assets:

1. Nature and size of business. The bigger the business, the larger the current asset components.
2. Business fluctuation due to macro economic and seasonal variations
3. Firms' Credit policy affects the level of account receivable. A harsh policy will mean low account receivable and a relax policy will result in high accounts receivable.
4. Growth and expansion activities of a firm determine its current asset component. A fast growth calls for high amount of cash at hand.
5. Profit margin and profit appropriation policy determines the level of retained earnings necessary to boost working capital.
6. Price level charges.
7. Operating efficiency.

The must liquid of all current assets components is cash and liquidity is determined by the ease with which they are converted to usable cash, the time necessary for conversion and the degree of certainty of conversion ratio.

We shall now discuss each component of current asset.

2.4 Cash Management:

Cash is the most important current asset for operation of a firm. Cash is needed to purchase inventories, to pay trade creditors, to rent premises, payment of power and insurance premium as well as pauy wages and interests on loans and Taxes.

2.4.1 **Cash Control:**

Cash is of two kinds viz. demand deposit which consist of cheques held deposit and time deposit which is interest bearing and in some cases has withdrawal restrictions.

Cash is very susceptible to fraudulent misappropriation, there fore it is imperative that cash transactions be subjected to internal control since most activities of a pharmacy involves either an increase in cash or decrease in cash. Some useful control measures are as follows:-

(a) Cash Register:

A cash Register should contain an internal Register tape that lists all the transactions. The tape should be locked in the Register with access being limited to only specific persons, this will minimise alterations.

(b) Daily Deposits:

Management should ensure that cash are deposited in a bank without delay. Generally, crossing all cheques and making them Account payee only reduce fraud with cheques.

(c) Payment by Cheque:

To control cash disbursement effectively, most payments should be made by cheque.

(d) Separation of Duties:

No one person in a pharmacy should be given the responsibility of Ordering merchandise, verifying that items received conforms to original order and paying the suppliers. If these duties are not separated and divided among people, a lot fraudulent activities such purchase of substandard Drugs and payment of fictitious suppliers may result.

(e) Bank Statement:

The records of the Pharmacy should be reconciled monthly with those of the Bank to arrive at the true cash balance. This reveals not presented and dishonoured Cheque and necessary actions can then be taken.

(f) Petty Cash system:

In situations where small payments by cheques would result in delay, annoyances and excessive expenses for maintaining records, cash disbursement should be made from petty cash fund.

2.4.2 Cash Projection:

Cash projection or cash Budget is a vital instrument of financial management. It assists in planning the cash requirements necessary for acquiring inventory and fixed assets and for dealing with problems such as difficulties in controlling account receivables. Cash planning is useful in planning for temporary borrowing and its repayment. Banks may even be more willing to lend to a pharmacy that can present well-prepared Cash forecast showing when and how payment will be accomplished.

Proper cash management requires the development and applications of some practical administration procedures to accelerate the inflow and the improve the utilisation of the excess funds thus generated, the procedures are:-

(1) Proper planning of cash requirement.

(2) Effective Control of Cash flow.

(3) Production utilisation of excessive funds.

These procedures, if properly applied to the cash operation of the firm, should give management additional opportunity to increase the profits of the firm.

From a proforma balance sheet and income statement, Management can determine with high degree of accuracy:-

(a) The Firms cash receipt for current operation.

(b) Firms need for short term financing

(c) availability of funds for investment.

The more frequent the sales turnover, the less capital. The management needs to finance certain volume of business, cash management therefore involves the effective and efficient control of:-

i) Cash inflow and outflow of the firm.

ii) Cash flow within the firm

iii) Cash balance help by the firm at a point in time.

Cash is the most significant and the least productive asset that a firm holds.

2.4.3 Other areas of Generating Cash:

1. - Reduction in compensating balance on deposits with Banks.
2. - Strategic Tax Planning. Tax evasion is illegal but its avoidance is legal.
3. - Improving control over inter-firm transfers for example, the use of a central Bank Account by Various subsidiaries, Units, Division and so on. Transfers are made using accounting entries, this eliminates unnecessary Float .

2.4.4 Utilising Excess Fund:

When a firm is faced with a situation where it has excess cash at hand at a particular period, it can subscribe to any of the following means of Utilizing excess fund.

i) Investing in short terms obligation.

ii) Extension of loan to subsidiaries.

iii) Investment of fund through merger and acquisition in order to earn higher return.

iv) Application of excess cash to amortise or reduce loans and thereby obtains interest savings.

v) To develop new product or buy more stock for the sake of of variety and satisfaction of customers varied needs.

2.4.5 Motives for holding Cash:

Firms generally hold cash for three primary reasons. Transactionary, precautionary and speculative motives. The reasons will be discussed briefly.

Transactionary Motives:

Cash is held for the firms ordinary course of business making purchases for instance. Some firms have synchronsied inflow and outflow of cash. However, synchronisation is practically impossible in retail business because sales are random and a unmber of transactions may actually be made by physical cash.

Precautionary Motive:

Cash inflow and outflow are predictable. Therefore, Cash held in reserve for random, unforeseen fluctuations are referred to as precautionary.

Speculative Motive:

This refers to cash balance held to enable the firm to take advantage of any bargained purchases that might arise. It also refers to cash held for investment purpose with a view to taking advantage of expected returns.

2.4.6 Reasons for not Holding Cash:

Cash is a non - earning asset, it does not yield profit just lying there on its own unless invested. Idle cash is a wasted investment, excessive Cash simply lowers the total asset turnover thereby reducing both the rate of return and the value of a firms stock. It is therefore better to invest cash in quick return securities shortages may be prevented by selling off marketable securities.

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2.4.7. **Tools for Cash Management:**

1. Cash budgeting and forecast.
2. Synchronization of cash inflow and outflow. If firms could arrange thingsd so that their receipts coincide with their cash disbursement then, they can hold their transaction balance to the minimum.
3. Speeding collection of cheques: Efficient firms go to great length to speed up the processing of incoming cheques by means of concentration Banking. Lock box system, special clearance and so on.
4. Using floats. Float is define as the difference between the balance shown in a firms cheque Book and balance on the Banks Books, If the financial manager keeps a tab on this, he could utilize the fund for investment during the float period.
5. Accruals: This is for stretching fund payment. Increasing the accrual delays payment.

To recapitulate, we noted that the tools of management of cash are based on the promise that cash flow must be accelarate,disbursement slowed and judicious investment of excess cash temporarily.,

2.4.8 **Determining the Cash Balance:**

Cash is generally held for transaction purposes while the precautionary and speculative motives are met by holding portfolios of marketable securities or by borrowing.

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Method used in determining minimum Cash Balance.

