Determinants of Working Capital Management Periods on Profitability of Small and Medium Enterprises in Trans Nzoia County

[1]Kiprotich, Chebet, Rehema, [2]Dr.Elizabeth Nambuswa, [3]Mr.Okwaro, Fredrick

[1]Jomo Kenyatta University of Agriculture & Technology (Masters of Business Administration Finance Option)
[2]Jomo Kenyatta University of Agriculture & Technology (Ph.D)
[3]Jomo Kenyatta University of Agriculture & Technology (Ph.D Student)

Abstract: **Working capital management plays a significant role in improved profitability of firms. Firms can achieve optimal management of working capital by making the trade-off between profitability and liquidity. The purpose of the study was to establish the determinants of working capital management periods on profitability of the SMEs in Trans Nzoia County. The analysis was focused on the respondents of the target population of the study. The study was guided by the Four research objectives namely: to determine the effect of average collection period on profitability of the SME's in Trans Nzoia County; to evaluate the effect of inventory conversion period on profitability of SME's in Trans Nzoia County; to find out the effect of cash conversion cycle on profitability of SME's in Trans Nzoia County; and to find out the effect of average payment period on profitability of SME's in Trans Nzoia County. The study was guided by the Liquidity Theory; Corporate Risk Management Theory and Finance Theory. A descriptive survey research design was adopted with a structured questionnaire that covered both qualitative and quantitative data, as a tool for data collection. The target population comprised of 98 small and medium enterprises within Trans Nzoia County. The survey employed census method since the target population was less than one hundred respondents. Data sorting and analysis was carried out by both the regression tools and ANOVA using the Statistical Package for Social Sciences (SPSS) version 23. A multiple correlation coefficient and regression analysis together with the ANOVA test was used to establish, make conclusions and recommendations on the relationship between the study variables from the findings. The findings, through the F calculated (F =25.652), at > 5% level of significance, revealed that the regression effect was statistically significant between the independent variables and the dependent variable. The researcher concluded that average collection period and cash conversion cycle were the major determinants of working capital management periods on profitability of the SMEs, while Average payment period had a negative but significant effect on profitability. Recommendations included the need for a more restrictive credit policy that gives customers shorter credit periods, a reduction in the number of days the inventory are held in stock, SME management to negotiate for longer average payment periods and that the SMEs to reduce their cash conversion cycle to its minimum. The study will assist the management of financial institutions to understand some of the WCM practices in the SME's sector which will then guide their lending financing decisions to the SMEs. The findings of this study will also benefit the Ministry of Trade by providing insights to the kind of regulations they should have in place as regards to SME's and advice on whether there is need to revise the already existing Laws and Regulations. To the scholars, this research will add to the existing field of knowledge of working capital management and provide scholars with the necessary literature review to carry out further research.**

Keywords: **Average collection period, inventory conversion period, average payment period and cash conversion cycle.**

1. INTRODUCTION

Background:

Working capital management (WCM) is a highly essential component in the management of daily activities of enterprises. The continuous challenging economic and financial market environment has caused organizations around the world to intensify efforts to extract efficiencies and eliminate risks in the management of their working capital. Consequently, Working Capital Management enables enterprises to be at par with maintaining an optimal performance in liquidity and performance. The view is that there are likelihoods of disparities of firm's assets as well as liabilities if Working Capital Management is inefficient and mismanaged.

Enterprises are now taking a more strategic approach to Working Capital Management which helps in bringing about benefits beyond greater liquidity and reduced debt burdens. Working Capital Management also provides flexibility for growth, investment and increasing shareholder wealth through dividends. Managing working capital effectively and consistently prepares enterprises for any eventualities without being forced into a crippling scramble for liquidity.

Global Analysis:

Decisions about how much to invest in the customer and inventory accounts, and how much credit to accept from suppliers, are reflected in the firm's cash conversion cycle, which represents the average number of days between the date when the firm must start paying its suppliers and the date when it begins to collect payments from its customers. Some previous studies have used this measure to analyze whether shortening the cash conversion cycle has positive or negative effects on the firm's profitability. Specifically, Shin and Soenen (2016) analyze the relation between the cash conversion cycle and profitability for a sample of firms listed on the US stock exchange during the period 1974-1994. Their results show that reducing the cash conversion cycle to a reasonable extent increases firms' profitability. More recently, Deloof (2003) analyzes a sample of large Belgian firms during the period 1992-1996. His results confirm that Belgian firms can improve their profitability by reducing the number of days accounts receivable are outstanding and reducing inventories. Moreover, he finds that less profitable firms wait longer to pay their bills.

Dong and Su (2010) also measured the relationship between Working Capital Management components and profitability employing secondary data collected from the listed companies in Vietnam Stock Market (VSM) for the period from 2006 to 2008. They reported a significantly negative association between three components of Working Capital Management including: inventory holding period, accounts receivable period and cash conversion cycle. It was therefore argued that as inventory takes more time to sell, it will adversely affect profitability. Also, the results imply that the increase or decrease in accounts receivable will significantly affect profitability of companies. The cash conversion cycle coefficient indicates that when the cash conversion cycle is longer, profitability is smaller and that managers can create value for their shareholders by reducing the cash conversion cycle to a reasonable range. They concluded that the positive relationship between the average payment period and profitability indicates that profitable companies wait longer to pay their bills.

Wang (2012) analyzed a sample of Japanese and Taiwanese firms, emphasized that the way the working capital is managed has a significant impact on the profitability of firms and increase in profitability by reducing number of day's accounts receivable and reducing inventories. A shorter Cash Conversion Cycle and net trade cycle is related to better performance of the firms. Furthermore, efficient working capital management is very important to create value for the shareholders. Shin and Soenen (2016) analyzed a sample of US firms also reported similar findings but have used Net Trading Cycle (NTC) as comprehensive measure of working capital management and found significant negative relationship between NTC and profitability.

Regional Analysis:

Abbasali and Milda (2012) with a view to finding the empirical evidence about the impact of working capital management on profitability and market evaluation studied a sample of companies listed on the Nigeria Stock Exchange for a period from 2006 to 2010. Return on assets and return on invested capital ratio were used to measure the profitability of firms, and Tobin Q ratio to measure the market value of companies. The variables of cash conversion cycle as working capital management criteria, current ratio, current assets to total assets ratio, current liabilities to total assets ratio and total

debt to total assets ratio were used. Their result indicates that there is a significant relationship between working capital management and profitability.

Mengesha, Seyoum and Gizaw (2014) carried out a study on the impact of working capital management on financial performance of selected manufacturing companies in Ethiopia. The study used audited financial statements of 11 metal manufacturing firms for a period of 4 years. Working capital was measured through Cash Conversion Cycle (CCC) while return on assets and return on investment measured profitability. It was found that CCC had a significant negative relationship with return on asset. It was therefore concluded that Cash Conversion Cycle impacted negatively on profitability of the firms and that managers can increase firms' profitability by improving working capital management measures. Agyei and Yeboah (2011) looked into working capital management and profitability of selected banks in Ghana. It was found that Cash Conversion Cycle had a positive relationship with banks' profitability. Falope and Ajilore (2016), in their study on working capital management and corporate profitability of Nigerian quoted companies revealed a significant negative correlation between net operating profitability and cash conversion cycle. Akoto, Victor and Angmor (2013) on the other hand found that cash conversion cycle, current ratio and current asset turnover significantly and positively influenced profitability of listed manufacturing firms in Ghana.

Analysis in Kenya:

The small scale enterprises (SMEs) play an important role in the Kenyan Economy. According to the Economic Survey 2016, the sector contributed over 50 percent of new jobs created in the year 2015. Despite their significance, Kenya National Bureau of Statistics, 2016 indicate that three out of five businesses fail within the first few months of operation as cited by Bowen *et al.,* (2016) due to several challenges. Because of their small size, a simple management mistake is likely to lead to closure of a small enterprise as there is no chance for management to learn from its past mistakes. Lack of planning, improper financing and poor management have been cited as the main causes of failure of small enterprises (Longenecker*et al.*, 2016). Lack of credit has also been identified as one of the most serious constraints facing SMEs thus hindering their development (Oketch, 2010; Tomecko and Dondo, 2012; Kiiru, 2011).In addition to these, education is also one of the factors that impact positively on growth of firms (King and McGrath, 2012).Although Working Capital Management periods is the concern of all enterprises, it is of explicit importance to the Small Medium-sized Enterprises (SMEs) given the vulnerability of small enterprises to fluctuations in working capital since they cannot afford to starve of cash (Padachi, 2006). The SME Solutions Center (SSC, 2007) defines SME as a business formally registered, with an annual turnover of between Kshs. 8 million to Kshs. 100 million, an asset base of at least Kshs. 4 million and 5 to 150 employees.