1. Graphical Method

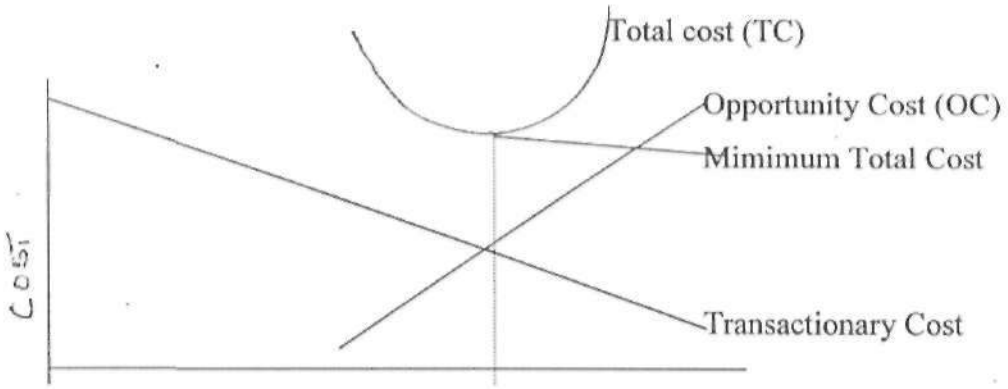


FIG 2.2 Total Cost includes the transaction cost plus the opportunity cost of holding excess cash.

2 - Baumol Model:

$$C = \frac{\sqrt{2bt}}{i}$$

Where c = Optimal level of cash

b = Fixed Cost per order of security

t = Total demand for Cash

I = Interest charged.

3. - The miller - Orr model:

Here it is assumed that cash balance fluctuates randomly and that the demand for cash is stochastic and unknown in advance. Based on its assumptions, control limits are set such that when cash reaches an upper limit, a transfer of cash to marketable securities is consumated and when it hits a lower limit a transfer from marketable securities to cash is effected as shown below:-

MILLER ORR MODEL

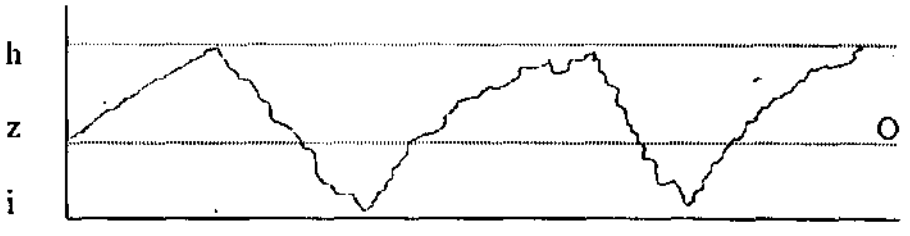


FIG 2.3

Where h = Upper limit

z = Return point

l = Lower limit

From the above diagram, it could be seen that when the fluctuating line (i.e Cash balance) touches the upper limit (h), port folio purchase is made in an amount large enough to restore cash balance to point. Z.

This is allowed to remain so or thereabout until the lower limit is touched, marketable securities may be disposed off to fetch sufficient cash large enough to restore the cash balance to Z . Therefore the optimum cash balance depends not only on Z or on fixed and opportunity cost but also on the degree of likely fluctuation in cash balance.

The optimal point z is given by the following equation.

$$Z = 3\sqrt{\frac{3b\,r2}{4i}}$$

Where b = Fixed cost associated with securities transaction.

$\sum^2$ = Variance of daily net cash flow

i = Interest rate on marketable securities.

Average Cash balance is given by:

$$\frac{Z + h}{3}$$

Other reasons for Holding Cash:

1 - Sufficient cash enables a firm to take advantage of discount (i.e trade discount) for example a credit term of 2/10 net 30 allows a 2% discount if the invoice is paid within the first ten days with full payment required in 30 days.

2 - A firm can maintain its credit standing i.e maintaining its liquidity position. These enhance more favourable bargaining and terms.

3 - Firms hold cash in order to take advantage of any opportunity of gaining returns.

2.4.9 **Risk and Cost of Cash Errors:**

A wrong estimation of firm cash balance may lead to over or under estimation. A small difference is negligible but where the error is great problems may arise.

Since most firms tend to be conservative in their cash balance estimates, there is the tendency for them to incur opportunity cost. Investment in marketable securities may mop up excess fund while disposing off marketable securities brings in needed cash to optimise the cash balance.

Consequently, firms with apparently excess cash balances should have a scheduled alternative uses of fund based on liquidity, risk, and yield. The first among these alternatives should be the various types of short term, liquid, riskless and relatively modest yielding investment. Secondly, the retirement of firms own short term debt (which bears a higher cost that the yields involved in the first alternative but will also reduce the firms liquidity). Lastly the long-term debt reduction or increasing fixed assets outlay with the continuing yields, risks and liquidity trend.

Similarly, while firms do not desire to incur opportunity cost that may arise from excessive cash holding, the degree of error at a reasonable cost compared to the potential losses that may arise from cash shortages are normally unavoidable. A firm having priority payment schedule in the event of inadequate cash situation may incur cost due to loss of savings from trade or quantity discount especially from the lowest ranking category. These costs may also come from forgone attractive business opportunities. The highest of category of payment priority may be the avoidance of a default by the firm on its long-term obligation or the avoidance of some other drastic actions from creditors.

Although, the loss of saving from discount can be estimate with accuracy from past purchasing experience, other losses cannot be easily quantified as a result of this, it is the duty of the firm to achieve a delicate balance with a margin of safety between excess and inadequate cash balance. This will invariably minimize cost, risk and losses due to cash balance error on the part of the firm.

2.5. Management of Marketable Securities:

The next liquid of the current asset component after cash is marketable securities. The disposal of marketable securities have attendant transaction cost, however, investment in marketable securities is rewarding i.e expected return that the holder of cash has to forgo

Generally, marketable securities mature within one year.

Reasons for investing in marketable securities include inter alia.

1.- To provide for precautionary motive when outflow outstrips inflow.

2.- As a temporary investment for idle cash.

3.- To meet predictable financial requirements.

Fortunately, marketable securities are characterised by ready market and stable value.

2.5.1 **Types of Marketable securities:**

All marketable securities vary in their yields, they have different levels of default risks, marketability, length of maturity and taxability.

1- Treasury Securities:

These are in form of Treasury Bills and Treasury certificates, the difference is in their maturity date. These securities are normally issued by the central Bank to corporate Bodies and individuals.

2- Bankers Acceptance:

It is a financial instrument used in trading with maturity date of less than 180 days, traded on discount just like Treasury Bills. It works by one Bank Making a Draft and another Bank accepting to honour the Draft, the quality of the Draft is determined by the accepting Bank and not the Drawer.

3- Other including repurchase Agreement (repo), guarantee or Agency, security, commercial paper and Negotiable certificate.

Most retail pharmacies do not normally transact in marketable securities but suffice it to say that in choosing from among alternative securities, the firm should examine Three basis

features of a security viz. safety, maturity and marketability.

Safety: Normally, a firm investing in marketable securities is interested in receiving a high return on his investment. However, high returns comes from riskier investments, the result is that the firm invests in Safe Securities i.e that high yielding securities with acceptable level of risk.

Maturity: This refers to the period over which the interest and principal are to be paid. Fluctuations in long term investments are more frequent than in short-term investment, therefore, for safety and maturity reasons short term securities are preferred to long term securities.

Marketability: This refers to the speed and convenience with which securities: This refers to the speed and convenience with which securities are converted to cash since price and time are important factors for marketable securities, securities that can be quickly sold without loss of price to be highly liquid or marketable. Note that securities with low marketability have higher yield in order to attract patronage.

A portfolio of securities may then be selected based on the above risk- return characteristics. These forms of current assets are not popular with retail organisations.

2.6 Management of Inventories:

Stock of goods on hand and available for sale are called merchandise inventories. Inventory constitutes a substantial part of total current assets employed. Inventories are assets that can be converted into cash within one year. The optimal level of inventory desired by a firm can be determined by marginal analysis. The more stock a firm carries (up to a limit) the lower the probability of Bankruptcy.

Management of inventory is very critical in retail pharmacy as they constitute the life blood of business, simply put a pharmacy without Drugs has no business at all, therefore, inventory management requires the development of a highly integrated and co-ordinate system, it involves:-

a - Sales Forecasting, purchasing, production, Receiving, storing and shifting.

b - Actual sales and Engineering changes.

It is important to a pharmacy to manage inventory to manage inventory effectively because:-

a - Drugs carry varied shelve lives, the have expiry dates after which they may loose their potency.

b - Unmanaged inventory can lead to over stocking, this tie down capital with a huge opportunity loss. That are viable or required by the Market, they get expired on the shelve. Some drugs get obsolete overtime due to some discovered toxicity or newly synthesised molecules should be more potent or more specific on certain receptor.

J.H. Ommbaka Ondonde, In his article gave credence to inventory management in pharmaceutical, retailing outfits where he observed that the erratic nature of prices of pharmaceutical products in Kenya had led many customers to believe that prices of Drugs are no longer a function of economic forces.

c- Inventory management is also important in preventing or reducing pilferage. Pilferage is one of the causes of business failure. Stock of Drugs on display and those in store must be controlled and checked well. Garner et al an article said that in 1973, 5 million Dollars worth of inventories at wholesale cost were pilfered in the United States alone. Dishonest employees accounted for Two-third and about one-third of the retail theft were blamed on shoplifters. These could be tackled by maintaining accurate inventory records and making the staff thoroughly aware of the system. Many pharmacy managers are unaware of the total value of the stock shrinkage's (i.e difference between stock on card on actual stock on shelve).

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2.6.1 Hints on prevention of pilferages:

1- Employee purchases should be approved by management.

2- Inspect packages periodically.

3- Employee purchases should be cleared through a Register by either the manager or another employee just before leaving the store.

4- Check Invoice against Bill of laden for merchandise received.

5- Control key to store Room.

6- periodic inspection of trash containers and lab coats.

2.6.2 Method of Inventory Control:

There are basically Two method for controlling inventory vis, perpetual inventory systerm and periodic inventory system.

The perpetual inventory system provide constant up- dated inventory information particularly for merchandise with high value, resulting in a need to exercise close merchandise with high value, resulting in a need to exercise close control the number of units of stock. For item of inventory, the perpetual system requires a detailed record card and contains information on the opening balance, purchase, sales and the current balance. Data is in both unit and monetary value.

The periodic inventory system on the other hand account for merchandising by means of physical counts of good on hand at the end of each accounting period. With this system expenses are reduced but lack the constantly up-dated information as with the perpetual system.

It is necessary to maintain an optimum level of inventory because firms depend on inventory for survival. Edgow L. Adlaver of price Water House and Co of new York in his paper on inventory management quoted president Eiserhower (May 1958) in the latter opening address at an economic mobilization conference a business man told me that his company s policy back in 1949 of letting inventory fall competitors when the upswing came..... . The guide to this

inventory question seems a common sense one. Buy to normal requirement. He went further that normal in economic and business reality is elusive and that what is normal in the 1930's is not in the 1950's, 1980,s let alone 1990's. The statement goes to confirm that optimal inventory is dynamic depending on economic and social variables.

2.6.3 Inventory Control Measures:

i) Turnover ratio

ii) Inventory budget

iii) Return on investment (ROI)

These are variable tools which enables management to make an overall appraisal of a company s performance and to compare such performance with predetermined goals or particular performance and to compare such performance with predetermined goals or particular performance.

2.6.4. Cost of Inventory:

There are many costs inherent in the management of inventories. This study shall discuss the three most important costs of inventory.

1. Carrying cost (Investment cost):

This refers to cost associated with holding goods in stock for example cost of money tied up, obsolescence charges and storage cost.

This cost is incurred as soon as an item is put into inventory and the size of the inventory is determined by the duration for which the item remains in inventory. The cost is not strictly dependent upon the size of inventory for instance heating and lighting cost of a warehouse of a given size may not fluctuate with changes in the size of the inventory. Nevertheless, for convenience sake they may be treated as a continuos function of size.

2. Ordering Cost (Set-up cost):

Sometimes called procurement cost it includes cost associated with placing order and making change in machine set-ups for production runs. An important characteristic of this cost is that its magnitude is affected by the size of the order, hence, the per unit set up cost decreases as the size of the order increases, example of ordering cost include cost of offloading, inspecting and storing the goods.

3. Stock out or shortage cost (outage Cost):

This results when demand cannot be met by inventory available. This results in lost sales or shutdowns in factory assembly line, costs are also incurred when such lines are to be put back in service.

2.6.5 Techniques for inventory managment:

Backlogging is not healthy in a competitive economy, it is ideal to acquire goods in anticipation of demand and thereby create inventory because inventory obviates the type need for a precise synchronization of acquisition and demand. Concern for inventory management bothers on when orders for acquisition should be places and the size of the order i.e the economic lot size. The relationship between these concerns has led to various techniques for managing inventories. These inventory systems are; the fixed - order system and fixed period system. In the first case, the size of the order remain the same irrespective of the time of the order while in the second case orders of varying sizes are placed at Regular interval or time.

Therefore in general, the manager is concerned with what to control, when to make or buy, and how much to make buy. These questions suggest the three techniques for inventory management.

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a. Inventory classification:

The main purpose of these techniques is to ensure that inventory control efforts are directed to areas where they can best be most effective in order not to spend too much money on keeping low value items. The nature and value of stocks and the factor governing expenses involved in ordering and delivering them are the variables to be considered through discrimination by adopting an ABC analysis of inventory.

Where A = lowest percentage item accounting for largest percentage of sales or production requirements.

B = The next action group.

C= The largest number of times with the least usage.