With limited access to the long-term capital markets, SMEs tend to rely more heavily on owner financing, trade credit and short-term bank loans to finance their needed investment in cash, accounts receivable and inventory (Chittenden et al. 1998; Saccurato, 1994). These sources of finance bare more risk and are more expensive as compared to equity making Working Capital Management an important financial management aspect in SMEs. Kwame (2007) noted that indeed Working Capital Management is important to the SMEs' managers, because it is them who strive for finances and the opportunity cost of finances, for them is usually on the higher side. Makori and Jagongo (2013) examined working capital management and firm profitability in Kenya. The study utilized data for the period 2003 to 2012 of five manufacturing and construction firms listed in Nairobi Securities Exchange. The number of day's accounts receivable and Cash Conversion Cycle proxy working capital. The study found that cash conversion cycle and number of day's accounts receivable had a negative association with profitability. It was further noted that financial leverage and the sales growth had significant effects on firm's profitability. It was concluded that firms can gain sustainable competitive advantage through efficient and effective utilization of their resources through reduction of the cash conversion cycle to its minimum.

Mathuva (2010) conducted a study on the influence of working capital management on corporate profitability in Kenya. The study focused on 30 firms listed in the Nairobi Securities Exchange for the period 1993 to 2008. Average payment period, average collection period and inventory conversion period were used as measures of working capital. The study found average payment period highly and positively influenced profitability in these firms. It was argued that the longer the firms took to pay their creditors then the more profitable the firms were. Mwangi (2013) on the other hand examined the association between working capital management and financial performance of private hospitals in Kenya. The study used average collection period, average payment period and cash conversion cycle as proxies of working capital

management. Return on assets represented profitability. It was found that the average payment period had a negative relationship with profitability. The low levels of profitability noted in hospitals were ascribed to the long average payment period creditors took to honor their obligations.In Trans Nzoia County, SMEs play an important role in the Economy. According to the Economic Survey (2006), the sector contributed over 50 percent of new jobs created in the year 2005. In addition, Oketch (2000) noted that SMEs in Trans Nzoia County contributed significantly to economic development through provision of job opportunities, reduction of poverty levels, nurturing the culture of entrepreneurship and providing a vital link in the economy through their supply chain and intermediary role in trade. However, despite their significance, past statistics indicate that three out of five businesses fail within the first few months of operation (Kenya National Bureau of Statistics, 2007). Fina Bank Report (2007) further highlights that SMEs exhibit both high birthrates and high death rates with 40% of the startups failing by year two and at least 60% failing by year four.

Further, given SMEs importance to a nation's economic growth and the critical role that they play in poverty reduction, an understanding of the problems that negatively affect SMEs in Trans Nzoia County is a fundamental step in managing and avoiding the enormous failure of these SMEs (ILO, 2010). Based on this background, this study is designed to establish the determinants of Working Capital Management on profitability of SMEs in Trans Nzoia County.

Working Capital Management:

Working Capital Management involves planning and controlling current assets and liabilities in a manner that eliminates the risk of inability to meet short term obligations and avoid excessive investment in these assets (Eljelly, 2004). The goal of Working Capital Management therefore, is to ensure that the firm is able to continue in its operations and that it has sufficient cash flow to satisfy both maturing short-term debt and upcoming operational expenses (Brigham and Houston, 2007). WCM is a therefore a fundamental part of any firm's overall corporate strategy to create value, to ensure financial health and provide competitive advantage (Deloof, 2003). Working Capital Management is also vital for the success and survival of businesses and for enhanced performance and contribution to economic growth (Padachi, 2006). In this sense, it is possible to regard working capital as the lifeblood of a firm (Padachi*et al.* 2008). The goal of Working Capital Management therefore, is to ensure that the firm is able to continue in its operations and that it has sufficient cash flow to satisfy both maturing short-term debt and upcoming operational expenses (Brigham and Houston, 2007).

Working capital is the capital that a company needs in order to run its operations, i.e. the short-term financing of the company. The properties of working capital are such that it does not earn interest (e.g. capital tied up in Inventory). It is therefore important that companies manage the working capital levels well in order to ensure that it provides the company sufficient amounts of profit. On the other hand, Working Capital Management refers to any actions aimed at managing companies' working capital levels.In contrastto long-term financial decisions, Working Capital Management deals with the issues of short-term financing. For example, deciding the level of credit a company gives their clients as well as how much credit they should demand from their suppliers. These types of short-term financing decisions are important for the sustainability of companies, as it affects liquidity and profitability of an enterprise. This is as shown by (Aravindan andRamanathan, 2013). The net balance between current assets and current liabilities is important as the current assets are expected to turn into cash within one year, while current liabilities are commitments that are due to mature within one year. Working capital is of high interest from a short-term financing perspective and liquidity analysis. It is also important for companies' long-term financing because the indication of short-term survival strength and financial-health through short-term liquidity will impact the companies' ability to attain attractive long-term financing. A company with poor financial health is likely to have a higher cost of capital than a company with better finances, because of the higher credit risk. (Penman, 2013) In short, therefore, it means that Working Capital Management is the managing and planning of liquidity and profitability. A company with poor Working Capital Management may run the risk of locking-up surplus amounts of capital (e.g. excess inventories) and on the other hand a shortage of working capital can damage the flow of operations. In the study, Working Capital Management will put focus on three main current assets: inventories, accounts receivable (AR) and cash while the main current liability is accounts payable (AP).

Therefore, for Working Capital Management to be effective there is need for clear specification of the objectives. According to the mainstream economic theory, it is generally accepted that the main objective of any firm is to maximize profits. However, maintaining liquidity is also an important objective as shown by (Raheman and Nasr, 2007). The dilemma is that increasing profits at the cost of liquidity can bring serious problems to the firm. Therefore, there should be a tradeoff between these two objectives (liquidity and profitability) of enterprises (Falope and Ajilore, 2009). As a result,

Working Capital Management is a very crucial element in analyzing the firm's performance whilst performing day to day operations and achieving balance between liquidity and profitability. All individual components of working capital including cash, marketable securities, account receivables and inventory management play a vital role in the performance of any firm (Brigham and Hauston, 2007).

Statement of the Problem:

Efficient management of working capital periods is an important indicator of an organization. A firm should therefore formulate policies to control the working capital so as to meet financial distress, which may occur in future (Luther, 2007). In addition, being a part of investment in assets and directly affecting the financial performance of enterprises, Working Capital Management is a vital issue in the financial decision making process. It ensures adequate cash flow for business operation and expansion which in turn ensures that a firm has positive working capital and hence is able to meet its short term obligations when they fall due.

SMEs pose as the efficient motor of every market economy. For example, in Europe 99.8 per cent of all businesses fall into the SME category. In addition, roughly 66 per cent of all workers are employed in this corporate size. However, the failure rate among small businesses is very high compared to that of large businesses. Padachi (2006) noted that above 20% of small firm failures in the United Kingdom (UK) was due to irrecoverable debts or poor receivable management. In other developed countries such as Canada, England, Australia and others, it has long been recognized that efficient management of working capital is crucial for prosperity and survival of small businesses (Deloof, 2003).

In Trans Nzoia County, several studies have been carried out to establish the impact of Working Capital Management periods on the financial performance of enterprises. However, there have been contradicting findings by the different researchers. Mathuva (2010) carried out a study on the impact of Working Capital Management on the financial performance of enterprises in Trans Nzoia County with a focus on 30 enterprises listed on the Nairobi stock Exchange. He established that there was differing impact of each Working Capital Management components on the financial performance of enterprises with some having a positive impact and others having a negative impact. On the other hand, Gakure, *et al.*, (2012) carried out a similar study with a sample of 18 organizations listed on the Nairobi stock exchange. They established that there was a strong negative impact of all Working Capital Management components on the financial performance of enterprises.