Great attention should be given of items with the least usage. Great attention should be given to group a with tight control being is not frequent, group B requires more elaborate control.

b. Order point Technique:

The lead time means the period in days between ordering time and receip of order (i.e the time lag). The order point is that point wehere the inventory has preached alevel where replenishment is needed. The order point is determined by the formula.

$$OP=S(P-L)+\frac{E}{\sqrt{SQ(P-L)}}$$

Where S = Sales/Usage.

L = Lead time.

Q = per unit demand.

E = Stock out acceptance factor.

P = Production or procurement cycle.

Order point therefore serve the following functions.

1. It optimize the two opposing condition of minimizing investment in inventory and satisfying demand by reducing the possibility of stock out to an acceptable level.
2. It provides for addition of safety stock. The amount of safety stock however depends on competitive practice and demands of the trade.

c. Economic Order Quantify Techniques (EOQ):

The technique measures the most economic lot size that will generate lowest cost under the following assumptions.

(i) Constant demand rate per unit of time.

(ii) Deterrministic environment with respect to demand and cost.

(iii) Unlimited cash is available for investment in inventories.

(iv) Insignificant or non- - existent lead time between placing an order and receiving the goods.

Given by the Formular

$$EOQ = \frac{\sqrt{2\,CoD}}{CsS}$$

Where Co = set-up or ordering cost per order.

D = Annual demand or Units.

Cs = Carrying Cost (annually) in Naira,

S = Unit Cost.

Graphical Approach

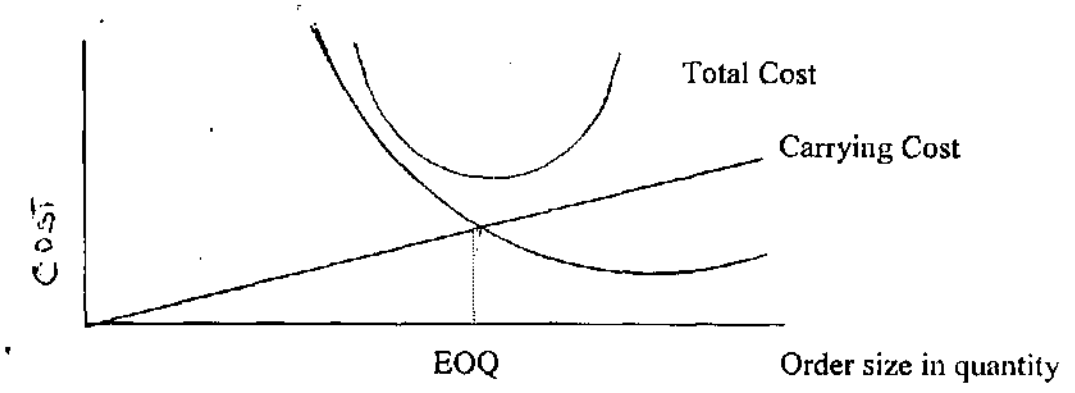


Fig. 2.4

2.6.6. **Average Stock Level:**

The average stock on hand is defined as EOQ divided by two.

Average stock level = EOQ /2.

Some firms add safety to their averages stock level to avoid unforeseen contingencies such as variations in delivery tine due to bad weather, strikes e.t.c. The size of the safety stock could be high or low depending on usage rate and delivery time and outage cost.

2.6.7. **Factors Affecting Inventory Level:**

1. Anticipated demands. Demand may be based in historical records or on sales forecast, though modification to allow for fluctuation must be made as estimated demands do not exactly equate actual usage.
2. Lead Time - This is not always predictable.
3. Value of the item - High -value items is controlled more rigidly than low value items.
4. Storage space - with regards to its cost availability.
5. Price - This is considered for the possibility of buying to gain discount or anticipation of price increase.

6. Cost of carrying inventories.

7. Danger of obsolesces.

Any of the above factors can result into loss of sales, permanent loss of customers or disruption of production.

2.6.8 Traditional Approaches to Inventory level:

Many companies have stopped using the formulae method to determine inventory level for these reason viz:

1. The use of equations require the determination of finite value which may not always be readily available. They require special analysis to arrive at, which are deterrent to using the formula.
2. Formula are expected as mathematical equations with symbols that baffles completely many Accountants and Businessmen.
3. Due to the large nature of inventory items to which formulate must be applied, use of equation became cumbersome and difficult.

Attention has shifted back to use of formula method in recent time due to the development of computers that can easily solve large volume of problems in seconds. The camp s formula rightly concludes that empirical formula gives empirical results. They should be double-checked by personal judgement and common sense.

In the final analysis, the management of firm generally and retail outlets in particular should appreciate the importance of inventory management in the maximisation of profit and overall survival of the organisation.

2.7 Managment of Accounts Receivable (AR):

Accounts receivable is the total credit extended by a firm to its customers. Some accounts will never be collected they are referred to as bad debts and constitute expenses to the firm. Many organisation sell their products or inventory on credit such credits sales are based on the Company s credit and collection policies. Credit policies involve a trade -off between profit arising from sales that brings in receivable on one hands and cost of carrying these receivable plus bad debt losses on the other. Average collection period refers to the time between sales and collection.

The credit policy of any firm is a function of :

(i) Credit standard.

(ii) Credit term.

(iii) Collection policy.

(iv) Credit and collection policies of other firms.

Economic condition and average collection period as well as other credit policy variables mentioned earlier determine the level of account receivable.

Credit may have to be granted in a highly saturated market with speciality goods, this was the view of the managing Director of Allen Distribution company, a subsidiary of Allen Electric Company in the United State, he was quoted as saying because of intense competitions, service to customers were not enough to and not fully appreciated by customers, Sales often demanded on the personal relationships developed between the customer and the company s Salesman and Trade Credit . (Keith Butters al 1981, Case problems in finance).

2.7.1 Benefits of Trade Credit:

Firms that provide credit facilities are likely to have higher sales than those that do not. This is because to the customer, trade credit is a sort of short term financing. It is however difficult to measure the gains in sales as compared with the cost and the risk associated with trade credit.

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A method of solving this problem is the concept of average return. Here, the firm attempt to estimate the difference in sales volume based on varying credit policies and then multiplying them by profit margin on sales at various volumes. The resulting figure being net of the cost of credit extended are then divided by the increase in account receivables to determine their desirability.

2.7.2 Costs and risks of trade credit:-

Trade risk can be expressed as cost elements in a trade credit programmed due to their general predictability and industry accumulated experience over time, these risks are related to the reduction in receivable turnover (or increase in average collection period).

The cost of credit is the carrying cost, involved- opportunity cost, credit and collection cost. The fund invested in accounts receivable entails an interest cost to the firm. If account become slow, delinquent and un-collectable, additional costs result in bad debt cost. The firm may however shift the risk of excess bad debt in insurers through credit insurance policies. This means converting unknown losses to definite loss.