The studies specific to SMEs in Kenya also have contradictory findings. For instance, Kithii, (2008) established that there was a significant negative relationship between the components of Working Capital Management with the financial performance of SMEs in Kisumu City. On the other hand, Nyambaga, et al. (2012) established that there was a positive relationship between Working Capital Management components and the financial performance of SMEs in Kisii South District. The purpose of this study was to establish the determinants of working capital management periods on the profitability of the SMEs in Trans Nzoia County.

Research Objectives:

General Objective:

To establish the determinants of working capital management periods on the profitability of the SMEs in Trans Nzoia County.

Specific Objectives:

The specific objectives of the study were:

I.   To determine the effect of average collection period on profitability of the SME's in Trans Nzoia County.

II. To evaluate the effect of inventory conversion period on profitability of SME's in Trans Nzoia County.

III. To find out the effect of cash conversion cycle on profitability of SME's in Trans Nzoia County.

IV. To find out the effect of average payment period on profitability of SME's in Trans Nzoia County.

Research Questions:

I.   What is the effect of average collection period on profitability of the SME's in Trans Nzoia County?

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II.   How does inventory conversion period affect profitability of SME's in Trans Nzoia County?

III.   How does cash conversion cycle affects profitability of SME's in Trans Nzoia County?

IV.   How does average payment period affects profitability of SME's in Trans Nzoia County?

Research Hypotheses:

$H_{01.}$ There is no significant effect between average collection period and profitability of the SME's in Trans Nzoia County

$H_{02.}$ Inventory conversion period does not have a significant effect on profitability of SME's in Trans Nzoia County.

$H_{03.}$ Average payment period does not have a significant effect on profitability of SME's in Trans Nzoia County.

$H_{04.}$ There is no significant effect between cash conversion cycle and profitability of SME's in Trans Nzoia County

Significance of the study:

The findings of this study were of benefit to:

Lending institutions: Sources of funds are a component of working capital. The findings of this study will assist the management of financial institutions to understand some of the Working Capital Management practices in the SME's sector which will then guide their lending financing decisions to the SMEs.

Regulator: The SME's in Trans Nzoia County are registered under the Ministry of Trade and Industrialization. The findings of this study benefited the Ministry by providing insights to the kind of regulations they should have in place in regards to SME's and advice on whether there is need to revise the already existing Laws and Regulations.

Scholars and Researchers: This research will add to the existing field of knowledge of working capital management and provide scholars with the necessary literature review to carry out further research.

Scope of the study:

The study was delimited to Trans Nzoia County and not any other County in Kenya. Whereas there are large scale business enterprises, the study only delimited to the influence of Working Capital Management Periods on the profitability of SMEs in Trans Nzoia County. The study was also delimited to the four objectives for research only.

Limitations of the study:

The researcher experienced some difficulty in data collection from the targeted respondents due to suspicions exhibited by the respondents which were associated with the political campaigns that were taking place at the time the researcher was collecting data. The other challenge was due to different academic backgrounds of most of them especially those dealing in businesses that needed no basic education to run. The researcher had to spend extra time convincing and explaining to them on the meaning of some of the terminologies before delving into the data requirements. Most respondents never knew anything to do with working capital management periods and therefore a one off explanation could not be enough for them to understand. It was also a challenge for some respondents to understand when told it was purely for academic purposes.

2.   LITERATURE REVIEW

Introduction:

The literature review guided the researcher to gain insight on the project topic by analyzing the works of other scholars on the same topic. The researcher focused on the dependent and independent variables of the research topic respectively which are embedded in the four objectives and the purpose of the study.The literature review also covered the theoretical frame work review, the conceptual frame work a summary of the literature review while identifying the gaps.

Theoretical Framework:

The study was guided by the following theories namely: Liquidity theory, corporate risk management theory and finance theory:

Liquidity Theory:

The study was guided by liquidity theory by Jose (2011). According to Jose (2011), liquidity theory as a function of current assets and current liabilities is an important factor in determining working capital policies and indicates firm's capability of generating cash in case of need. Current ratio, acid-test and cash ratios as traditional measures of liquidity are incompetent because these balance sheet based measures cannot provide detailed and accurate information about effectiveness of working capital management. Formulas used for calculating these ratios consider both liquid and operating assets in common. Besides, mentioned traditional ratios are also not meaningful in terms of cash flows (Richards and Laughlin, 2010). Boer (2016) has insisted on using ongoing liquidity measures in working capital management. Ongoing liquidity refers to the inflows and outflows of cash through the firm as the product acquisition, production, sales, payment and collection process takes place over time. As the firm's ongoing liquidity is a function of its cash conversion cycle, it would be more appropriate and accurate to evaluate effectiveness of working capital management by cash conversion cycle, rather than traditional liquidity measures (Pinches, 2012).

Corporate Risk Management Theory:

The study also employed corporate risk management theory by Minton (2013). According to Minton (2013), the theory of corporate risk management states that shareholders are better off if a firm maintains smooth cash flows. Smooth cash flows can add value by reducing a firm's reliance on costly external finance. Empirically, it has been shown that cash flow volatility is costly as it affects a firm's investment policy by increasing both the likelihood and the costs of raising external capital. While previous research finds that cash flow volatility is costly, no direct evidence exists linking financial statement volatility to firm value. Such a link is important because, in order for risk management to matter, smooth financials must be valued at a premium to more volatile ones. Investors value firms with smooth cash flows at a premium relative to firms with more volatile cash flows. Consistent with risk management theory, strong evidence shows that cash flow volatility is negatively related to proxies for firm value. There are a number of reasons why earnings volatility may matter to the firm independently of cash flow volatility. For instance, prior empirical work suggests that analysts tend to avoid covering firms with volatile earnings, as it increases the likelihood of forecast errors.

Similarly, it is imperative that institutional investors avoid companies that experience large variations in earnings. High earnings volatility also increases the likelihood of negative earnings surprises. Managers have engaged in extensive earnings smoothing. It should be noted that earnings smoothing may likely reduce a company's perceived probability of default and therefore a firm's borrowing costs. A firm may smooth earnings so as to reduce the informational advantage of informed investors over uninformed investors and, therefore, protect these investors who may need to trade for liquidity reasons. It has also been found that firms with greater earnings smoothing have a lower cost of capital even after accounting for cash flow volatility. Under certain specifications the market appears to punish firms for undertaking smoothing behavior preferring earnings volatility mirror cash flow volatility. These results are important and suggest managers focus their actions on smoothing cash flows rather than necessarily utilizing accruals to smooth earnings. There are a number of other ways in which financial uncertainty interacts with firm value. According to the Capital Assets Pricing Model (CAPM), systematic risk should be negatively related to value, since higher discount rates yield a lower value, all things being equal. Further, recent empirical work suggests that not only does systematic risk affect value, but also idiosyncratic risk may be priced (Shin and Stulz, 2010). Empirical evidence suggests that there is a negative relationship between systematic risk and firm value, as well as a negative and significant association between unsystematic risk and firm value. The two alternative types of risk, namely, cash flow and earnings volatility are of primary importance since unlike financial market variables they reflect the actual stability of the firms' financial statements and are directly affected by managerial decisions and the firms' risk management policies.

Finance Theory:

In addition the research used finance theory by Aksoy (2015). According to Aksoy (2015) finance theory is under three main threads: capital budgeting, capital structure and working capital management. Capital budgeting and capital structure decisions are mostly related with financing and managing long-term investments. However, financial decisions about working capital are mostly related with financing and managing short-term investments that undertake both current assets and current liabilities simultaneously. In most cases short-term financial management is referred to as working capital management.