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2.7.3 Credit Standard:

This defines the minimum criteria for the extension of credit to a customer. In evaluating this, the five C s of credit are used -character, condition, capital, collateral and capability the cost associated with credit include, defaults, bad debt, investigation and collections costs and cost of capital tied down. So long as marginal profits on increased sale exceed added cost of receivable the credit standard should continue to be relaxed.

2.7.4 **Credit terms:**

This refers to the length of credit period and the discount given. A term of 2/10 net 30" means a 2% discount is given if the bill is paid in 10 days, however, payment is due in 30 days. Another credit term could be net within 30 days it means no discount is given and the invoice is due in 30 days from the days on the invoice. Varying the discount rate involves an attempt to speed up the payment of receivables, discounts also affect demand and bad debt. The determination of an optimal credit period and discount rate involves a marginal analysis approach.

2.7.5 **Collection Policy:**

This refers to the procedures the firm follows to obtain payment on overdue accounts e.g letters, telephone, personal calls and legal action. The more you spend in collection effort the less the bad debts, This will inversely go up to the saturation point after which bad debt will stabilise no matter the expenditure incurred.

This is represented in the diagram bellow:-

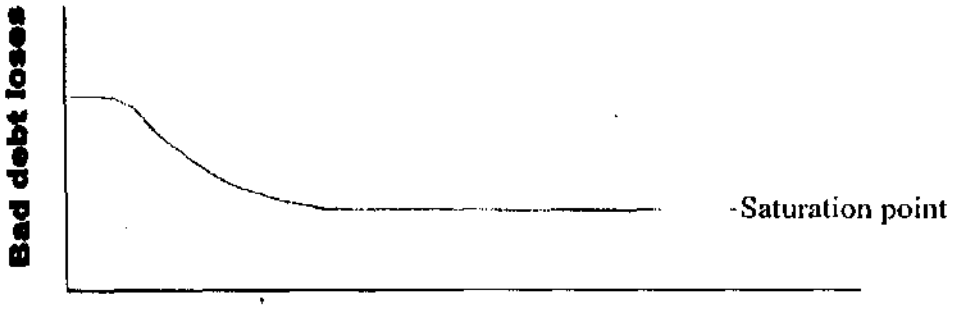


FIG 2.5 Expenditure:

The use of quality of account is related to the risk potential of debt, this is reflected in bad debt probability. If the quality of account is high (i.e where the risks are low) the collection efforts are milder. The time and quality dimensions are partially related as such they both should be considered in determining the appropriate policy. Mehta, suggests that an alternative collection policy should involve timing of cash flow over several reporting periods. (Metha 1974).

2.7.6 Selecting Credit Customer:

The conventional methods of granting or refusing credits to applications can be time-consuming costly and inaccurate. This is so because initially, some risks appear to be good but later turns out to be bad. Similarly, those that appear to be bad actually are good risks. Therefore, attention should be paid to the following in selection credit customers.

i. Deciding an Acceptable grade of risk:

In assessing the risk for credit, the five C s are relevant, character, capital, capacity collateral and conditions. These factors are ranked qualitatively. The first factor, character refers to the applicants willingness to pay while the other four reflects applicants ability to pay.

ii. Investigation Credit Applicants:

Credit investigations are based on various sources of information such as Bankers references, financial reports, other creditors experiences and professional rates. Nigeria is yet to have professional credit raters that is why firms base credit decisions on their past experiences.

Credit term offered to an acceptable account generally depends upon classification of the accounts into one of the several predetermined risk categories, they are also influenced by changes in such factors as inventory turnover, terms of competitive suppliers, phase of the business cycle and the character of the credit risk.

iii. Analysing Customers Credit worthiness:

The Credit worthiness of a request is a qualitative assessment, but in order to make this assessment, the credit manager has to take into account qualitative factors or indicators, assigning weights to various factors either explicitly or implicitly in the light of his own experience and judgement. This method works well when the number of requests for credit is small, it becomes cumbersome where there are large number of requests.

There are two techniques for analysing credit worthiness of accounts.

a. Discriminant Analysis:

Under this method, the characteristics of a sample account that have satisfactory credit risks are compared with those of delinquent accounts. It is believed that the payment behaviour of customers is systematically related to their observable attributes. It is therefore possible to determine which account to accept or to reject. Despite the advantage of this method, it is found to be economically unsound due to the huge money and time involved in information collection.

b. Decision tree Approach:

Also known as sequentical decision process, it is commonly used for handling individual requests for credits. It is based on two premise first, because not all relevant information can be secured either on time or without cost, not all information is worthwhile in making a decision. Secondly, past experience can be effectively employed in dealing with uncertainty regarding the future.

Wherever one gets a piece of relevant information an attempt is made based on past experience to estimate the associated costs of three alternatives open to one; granting credit, rejecting the requests and postponing the decision until further information is available. The alternative with the minimum cost is thus selected.

2.7.7 Monitoring Accounts Receivables:

Monitoring account receivable involves paying closer attention to receivables of a firm from time to time with the aim of identifying possible collection problems that may arise. This enables a firm to have an accurate appraisal of customers account payment patterns and in particular, to determine to what extent those vary overtime,

There are two techniques for monitoring account receivables.

1. Average Collection Period:

Collection period refers to the number of days credit sales is outstanding in receivables

It is given by the formula.

$$\frac{\text{Net Receivable X number of days in a year}}{\text{Net Sales}}$$

It indicates the rapidity or slowness of collecting receivables, the shorter the period the better the quality of receivables. Longer periods indicate that firms credits are outstanding for longer period than necessary.

2. Ageing schedule:-

Here outstanding accounts are classified by vintage and are expressed as percentages of total uncollected balance on the analysis of data. Thereafter, any indicated collection period can be interpolated to know what percentage of receivables falls due.

2.8 Management of current liabilities:

The solvency of a firm depends on its ability to meet its obligation as and when due. Current liabilities like all other obligations must be honoured at the end of one year if the firm is to maintain its financial integrity. Current liabilities include components such as notes payable,

accounts payable, accruals and short term loans. These components need to be managed through control.

2.8.1 Control of payable and related payments:

This can be done in the following ways:-

i) Timing of payments to vendors so that bills are paid only when they fall due.

ii) Establishing procedures, which will prevent or minimize the loss of discount.

iii) Centralising payable and disbursement procedures. In order to increase company's 'float' in payable and thus use cash available for short term investment or other corporate purposes, the following payment techniques have been used:-

a) Payments are made by bank drafts or cheques crossed to extend the cash withdrawal period.

b) Speeding up paper work in order to prevent loss of discount and;

c) Arrangements are made with vendors to set due dates of bills to coincide with company's peak periods.

Since the levels of Current liabilities change significantly with change in level of sales, they are decision variables hence their management is of paramount importance.