Efficiency in working capital management is important especially for production firms whose assets are mostly composed of current assets (Horne and Wachowitz, 2014) as it directly affects liquidity and profitability of any firm (Raheman and Nasr, 2014). According to Kargar and Bluementhal (2014) bankruptcy may also be likely for firms that put inaccurate working capital management procedures into practice, even though their profitability is constantly positive. Hence, it must be avoided to recede from optimal working capital level by bringing the aim of profit maximization in the foreground, or just in direct contradiction, to focus only on liquidity and consequently pass over profitability. While excessive levels of working capital can easily result in a substandard return on assets, inconsiderable amount of it may incur shortages and difficulties in maintaining day-to-day operations.

Working capital is also a major external source of capital especially for small and medium sized and high growth firms. These firms have relatively limited access to capital markets and tend to overcome this complication by short-term borrowing. Working capital position of such firms is not only an internal firm-specific matter, but also an important indicator of risk for creditors. Higher amount of working capital enables a firm to meet its short-term obligations easier. This results to increased borrowing capability and decrease in default risk and consequential decrease in cost of capital and increase in firm value. Therefore, efficiency in working capital management affects not only short-term financial performance in terms of profitability, but also long-term financial performance such as firm value maximization (Moyer *et. al.,* 2014).

Conceptual Framework:

The study adopted a conceptual framework that explains the relationship between working capital management and profitability of small and medium enterprises in Trans Nzoia County as illustrated below
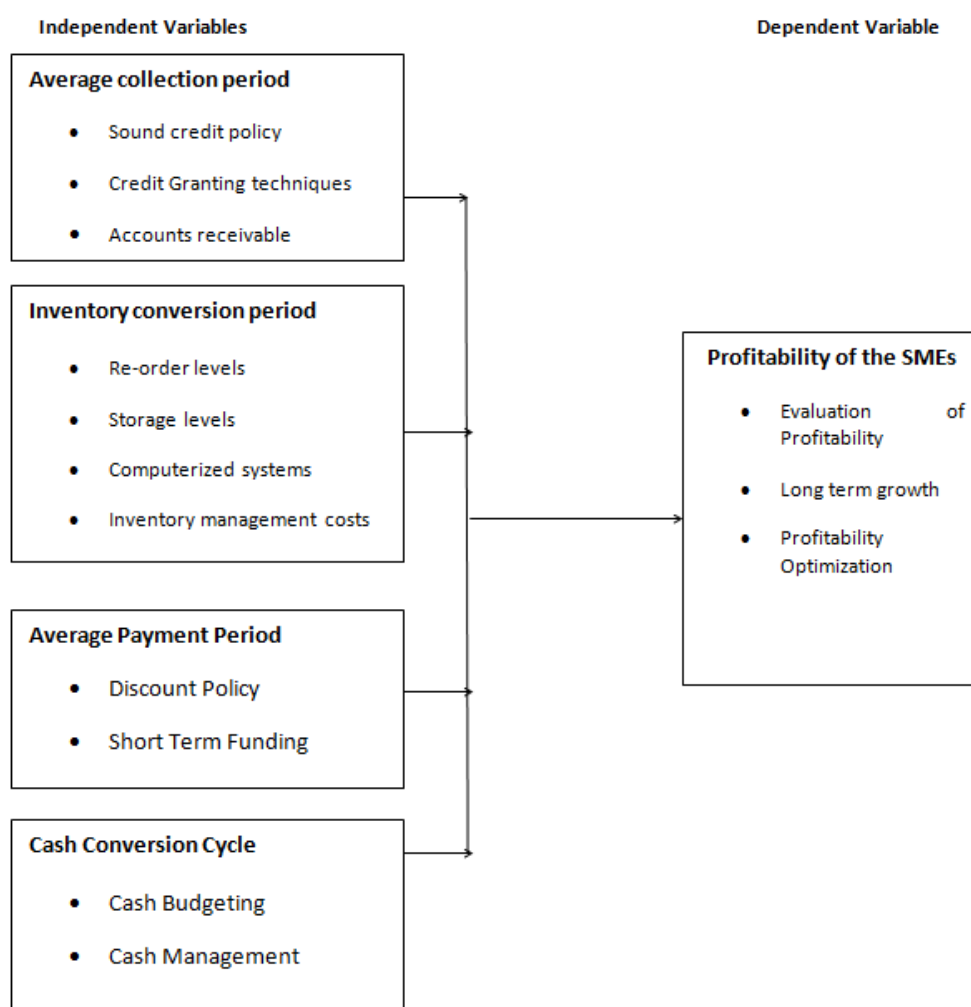

Figure 2.1: Conceptual framework.

Review of variables:

Average collection period on profitability of the SME's:

Efficient receivables management involves a shortened debtor's collection period, low levels of bad debts and a sound credit policy which often improves the businesses' ability to attract new customers and accordingly increase financial performance (Ross et al., 2008). This was further affirmed by a study by Sushma and Bhupesh (2007), which stated that putting in place a sound credit policy ensures proper debt collection procedures and is pivotal in improving efficiency in receivables management hence the performance of enterprises. The standard measure of receivables management is the Average Collection Period (ACP) which is the time taken to collect cash from customers (Mathuva, 2010). ACP is calculated as average accounts receivable divided by credit sales multiplied by 365 days.

Inventory conversion period on profitability of SME's:

Efficient inventory management practices involve knowing how much should be ordered and when should it be ordered. This relates to determining the economic order quantity and analysis of the costs of maintaining certain levels of inventory (Ross *et al.*, 2008). The costs involved in inventory management are those of holding too much stock and those of holding too little, hence the need to put in place an effective inventory management system to ensure reliable sales forecasts to be used in inventory ordering purposes (Atrill, 2006). Maintaining optimal inventory levels reduces the cost of possible interruptions or loss of business due to the scarcity of products, reduces supply costs and protects against price fluctuations (Nyabwaga*et al.*, 2012). The time taken to convert inventory held into sales is known as Inventory Conversion Period and is used as a proxy for inventory management policy (Deloof, 2003). Inventory Conversion Period is calculated as inventory divided by cost of sales multiplied by 365 days.

Average payment period on profitability of SME's:

The number of days accounts payable (AP) reflects the average time it takes firms to pay their suppliers. We calculated this as $365 \times$ accounts payable/purchases. The higher the value, the longer firms take to settle their payment commitments to their suppliers. These three periods help to estimate the cash conversion cycle (CCC). This variable is therefore calculated as the number of day's accounts receivable plus the number of days of inventory minus the number of days accounts payable. The longer the cash conversion cycle, the greater the net investment in current assets and hence the greater the need for financing of current assets. Dellof (2003) in his study of large Belgian firms also considered the ratio of fixed financial assets to total assets as a control variable. For some firms in his study such assets are a significant part of total assets. However the study focuses on SMEs whose fixed financial assets are less important.

Cash conversion cycle on profitability of SME's:

Cash management is the process of planning and controlling cash flows into and out of the business, cash flows within the business, and cash balances held by a business at a point in time (Pandey, 2004). According to Ayiro (2012), creditors are a vital part of effective cash management and should be managed carefully to enhance cash position of a business. Management of creditors and suppliers is very important as slow payment by a firm may create ill-feeling and can signal that the business is not doing well. This was further affirmed by Raheman and Nasr (2007), who indicated that delaying payment of accounts payable to suppliers allows enterprises to access the quality of obtaining products and can be inexpensive and flexible source of financing. On the other hand, delaying of such payables can be expensive if a firm is offered a discount for the early payment. By the same token, uncollected accounts receivables can lead to cash inflow problems for the firm. According to Deloof (2003), the time taken to pay suppliers is the APP which is used as a proxy for accounts payable management policy. APP is calculated as average accounts payable divided by credit purchases multiplied 365 days.

Efficient cash management involves the determination of the optimal cash to hold by considering the trade-off between the opportunity cost of holding too much cash and the trading cost of holding too little (Ross et al. 2008) and as stressed by Atrill (2006), there is need for careful planning and monitoring of cash flows over time so as to determine the optimal cash to hold. One of the standard measures of cash management is the Cash Conversion Cycle that was introduced by Richards and Laughlin (1980). It refers to time-period from buying raw material, converting to finished goods, sales products, and collecting account receivables (Mansoori and Muhammad, 2012). Cash Conversion Cycle is calculated as Average Collection Period + Inventory Conversion Period – Average Payment Period.