2.8.2 Components of Current Liabilities:

The components of Current Liabilities are accounts payable, loan payable, notes payable, salaries payable, taxes payable and utilities payable. Accounts payable in small firms is paid within one month usually. Loan payable and Notes payable are more formal than accounts payable and are evidenced by a written promise to pay a specified sum of money on a specified date usually with interest. This written promise is referred to as promissory Note.

In case of long-term liabilities, they are due after one year but payments or amortizations are done periodically. These periodic instalments are referred to also as Current liabilities.

2.8.3 Techniques of Managing Current liabilities:

(1) Voucher system:

This is a system of internally controlling all transactions involving the payment for liabilities incurred. A voucher is serially numbered, written authorization for each expenditure, it is designed to meet the specific need of an organisation.

Once the voucher is prepared it is placed in the unpaid voucher file. This file is arranged by due dates in order to facilitate taking advantage of cash discounts and forecasting cash needs. After authorisation and payment of the Voucher, it is transferred from the unpaid file to the paid file which is usually arranged sequentially.

(2) Payroll Accounting:

An Organisation's payroll consists of wages and salaries. Though the two terms can be used interchangeably, they are technically different. Adequate payroll accounting enables adequate deductions of income taxes at source and it is so because they represent a large part of the total expenses.

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CHAPTER THREE

DATA PRESENTATION AND ANALYSIS

3.0 INTRODUCTION:

In this chapter, data are presented and analysed objectively in order to find solutions to the problems unravelled by the research effort. The use of ratios to analyse the data will help determine the position of the organisation under study when compared with Industry averages.

The chapter is therefore divided into various headings of working capital components.

3.1 Management of Cash and marketable Securities:

Cash is generated basically from daily sales, sometimes cheques are received from reputable customers in payment for goods purchased. The management of Karu pharmaceutical company ensure that every cash sales is recorded in what is called "Daily Sales Book" Proper and immediate recording is adhered to even during rush hours to avoid any form of human error.

At the end of each day's business, sales are totalled to give the actual amount of cash sales, this total is matched with the physical cash at hand. It was discovered that there were no particular or specific staff assigned the duties of cashier, however, the duty of recording daily sales is rotated among the staff weekly for the purpose of accountability although separation of duty is not very rigid. Where there are difference between the physical cash and total sales recorded, the difference is recorded as excess or shortage. The balance in the daily sales book is transferred to the weekly sales journal and at the end of every month a monthly sales journal is prepared. Karu Pharmaceutical company employ the services of external auditors who scrutinise their books at the end of each financial period.

The total cash is banked on daily basis along with any paid cheques. It was discovered too that the organisation does not keep Cash or have a safe or till box in the store. Whenever there is need for purchase of any operating material such as stationery and fuel they withdraw from the Bank. The cash outflow is usually matched with inflow. The managing Director keeps a close watch on the balance in the Bank regularly to know how much she can pay out. All payments to suppliers is done through cheque, the managing Director ensures that there is adequate fund in the account before issuing a cheque to a supplier and once a cheque has been issued against a Bank balance the fund will not be used before clearing is effected. This is to say that the organisation does not use "Floats" as a form of short-term financing. Since purchases are in small quantities, the cheques are usually cash cheques.

The managing Director is a pharmacist and is always in the Store to consult and be consulted on choice of Drugs or substitute Drug best suited for the needs and requests of customers.

The company has a system of keeping all unpaid invoice in a general file opened for all their suppliers, schedule of total amount owing or paid are kept in the file. This is used by the Managing Director to monitor accounts payable. She does not formally draw cash budgets or projection of cash inflow and out flow on paper but uses intuition and past experience to determine how much to pay and when to pay. Payment to suppliers is made instalmentally on first come first served basis. Karu pharmaceutical Company gives trade discounts to customers on large purchase. Discount is given to Doctors who in turn use the drugs on their patients.

Salaries of staff are never delayed, fees and dues to professional bodies, rents, rates and all bills are paid as and when due. The company therefore does not make use of accruals. Management has a philosophy of paying suppliers when there is receipt and this is vigorously pursued, however, the managing Director uses suation sometimes to convince suppliers to extend

payment period when there is cash shortage or when the cash available has been put to other use. The management of Karu Pharmaceutical Company Limited strives to settle their obligation on time in order to maintain its credibility with suppliers. This is very important in pharmaceutical retailing business.

The main source of short-term financing is trade credit, the Company had at one time or the other enjoyed facilities from financial institutions using the Directors personal property as collateral.

The organisation does not keep fixed deposits obviously because of its size and operation it therefore does not have marketable security of any kind. The management of Karu Pharmaceutical Company invests in supplies of Drugs and other goods to Government Agencies and parastatals on contract basis and plough back the whole capital and any profit. There in to the pharmaceutical business on receiving the contract payment.

3.2 Inventory Management

Karu Pharmaceutical Company Limited is engaged in retailing to final consumers therefore its inventory is in the form of finished goods ranging from drugs - which is their major stock-in-trade-, cosmetics, Toiletries and other household items. The Drugs are in various forms such as tablets, capsules, injectables and liquid preparations. The inventories are displayed on painted wooden shelves with glass door round the store, there is demarcation between the drugs, and customers. The pharmacists' table is at one corner of the shop close to the entrance and on the table lies her reference Books. The attendants and cashier sits close by to attend to customers requests and issue out receipts. No provision is made for self-selection by customers.

About 85% of investment are in inventories. Inventory level is determined by the level of expected receipts, rate of purchase, projected sales, and so on. It was discovered that sales are lower during the last two weeks before salaries are paid to workers and are lowest during the Islamic months of Ramadan. Most of these factors are determined by mere intuition and past experience; no special model is used by Karu Pharmaceutical Company to determine the level of inventory to stock at any given time. Drugs with shorter life span are bought in small quantities. Karu Pharmaceutical Company gives discount on large purchases and to operators of private clinics. Discounts are given only on drugs but not on other products as mark-up built on them are not as high as drugs, this is because prices of other household products are standardised in the market. Karu Pharmaceutical Company supply drugs to Anna kitch Hospital, Wusasa and St' Lukes Hospital Wusasa, Zaria.

Supplies are bought by the managing Director herself. In the past a staff was assigned to negotiate and purchase from supplies but since the staff left the organisation, the managing Director took charge of suppliers. As soon as supplies are received, they are labelled with current prices and entered in to their various bin-cards. Each product has its bin card which contain pieces of information such as products name, date of entry old balance, stock amount in, new balance, source, expiry date and signature of clerk entering the information. If it is a supply in cash, they enter 'Cash' as it appeared on the invoice. Suppliers invoice is filed in their appropriate files and the good are displayed immediately.

3.3 Inventory Control:

Karu pharmaceutical Limited uses the periodic inventory system to control their inventory. In the past, physical counting of stock was done fortnightly and compared with what was on the bin-card but now it takes a longer period, about 6 months since the level of inventory is low. However, the managing Director monitors strictly the on flow and outflow of stock using the

bin card and occasionally, say, twice a year using physical counting.

As soon as stock balance reaches the safety level (which is usually determined from past experience of demand), orders are placed to bring the stock level top predetermined or desired level. Generally, purchases are made monthly. Regular checks are carried out physically to determine drugs that are expired for immediate withdrawal from shelve. Those that are almost expired are 'pushed, out to customers. Drugs that have expired are costed and recorded, the expired drugs are then destroyed.

Occasionally, it was discovered that some expensive drugs are pilfered. Disciplinary actions are immediately taken against the culprits when caught. Such staffs are dismissed immediately. So far four people had left because of this offence. The problem of pilferage and theft has become a thing of the past because Karu pharmaceutical company now has a group of honest, loyal and selfless staff who has the interest of the business at heart.

The management of Karu Pharmaceutical Company has a unique philosophy regarding price crash of any product. Where the price of old stock is higher than latest price then the good is sold at current price, however, where the price of latest stock is higher than old stock, the average price is found and this becomes the new price.

The technique for inventory management in Karu Pharmaceutical Company is not based on any recognised model. The inventory level, the economic order quantify (EOQ), the order point or re-order point and safety stock are based on past experience of sales, the demand, the season, the availability of cash, level of trade credit as well as management intuition.

3.4 Management of Accounts Receivable:

It is common knowledge that no business can survive, in the face of competition and economic recession if it insists on selling on cash basis only. The management of Karu pharmaceutical Company appreciates the importance of credit Sales in increasing sales volume

and gaining customers loyalty. They therefore sell on credit when requested to do so. Their credit customers are persons considered as having good reputation, close friends, relations and colleagues that is, Doctors operating private clinics.

In order to effectively manage these accounts receivable, the company has a 'Debit Book' in which they record the name of the debtor, the amount and the due date. Some debtors pay as and when due, others need follow ups and the managing Director makes personal call on the debtors to recover the debt. A good number of these debtors are declared bad debt when recovery becomes unrealistic.

Karu Pharmaceutical Company Limited

Balance Sheet as at 31st December, 1992.

Employment of funds	Note	₦	₦
Fixed Assets			300,825.00
Current Assets	(1)	565,121	
Current Liabilities	(2)	388,143	
Net Current Assets			176,978.00
Director's Account (Current)			140,000.00
			₦617,143.00
Fund Employed			
Paid up Capital		385,000.00	
Medium term loan		180,000.00	
Profit/Loss Account		52,803.00	
		₦617,803.00	
Authorised Capital		₦1,000,000.00	

Karu Pharmaceutical Company Limited

Trading Profit and loss Account for the Year Ended 31st December, 1992

	₦	₦
Turn Over		929,919.00
Direct Cost of Turnover		676,258.00
Gross Earning		315,931.00
Operating Charges:		
Administrative Charges	119,772.00	
Establishment Expenses	107,515.00	
Finanace Expenses	109,710.00	(₦336,997.00)
		(₦21,066.00)

NOTE TO ACCOUNTS

Note 1:

Current Assets:

Stock	382,543.00
Debtor (Kaduna State Govt.).	171,298.00
Debtor (Sundry)	10,000.00
Cash Balance	280.00
Prepayment	₦1,000.00
	₦565,121.00

Note 2:

Current Liabilities

Creditors (Trade)	61,408.00
Bank Overdraft	319,735.00
Accruals	₦ 7,000.00
	₦388,143.00

Ratio Analysis:

Ratio Analysis is one of the most common methods of evaluating financial statement of retail outfits like Karu Pharmaceutical Company Limited. It is particularly applied to current operations since the pharmaceutical store depends greatly on working capital. The researcher particularly relied on the results to measure the effectiveness and efficiency of resource allocation. The standards of measurement are derived from the average behaviour of the Industry in which the firm belongs.

In a typical pharmaceutical store, current assets represents 75% of total assets while inventory makes up 50% of total asset. Accounts payable constitutes the largest liability of total liabilities and cost of goods sold is the most significant expenses normally claiming 65% of total income.

Three major ratios were analysed, vis, solvency ratio, liquidity ratio, financial policy and rate of return. Solvency depicts the level of current assets or quasi-cash of a firm. Liquidity indicates the cash level of a firm and its ability to settle its Cash obligations while financial policy and rate of Return Ratio signals the efficiency of a firms policy regarding credits and so on.

Given the industry averages, the researcher extracted figures from the firms balance sheet as at 31st December, 1992 to calculate the firm's Ratios.

(1) Networking Capital =

Current Asset - Current Liabilities

= 565,121 - 388,143 = 176,978.

The result represents margin of safety for short-term creditors.

(2) Inventory to Networking Capital Ratio

$$\frac{\text{Ending Inventory or Closing Stock x 100\%}}{\text{Networking Capital}}$$

$$= \frac{382{,}543 \times 100\%}{176{,}978}$$

$$= 216\%$$

The industry average 94 - 100%

A lower Ratio than the industry average would call for action from management to consider ways to stimulate sales. A high value as indicated by Karu pharmaceutical Company signalling a good operation with little available Cash. This may result in cash crisis requiring more investment of capital by owners.

(3) Current Ratio =

$$\frac{\text{Current Assets}}{\text{Current Liabilities}}$$

$$= \frac{565{,}121}{388{,}143}$$

= 1.5 Times

Industry average is 2.3 to 3.5 times.

This Ratio measures the ability of a firm to meet its Current Liabilities, a poor Current Ratio indicates unprofitable investment. Karu Pharmaceutical Company current Ratio is lower than the industry average, this may affect their ability to obtain short-term loan.

(4) Quick (Acid test) Ratio =

$$\frac{\text{Quick Asset}}{\text{Current Liabilities}}$$

Where quick asset = Current Asset - Inventory

= 565, 121 - 382,543

= 182,578

Therefore,

$$\frac{182,578}{388,143} = 0.47$$

The industry average is 1.0 - 1.1 with smaller and never pharmaceutical Store having as low as 0.6. This Ratio intends to show immediate liquidity by discounting inventory, the latter is assumed not easily convertible to cash. A Ratio lower than the industry average depicts insolvency of a firm. The firm under study indicates a high degree of insolvency.

(5) Accounts payable period Ratio,

$$= \frac{\text{Average Account payable x 360}}{\text{Purchases}}$$

$$= \frac{7,000 \times 360}{676,258}$$

= 3.7 Days.

The industry average is 27 days. The firms accounts payable period is much lower than the industry average indicating that the firm pays its bills too easily and quickly not taking advantage of available credit. A higher result indicates that the company does not pay its Bill within the cash discount period resulting in an increase in capital cost of credit.

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(6) Net Sales to Networking Capital

= Annual Net Sales
Net Working Capital

= 992, 919
176,978

= 5.6 Times

Industry average is 5-6 times. This ratio determines the effective use of asset. Karu Pharmaceutical Company is within the industry average which means that the Current assets are effectively used to generate Sales.