Profitability of SMEs:

Profitability is the ability of a business to produce return on investment based on its investment (Scherr, 2016). This is simply a cash transaction between the business and the lender to generate cash for operating the business or buying assets. Profitability is the primary goal of all business ventures. Without profitability the business will not survive in the long run. So measuring current and past profitability and projecting future profitability is very important. Profitability is the extent to which a business generates a profit from the factors of production. Four useful measures of enterprises' profitability are Return on Equity (ROE), Operating profit Margin Return on Assets (ROA) and Net Income. According to (Mathuva, 2010), Most profitable firms have shorter number of days accounts receivables, days of inventory and days accounts payable as well as shorter cash conversion cycles. These firms are also larger and have superior sales growth and lower leverage.

An unwanted high investment in current assets would reduce the rate of return (Vishnani, 2007). Whether you are recording profitability for the past period or projecting profitability for the coming period, measuring profitability is the most important measure of the success of the business. A business that is not profitable cannot survive. Conversely, a business that is highly profitable has the ability to reward its owners with a large return on their investment. Therefore Increasing profitability is one of the most important tasks of the business managers. Managers constantly look for ways to change the business to improve profitability. Low profit margin can be interpreted as indicating that a company's profitability is not very secure. If a company with a low profit margin experiences a decline in sales, its profit margin will decline even further, leading to a very low, neutral or even negative profit margin.

Critique ofthe existing literature:

Ikram, Mohamad, Khalid and Zaheer (2011) studied working capital management on profitability in the cement industry. The results of the study were based on only one sub sector within the manufacturing sector. Therefore, the results of this study should be used with caution and should only be generalized to the cement industry and not entire manufacturing sector. Mathuva (2010) concentrated on the firms listed in Nairobi securities exchange. The companies listed in the stock exchanges are large companies. Small companies were excluded from this study. Therefore, the results of study can only be generalized on large and listed companies.

Studies on working capital management use secondary data. Mousavi and Jari (2012), Kaddumi and Ramadan (2012) and Gakure*et al* (2012) used record survey sheet to collect the secondary data. However, Nyabwanga*et al* (2012) studied the effects of working capital management practices on performance of small enterprises in Kisii South District in Kenya. They used a questionnaire to collect the primary data, Secondary data from financial statements give values at a specific date and therefore require to be supplemented by primary data collected from opinions of finance managers.

Summary:

Working capital management has long been an important financial management aspect in large and SME firms. Much of what has been written about working capital management practice relates to entities actively dealing in the manufacturing sector. Just as Teruel and Solano (2008) argue, most of the previous studies have focused on analysis of larger firms, but the management of current assets and liabilities is important issue in the case of small and medium-sized companies. Most of these companies' have current assets and current liabilities as their main sources of external finance since SMEs have difficulties in obtaining funds and accessing to the long-term capital markets. There have also been conflicting arguments on different working capital management practices and their effects on profitability. For instance, while most studies support that shorter cash conversion cycles increases profitability, some studies have proved otherwise. (Nobanee, 2009) argues that sometimes shorter cash conversion cycles are associated with high opportunity costs and longer cash conversion cycles are associated with high carrying costs and hence longer cash conversion cycle might increase profitability.

Research gaps:

The empirical studies show that Working Capital Management has an impact on the financial performance of enterprises and is of particular importance to small enterprises. However, the researchers defer on the kind of impact that Working Capital Management has on financial performance of enterprises. Some researchers (Nyabwaga*et. al.,* 2012) have found a positive relationship while others have found a negative relationship (Deloof 2003; Eljelly 2004; Falope and Ajilore2009).

For other researchers (Mathuva, 2009), different components of Working Capital Management have different impact on the financial performance of enterprises. Therefore this study attempted to cover the gap which exists in defining the kind of relationship between Working Capital Management and financial performance of enterprises. The study therefore concentrated on SMEs in Trans Nzoia County since only a few studies have been carried out in regards to the effect of Working Capital Management on the financial performance of SMEs in Trans Nzoia County.

3. RESEARCH METHODOLOGY

Introduction:

This chapter explained research design; target population; sampling frame; sample size and sampling technique; data collection procedure; pilot test and data processing and analysis add the model for analysis.

Research Design:

The study adopted a descriptive survey research design. Descriptive survey research design involves collecting quantitative and qualitative data in order to answer questions concerning the current status of the subjects of the study (Kerlinger, 2000). Kerlinger (2010) and Mugenda and Mugenda (2003) also noted that the design seeks to identify the nature of factors involved in a given situation, determine the degree in which they exist and discover the links that exist between them. Kombo and Tromp (2006) defines it as the "glue" that holds all of the elements in a research project together. The research design was relevant in this study because it helped to produce statistical information about Working Capital Management determinants of enterprises. This study also employed a quantitative approach. This approach involves collecting and analyzing numerical data. Quantitative approach was used because it enabled the researcher to test the significance of the relationship between Working Capital Management and financial performance of SMEs in Kenya. The researcher also used a cross- sectional survey designed to establish whether SMEs in Trans Nzoia County carry out working capital management practices. This is because surveys allows for results to be aggregated and generalized back to the larger population.

Target Population:

The target population for this study was 98 registered SMEs located in Trans NzoiaCounty.This was based on the Ministry of trade and industry database which states that there is an estimated 1.6 Million SMEs in Kenya representing 96% of all formally registered private enterprises in different industries and sectors.

Sample size and Sampling Frame:

Cooper and Schindler (2011) defined a sampling frame as a list of elements from which the sample is actually drawn and closely related to the population. A sampling frame is a list of all items where a representative sample is drawn for the purpose of research (Kothari, 2004). The target population, for this study, 98 enterprises, was collected from Trans Nzoia County Chamber of Commerce database. This same sample size was used as a whole since was less than a hundred respondents being the limit below which census method is to be used. Hence the study was a census. The study targeted the managers of the SMEs. The sampling frame was as shown in Table 3.1 below;

Table 3.1: Sampling Frame

Respondents	Target population
Enterprises dealing with communication services	11
Enterprises dealing with manufactured products	10
Enterprises dealing with agricultural produces	21
Enterprises dealing with health services	15
Enterprises dealing with restaurant and entertainment	11
Medium workshops and repair contractors	12
ICT service providers	10
Small petrol filling stations	8
Total	**98**

Data collection instrument:

Data collection instrument are tools used to collect data from respondents. This study relied on both primary data and secondary data. In addition to the secondary data, self-administered questionnaires were used to collect primary data on the Working Capital Management periods carried out by SMEs in Trans Nzoia County. Dwivedi (2006) defines a questionnaire as a device for securing answers to questions by using a set of questions. This is because questionnaires reduce researcher bias, they are cost effective, easy to analyze and less intrusive.Secondary data included; the amount of debtors, amount of creditors, amount of inventory and amount of cash which was useful in calculating the Average Collection Period, Average Payment Period and Inventory Conversion Period respectively. Further, the Earnings before Interest and Taxes, the amount of total assets was collected to calculate the Return on Assets (ROA). Secondary data was collected from the annual reports and audited financial statements of SMEs in Trans Nzoia County.

Data Collection Procedure:

The researcher proceeded to the SMEs in Trans Nzoia County with the questionnaires to collect data by talking to the respondents and then distributing the questionnaires. The researcher administered the questionnaires to the sample population, and clarified in cases where there was need for clarifications. The researcher gave the respondents a week to complete filling the questionnaires.

Validity of research instruments:

Validity refers to the degree to which an instrument measures what it purports to measure (Mugenda and Mugenda, 2003). This illustrates the degree to which analysis results obtained from the data collected represent the phenomena under study. To ensure validity of the research instruments, the supervisors' expertise in the study area was greatly utilized. They scrutinized the instrument, check for the use of simple and relevant language for question formulation and gave suggestions that refined the questionnaires before the final copy was prepared.

Reliability of research instruments:

The reliability of an instrument is the degree of consistency with which a research instrument measures whatever it is intended to measure and yields consistent results. It refers to the extent to which findings can be replicated by another researcher (Silverman 2005). To test the internal consistency of the items listed on the instrument used, the Cronbach alpha coefficient was computed. Cronbach's alpha is a statistic coefficient (a value between 0 and 1) that is used to rate the reliability of an instrument such as a questionnaire.

This method randomly splits the data set into two and a score for each participant calculated from each half of the scale. If a scale is very reliable, respondents get same scores on either half of the scale so that, correlation of the two halves is very high. The advantage with using Cronbach's alpha is that the data is split into every possible way and the correlation coefficient for each split computed. The average of these coefficients is the value equivalent to this alpha (Cronbach, 1951).

Data Processing and analysis:

Quantitative and qualitative data was generated using questionnaires. Both descriptive and inferential statistics were used in the analysis. Data collected was analyzed through measures of frequencies and percentages. It was then presented using tables, charts. Multiple regression models which assumes that there is a linear relationship between the dependent variable (profitability of SMEs) and each predictorvariable (average collection period; inventory conversion period; cash conversion cycle; and average payment period) was used. The regression estimated at the study response rate of 95% as the confidence level and sought to establish the coefficient values of the predictor values to establish the extent to which each one of them influenced the dependent variable. This relationship was described in the regression model of the following form:

$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$

Where:

Y =   Profitability of the SMEs

$X_{1=}$ Average collection period

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$X_{2=}$ Inventory conversion period

$X_{3=}$ Average payment period

$X_{4=}$ Cash conversion cycle

e=   is the random error term

$\beta_{0=}$ the constant in the equation

While $\beta1$, $\beta2$, $\beta3$ and $\beta4$ are coefficients of determination

4. RESEARCH FINDINGS AND DISCUSSIONS

Introduction:

This chapter represented an empirical investigation of the determinants of working capital management periods on the profitability of the SMEs in Trans Nzoia County. The results were organized into four dimensions of independent variables (average collection period, inventory conversion period, cash conversion cycle and average payment period). The research findings and discussions of the four variables were also included in this chapter.

Response rate:

Although some questionnaires were returned partially filled by the respondents, the researcher managed the questionnaire response return rate of 93 fully filled questionnaires with five (5) questionnaires partially filled, out of total 98 questionnaires sent out to respondents. This accounted for a 95% success and hence response rate. It was from this feedback that the researcher carried out the analysis and reported the results using the statistical package for social sciences (SPSS version 23) .

Pilot Results:

The researcher used the reliability analysis when measuring the consistency of the research instrument (Likert-type scale questionnaire) which was essential in reflecting the overall reliability of the measured variables. The Cronbach's Alpha (α), as the scale reliability measure was used with a value greater than 0.700 being very acceptable (Irungu, 2016). The researchers' scale reliability value of 0.754 was generated by the SPSS software from the collected data.

Table 4.1: Showing the Reliability Statistics

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.754	.753	5

Table 4.2: Showing the respondents Gender

Gender	Frequency	Percent
Female	32	33.0
Male	66	67.0
Total	**98**	**100.0**

Table 4.2 above indicates that 67.0% of the respondents were male while 33.0% were female. The researcher concluded that the results showed that most of the female respondents were found in enterprises dealing with agricultural produce and in restaurants and entertainment services. The other sectors were majorly male dominated.

Age:

The researcher's findings regarding the respondents' age were as tabulated in table 4.2 as shown below.

Table 4.3: Showing the respondents Age

Age bracket	Frequency	Percent
18 – 23	11	11.2
24 – 29	18	18.4
30 – 35	19	19.4
36 – 41	17	17.3
41 – 46	**13**	13.3
47 – 51	8	8.2
Above 51	12	12.2
Total	**98**	**100.0**

Most of the respondents, as shown in table 4.3 above, were aged between 24 years and below 46 years who were averaging 70.0% of the entire population, this may be due to the nature of the type of work they were involved in which most of them needed some professional expertise like health services, medium workshops and repair contractors, ICT service provision, communication services among others. The respondents between 18-23 years were 11.2%, 24-29 years 18.4% being the second majority, 30 - 35 years 19.4% as the majority, 36-41 years 17.3%, 41-46 years 13.3% and above 51 years represented 12.1%. Respondents who were above 51 years happened to be more than those between 41 and 46 years old, the researcher concluded that in their sector, mostly health, experience counted more than any other factor in relation to service delivery.

Education level:

Table 4.4: Showing the respondents Education Level

Level of Education	Frequency	Percent
Primary	12	12.2
Secondary	20	20.4
College	45	45.9
University	17	17.3
Others	**4**	4.1
Total	**98**	**100**

The researcher decided to also establish the education levels of the respondents since quite a number of the fields they are engaged in needed some level of expertise.The results were as follows: Primary education 12.2%, Secondary education 20.4%, College/Tertiary education 45.9%, University education 17.3% and other qualifications were represented by 4.1%, this category of others was mostly filled by respondents who didn't even have primary education. The findings in Table 4.3 above showed that respondents with college qualifications were the majority followed by the respondents with Secondary education. The respondents with university education stood at 17.3%, a reasonable rate given that some fields in the study, like health services, needed professional qualification which can mostly be found at the university level. The others category was mostly filled by the respondents who never completed their primary education due to different challenges like fee unavailability.

Type of business:

The researcher sought to find out the type of business the respondent operated with the scope of this study.

Table 4.5: Showing the type of business

Type of Business	Frequency	Percent
Second Hand Merchandise	20	20.4
Cereals	11	11.2
Service	35	35.7

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Grocery	17	17.3
Retail Shop	10	10.2
Others	**5**	5.1
Total	**98**	**100**

The data on type of business engaged in by the respondents was collected and tabulated as shown in Table 4.4 above. Majority of the respondents, at 35.7%, were respondents in the service industry which included communication services, health services, ICT services, and restaurant and entertainment services among others. 20.4% of the respondents were dealing in second hand merchandise, 11.2% cereals, 17.3% Grocery, 10.2% retail shopkeepers while 5.1% were among others which included a mixture of the types of businesses researched in like a combination of retail shop and grocery.

Life of business:

Table 4.6: Showing the life of business

Period	Frequency	Percent
< 1 Year	38	38.8
1-3 Years	31	31.6
3-5 Years	17	17.3
>5 Years	12	12.2
Total	**98**	**100**

The results showing the life of the business were collected and tabulated as shown in Table 4.6 above. It can be clearly noted that the life the business has been in existence was reducing with the increase in the number of years accordingly.With the highest number of respondents lying within zero and 3 years old in their businesses. This led to the researcher noting that the working capital management periods to SMEs is a great challenge that becomes a burden with time to the business. 38.8% of the businesses were still within their first year of operation, 31.6% (1-3) years, 17.3% (3-5) years, 12.2% (>5) years, basically indicating that only 12 respondents out of 93 had been in business for over 5 years; it is worth noting that even some of these beyond 5 years of operation were just at the 5 years mark.

Analysis of the profitability of the small and medium enterprises

Data on the profitability of the small and medium enterprises was collected from the respondents and summarized as shown in Table 4.7 below.

Table 4.7: Showing Profitability of small and medium enterprises

Item	SD %	D %	N %	A %	SA %		TOTAL %	
Working capital periods are used as a performance measurement tool in your enterprise	6.1	10.2	13.3	29.6	40.8		100.0	
Employees are evaluated on working capital indicators	6.1	9.2	10.2	31.6	42.9		100.0	
The organization is working to optimize the level of profitability	5.1	7.1	3.1	59.2	25.5		100.0	
It is possible to combine both high focus on working capital and long term growth	5.1	12.2	9.2	31.6	41.8		100.0	
There has been an increase in the working capital in the recent past	8.2	16.3	11.2	35.7	28.6		100.0	

From Table 4.7 above, the profitability of the SMEs, 6.1% strongly disagreed that Working capital periods are used as a performance measurement tool in their enterprises, 10.2% of the respondents disagreed, and 13.3% were neutral. This neutral per cent was concluded, by the researcher, to be due to the respondents lack of knowledge on what exactly was working capital management periods and how they are used even after the researcher giving a brief explanation before allowing them time to respond to the questionnaires. Those respondents who agreed were 29.6% while 40.8% strongly agreed that Working capital periods are used as a performance measurement tool in their enterprises. It is worth noting that these categories of respondents who agreed and strongly agreed were from the enterprises that were run professionally like the manufacturing entities, health facilities etc.