(7) Financial policy and Rate of Returns.

(i) Creditors interest in asset =

Total Liabilities x 100%
Total Assets

568,143 x 100%
856,946

= 66%

Industry average is 35% to 45%.

Karu Pharmaceutical Company's Creditors interest in asset is higher than the industry average which is relatively risky because higher levarage erode the credit worthiness of the company. A lower ratio means that the contribution of creditors to total asset is low

(ii) Debt to Equity =

Total Liabilities x 100%
Owner's Equity

= 568,143 x 100%
385,000

= 147%

Industry average is 60%

The firm ratio is higher than the industry average, an indication that the company s liability is too high. This is a dangerous situation of over trading, the owners will have no residue after paying their creditors

(8) Inventory Ratio:

(i) Inventory to current asset ratio

$$= \frac{\text{Inventory}}{\text{Current Asset}}$$

$$\frac{382,543}{565,121}$$

$$= 67.69\%$$

The industry average is 66 -70% The firm's ratio is within the industry average meaning that investment in inventory is optimal. A higher result means too high investment in inventory.

(ii) Inventory Turnover Rate

$$= \frac{\text{Cost of goods sold}}{\text{Average inventory}}$$

$$= \frac{676,258}{382,543}$$

= 1.77 Times a year

Industry average is 3 - 5 times a year. The ratio measures the number of times a pharmaceutical store is able to sell and replace or turnover its stock. The firms' ratio is lower than what is average in the industry which means the firm is not doing too well at disposing off its inventory. A high ratio means a moderate inventory with no likelihood of obsolete or old items.

Funds are also earning a sufficient return.

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CHAPTER FOUR

SUMMARY, CONCLUSION AND RECOMENDATION:

4.1 Summary:

Working capital Management is the effective and efficient administration of cash, marketable securities, and accounts receivable, inventories and prepayments. Networking capital is the difference between current assets and current liabilities. In general, working capital Management represents the efforts of the firm to make adjustments to short-term changes, these are changes to which a firm must make prompt and effective response because working capital components are volatile with a maximum life span of one year. It is even more volatile in pharmaceutical retailing where Drugs form about 85% of total inventory. As earlier mentioned, Drugs are speciality goods and are very expensive to procure and requires care to sell and manage. Therefore, Management of inventory as well as cash, marketable securities and accounts receivable becomes very important to the success of retailing pharmaceutical products

The research is limited to a particular case study. Relevant literature was reviewed for secondary data while the primary data were sourced through unstructured interviews and personal observations. The data so gathered were critically analysed and meaningful conclusions drawn. It was discovered that Karu pharmaceutical company has over the years suffered dwindling business activities. The major problem being inadequate working capital and the cash squeeze exist because the organization is being owed by the Kaduna State Government. Then the problem of competition with so many other registered Pharmaceutical retail outlets and some illegal medicine stores and most recently the petroleum Trust Fund (PTF) Drugs scheme. The effect saw Karu Pharmaceutical Company's sales falling from six thousand naira a day to three thousand Naira. The inventory level dropped and this led to stock out situation.

On comparing the firm's ratio with Industry behaviour it was discovered that the firm was highly insolvent, accounts payable and inventory turn over ratios were very low . However, the financial policy and Rate of Returns ratios were optimal.

4.2 Conclusions:

Much has been said on working capital management of Karu Pharmaceutical Company and a clear understanding of the theoretical concept of the topic have been known through the effort of presenting a meaningful and acceptable piece of write up. Working capital is said to possess certain distinct and hidden characteristics as the short life span and nearness to cash. However, the survival, growth and development of every business organisation largely depends on the level as well as effective utilization of working capital.

Optimum level of cash will eliminate cost associated with not holding idle fund. Optimum inventory level ensures that customers demands are met and stock out and obsolescence are reduced. Optimum level of account receivable reduces the level of bad debt.

4.3 Recommendation:

Data gathered from Karu Pharmaceutical Company limited were extensively analysed for the purposes of drawing meaningful conclusion. The results of these analyses revealed the financial position of the firm as well as some of the techniques employed by management to monitor the various working capital components. It is on the basis of these findings that the researcher recommends that Cash, the most liquid of the components be increased in order to improve the firm's day-to-day operations. To achieve this, Management should sell some of the firm's fixed assets to a manageable size to reduce overhead cost, increase cash at hand and Bank for contingency as well as a saving to realise interest.

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To further reduce overhead cost, the firm should lay off one or two of the six staff. Also an immediate cash management tool such as cash budgeting or cash projection be implemented to reduce the intuitive act of management.

The researcher recommends that the firms inventory policy though mostly based on management's intuition be sustained. However, the responsibility of inventory planning and control must be assigned to specific individuals who will be charged with the duty of designing a reporting system to inform management of the status of inventory. Such individual should be good quantitatively because of frequent used of figures.

The store is grossly under stocked, this resulted in stock -out situations. Management should negotiate with more suppliers for supply of more Drugs on favourable terms. Also the inventory should include a variety of other consumables and household products as a diversification strategy, this will increase turnover, Finally, drastic actions be taken to recover the outstanding debt owed the firm and for future credit transactions, customers should be properly screened for credit worthiness.

The researcher noticed a mix-up in the company's balance sheet. Instead of separating the two balance sheets items, the asset and liabilities were mixed. This practice does not conform to the traditional accounting principles. The researcher therefore recommend that the company employs the services of an individual with a knowledge of book keeping and elementary accounting to forestall the occurrence of such mistakes in future.

The above recommendations, though in-exhaustive, provide the pharmaceutical Companies with useful suggestions on working capital management. The researcher hopes that if implemented the operational performance and financial position of Karu Pharmaceutical Company Limited, in particular and other pharmaceutical retail outfits in general will improve greatly.

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Appendix B

LEDGER FOLIO________________________

WALIYI PHARMACY LTD.,

JOS BRANCH

PHARMACY

Stores Form 5

SHEET No. ______________

TALLY CARD

(SEE STORE REGULATION 0315)

STOCK LEVEL CONTROL

Item Description______________________ Maximum______________________

______________________ Re-order Level______________________

Unit of Issue______________________ Minimum______________________

Date	SRV/SIV Voucher No	Unit Price		From Whom Received or To whom Issued	Receipts Quantity	Issue Quantities	Balance Quantity	S/K Sign
		N	K					
				C/F SUMMARIES				

Ben Simeon Press, Jos

Appendix C.

NAFARA PHARMACY LIMITED

Opposite A.B.U.T. Hospital, P. O. Box 651 Zaria, Tel: 34077

STOCK TALLY CARD

Description_____

Pack_____ Expiry Date_____

Date	Inv. Nos	In	Cost	Out	S.P. Rate	Balance	Remark

Printed by Delta Modern Printers, 29 Main St. S. Gan, Zaria