In response to the statement "Employees are evaluated on working capital indicators", 6.1% strongly disagreed, 9.2% disagreed, and 10.2% were neutral. It is also worth noting that these categories of respondents who were either neutral, disagreed or even strongly disagreed, either lacked knowledge on what exactly was working capital indicators and how they are used in business management or a few, mostly those who disagreed or strongly disagreed, actually were from the enterprises that didn't use the working capital indicators in evaluating employees or didn't even have employees altogether, this enterprises from the study may include retail shops, groceries etc. 31.6% agreed that indeed "Employees are evaluated on working capital indicators" in their enterprises such as Ratio analysis which aids in identifying areas of weak or poor performance in management of the firm's cash, inventory, and accounts receivable/payable, while 42.9% of the respondents strongly agreed that their employees are evaluated on working capital indicators.

When asked whether their organizations are working to optimize the level of profitability, 5.1% of the respondents strongly disagreed while 7.1% disagreed with 3.1% of the respondents remaining neutral as to whether their organizations were working to optimize the levels of profitability. The researcher concluded that since the SMEs were set up a the main reason being profit making, these respondents either were not clear with the question or they were being economical with the truth or maybe they have little knowledge on how to implement measures that will enable them obtain optimal profitability levels. Of the remaining respondents, 59.2% agreed while 25.5% strongly agreed that indeed their organizations were working to optimize the levels of profitability.

On whether it is possible to combine both high focus on working capital and long term growth of their enterprises, 5.1% strongly disagreed, 12.2% disagreed, and 9.2% were neutral. It should be noted that these were enterprises that were still within their first year of operations and owners were still in their initial stages of owning a business and hence they were still within trial stages. 31.6% agreed while 41.8% strongly agreed that it is possible to combine both high focus on working capital and long term growth of their enterprises.

In response to whether there has been an increase in the working capital in the recent past, 8.2% strongly disagreed, 16.3% disagreed, and 11.2% were neutral. With the total per cent of respondents from these three categories equaling that of the respondents who agreed, 35.7%, the researcher concluded that the mere concept that working capital was the difference between the firms current assets and current liabilities had either escaped the respondents minds or they had misunderstood the question since some of the concepts had been explained to them by the researcher before they were to respond to the questionnaires. There is also a possibility that some of the respondents were feeling their enterprises were under the weight of current liabilities exceeding the current assets. From the remaining number of respondents, 35.7% agreed while 28.6% strongly agreed that there has been an increase in the working capital in the recent past.

Analysis of the specific objectives:

Effect of Average Collection Period on Profitability of SMEs:

The findings on the effect of Average Collection Period on the profitability of small and medium enterprises was tabulated as shown in Table 4.8 below;

Table 4.8: Effect of Average Collection Period on the profitability

Item	SD %	D %	N %	A %	SA %	TOTAL %
The enterprise has credit granting techniques that it uses to grant credit	7.1	11.2	15.3	25.5	40.8	100.0

The enterprise has a system for monitoring accounts receivable	6.1	10.2	13.3	29.6	40.8	100.0
The enterprise has a system for evaluation of credit terms.	5.1	7.1	3.1	58.2	25.5	100.0
Policy parameters are evaluated for their effectiveness on accounts receivable	10.2	10.2	9.2	29.6	40.8	100.0

From Table 4.8 above on effect of Average Collection Period on the profitability of small and medium enterprises, the respondents reactions were;7.1% strongly disagreed that their enterprises have credit granting techniques that they use to grant credit, 11.2% disagreed, and 15.3% were neutral.This implied that more than a third of the enterprises do not have techniques in place on how they grant credit facilities to their customers. This is a very dangerous trend, since working capital is just the difference between current assets and current liabilities and amounts owing from the debtors will be increasing the value off current liabilities hence a heavy load on the working capital of the firm. However, a larger per cent of respondents comprising 25.5% who agreed and 40.8% strongly agreed that their enterprises have credit granting techniques that they use to grant credit, implied that all was not lost after role.

On whether their enterprises have a system for monitoring accounts receivable, 6.1% strongly disagreed, 10.2% while 13.3% of the respondents remained neutral.Accounts receivable to a business is part of the main assets. Weak or lack of a system for monitoring this sensitive component of business operation is a sign of dangerous worse things to come. 29.6% agreed while 40.8% strongly agreed that their enterprises have a system for monitoring accounts receivable.

Asked whether their enterprises have a system for evaluation of credit terms, 5.1% of the respondents strongly disagreed, 7.1% disagreed, and 3.1% remained neutral. The total percent of respondents in these three categories for this question was relatively small compared to the other questions. 59.2% of the respondents agreed that their enterprises have a system for evaluation of credit terms and 25.5% strongly agreed. Although this combined percent is promisingly large among the respondents, there is need to find out whether their systems for evaluation of credit terms to customers are acceptable to business standards or not.

When asked whether Policy parameters are evaluated for their effectiveness on accounts receivable, 10.2% of the respondents strongly disagreed, 10.2% disagreed while 9.2% of the respondents remained neutral. As mentioned earlier, accounts receivables are a substantial fraction of corporate assets. Not evaluating policy parameters for the effectiveness on this component of working capital may be detrimental to the business. Mian and Smith (1992) observed that in the US manufacturing sector, substantial diversity in firms' use of specialized contracts and intermediaries in their accounts receivable management policies involved (1) establishment of a captive finance subsidiary, (2) issuance of accounts receivable secured debt, (3) factoring of receivables, (4) employment of a credit-reporting firm, (5) retaining of a credit-collection agency, or (6) purchasing of a credit-insurance policy.

Table 4.9; Showing the model summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.891[a]	.794	.785	.45794
a. Predictors: (Constant), Average Collection Period, Inventory Conversion Period, Average Payments Period and Cash Conversion Cycle.				

The overall contribution of the predictor variables (Average Collection Period, Inventory Conversion Period, Average Payment Period and Cash Conversion Cycle) to the predicted variable (profitability of small and medium enterprises) accounted for 79.4% (R^2 = 0.794) of the variance on the profitability of small and medium enterprisesas shown in table 4.9 above, with the difference of 20.6% to 100% representing variables other than those dealt with by this research (predictors), that caused variations in the dependent variable, profitability of small and medium enterprises.

Relationship between variables:

The regression equation was used, by the researcher, to test the relationship between independent variables and the dependent variable. The regression analysis was then used in making the research predictions about the collected data.

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Table 4.10: ANOVA

Model	Sum of Squares	DF	Mean Square	F	Sig.
Regression	49.654	4	12.414	25.652	.0000[b]
1 Residual	42.592	88	.484		
Total	92.246	92			

a. Dependent Variable: Profitability

b. Predictors: (Constant), Average Collection Period, Inventory Conversion Period, Average Payment Period and Cash Conversion Cycle.

The ANOVA table provided an F-test for the null hypothesis that indeed there existed a significant relationship between the explanatory variables and profitability of the small and medium enterprises in Trans Nzoia County. The null hypothesis was therefore rejected at F =25.652, p<0.001 and concluded that the explanatory variables (Average Collection Period, Inventory Conversion Period, Average Payment Period and Cash Conversion Cycle) affected the profitability of small and medium enterprises in Trans Nzoia County.

Regression results from the Analysis:

The regression results from the data reflected that; Average Collection Period explained 35.1%, Inventory Conversion Period 42.1%, Average Payments Period -19.0% and Cash Conversion Cycle 41.8% of the profitability of small and medium enterprises in Trans Nzoia County.

Table 4.11: Regression coefficients

Coefficients[a]								
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.579	.387		.465	.356		
	Average Collection Period	.421	.125	.327	1.733	.089	.420	2.383
	Inventory Conversion Cycle	.351	.149	.321	1.212	.231	.392	2.552
	Average Payment Period	-.190	.138	-.138	1.177	.002	-.158	2.790
	Cash Conversion Cycle	.418	.149	.263	1.121	.605	.458	2.185

a. **Dependent Variable: Profitability of small and medium enterprises**

The regression model generated from the regression results was as follows;

$Y = 0.579 + 0.421 X_1 + 0.351X_2 - 0.190X_3 + 0.418X_4$

This section reported the results of the relationship between profitability of small and medium enterprises in Trans Nzoia County and the predictor variables (Average Collection Period, Inventory Conversion Period, Average Payment Period and Cash Conversion Cycle). Table 4.14 above indicated that the coefficients of the estimated variables had the expected signs. The effect of inventory conversion cycle was less significant compared to the other predictors. Average Payments Period negatively affect profitability of small and medium enterprises as measured by this model. This implied that the

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SMEs were allowed shorter credit periods by their suppliers compared to the credit periods they provided to their customers. This adversely affected the businesses and hence their profitability.

Average Collection Period predicted 42.1% of profitability of small and medium enterprises, clearly demonstrating that Average Collection Period factors like credit granting techniques, monitoring accounts receivables policy parameters and credit terms evaluation system were highly correlated with profitability of SMEs. This meant that, *ceteris paribus,* a unit change in Average Collection Period results in a 0.421 change in profitability.A good relationship also existed between cash conversion cycle and profitability of SMEs. It predicted 41.8% of the profitability of the SMEs with a positive coefficient of 0.418; similarly the set of standardized beta coefficients suggest that adjusting for the effect of the other explanatory variables; average collection period has the strongest effect on the profitability of the SMEs contributing 42.1%.The study results can be interpreted to mean that profitability of small and medium enterprises in Trans Nzoia County depends on how the average collection period, inventory conversion period and cash conversion cycle related positively with average payment period having a negative effect if not well managed. Average collection period predicted 42.1% of profitability of small and medium enterprises, demonstrating that average collection period correlated well with profitability of small and medium enterprises. This meant that a unit change in average collection period resulted in a 0.421 change in profitability of small and medium enterprises.

Hypothesis testing:

Hypothesis testing is the use of statistical approach to prove whether a given hypothesis is true (Kothari, 2008). The researcher tested the regression results using hypotheses testing generated from the model. The researcher's intention was to test whether there existed a significant effect between the independent variables and the dependent variable (profitability of SMEs in Trans Nzoia County). The p value in Table 4.14 above, for the independent variables is statisticallysignificant at ($p< 0.01$) and hence supported the rejection of the hypotheses H_{01}, H_{02}, andH_{03} and H_{04} as explained below.

H_{01}**:** There is no significant relationship between average collection period and profitability of the SME's in Trans Nzoia County**.**

This hypothesis indicated that there was a significant relationship between average collection period, which is a product of accounts receivable management, and profitability of the SME's in Trans Nzoia County. From Table 4.14 above, average collection period coefficient ($\beta = 0.327$) as positively related. Statistically, this null hypothesis (H_{01}) was rejected at ($t=1.733$, $\rho>0.05$) by concluding that there was a significant relationship between average collection period and profitability of small and medium enterprises in Trans Nzoia County.

5. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction:

The chapter focused on the summary, conclusions and recommendations from the study. The chapter summarized the findings, gave conclusions and recommendations and suggested areas for further research.

Summary:

The SPSS version 23 regression analysis output indicated that profitability of SME's in Trans Nzoia County was influenced by the predictor variables. These regression results from the data reflected that; Average Collection Period explained 35.1%, Inventory Conversion Period 42.1%, Average Payments Period -19% and Cash Conversion Cycle explained 41.8% of the profitability of small and medium enterprises in Trans Nzoia County. Together with the response from the respondents in a number of questions, where the per cent for neutral verdicts returned by respondents was high, the predictor variables fully proved to be fit for predicting the profitability of the SMEs in Trans Nzoia County.

This study conclusion was that the specific variables determined 79.4% (R square = 0.794) dispersion for the profitability of the SMEs in Trans Nzoia County. The researcher therefore concluded that the independent variables had an effect on the dependent variable, profitability of the SMEs in Trans Nzoia County, up to 79.4%, and the balance of 20.6% to 100% represented the unexplained variation by the predictor variables on the dependent variable which include factors or variables not covered by this study.

Effect of average collection period on profitability:

The objective of determining the effect of accounts receivable management (average collection period) on profitability of the SME's resulted in the researcher concluding that most respondents appreciated that proper management of accounts receivable, in order to reduce the period of credit to customers enhanced profitability of their businesses. This was reflected by the per cent of those respondents who either agreed or strongly agreed to the statements, that their enterprises had credit granting techniques that they use to grant credit, during the data collection period of this study. A similar response was also received in the statement posed to them as to whether their enterprises had a system for monitoring accounts receivable. Since most respondents were of low or no educational qualifications, some of this terminologies were strange to them, although the researcher took time explaining to them. In relation to whether their enterprises had systems for evaluating credit terms, again majority of the respondents responded in affirmative. A very high per cent of respondents, about 29.4%, appeared not to have policy parameters in place to evaluate their effectiveness on accounts receivable.The regression results revealed that Average collection period, as a predictor variable, explained 42.1% of the profitability of the SMEs which was the highest compared to the other three independent variables. The correlation statistics data output for the study also supported conclusion with the F-statistic (P =.000) and F = 25.652, which signified a strong relationship on the effect of accounts receivable management on profitability of SMEs as per the outcomes of the regression variables.

Conclusion:

Effectof average payment period on profitability:

The final objective of the study was to find out the effect of average payment period on profitability of SME's in Trans Nzoia County. The collected data was analyzed which revealed that the respondents' views were fairly positive with regards to the cash discount policy in their enterprises. Majority of the enterprises visited for research concurred that their businesses relied on short term funding. Most of these respondents also opined that the short term funds were beneficial to their enterprises. However, they at the same time lamented that the short term funds are no longer easily available especially with the capping of the base lending rates to the micro finance firms and commercial banks which left them to the mercy of shy locks whose burden is very heavy for the SMEs to carry. The regression results revealed that average payments period, as a predictor variable, had a negative effect of 19.0% on the profitability of the SMEs, although this variable had a negative effect on the profitability of SMEs, the results however concluded that this variable sufficiently (though adversely) affected profitability of SMEs in Trans Nzoia County. With the correlation statistics data output; F-statistic (P =.000) and F = 25.652 signifying an effect from average payment period on profitability of SMEs, the researcher concluded that the predictor average payments period had a significant, though negative effect on profitability of SMEs.

Recommendations:

In relation to the average collection period, the researcher recommended for a more restrictive credit policy that gives customers shorter credit periods, although this may negatively affect sales and hence profitability, it will improve performance. The SMEs, the researcher recommended, should reduce the number of days the inventory are converted into cash. Keeping inventory for shorter periods will improve profitability since that means the amount sales goes up and hence profitability. As regards average payment period, the researcher recommended that the SMEs should strive to negotiate for longer average payment periods. Although longer credit periods from the suppliers implies foregoing the available opportunities for discounts for early payment, in the long run, the SMEs will be able to finance their operations from the accounts receivables if well managed (Deloof, 2003; Garcia-Teruel and Martinez-Solano, 2005).

Finally, Padachi (2006) concluded that SMEs ought to be concerned with working capital management; because cash conversion cycle is determined by adding average collection period to inventory conversion cycle then subtracting average payments period, the SMEs will create value for themselves by reducing their cash conversion cycle to a minimum, as manageable as possible.

Areas for further Study:

The researcher, after the rigorous work on this study, realized that quite a number of areas needed further research by other scholars in order to expound more on SME sector of the economy. The researcher suggested that there is need to

research on the impact of county government charges to the SMEs to enable them improve on their profitability and existence of the SME sector in the economy. This would help enhance the SME sector at the grassroots as their contribution to the rural as well as the lower class urban dwellers in society would be recognized. This study was a case study based on only one County, which is a rural county.This was in itself a limitation because it may not give a broader view of this sector, especially noting that some more developed counties may be a bit different. The researcher therefore suggested that further research could be to carry out a similar researcher in a number of counties and a comparison of the results made to enable proper planning for this sector.

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