

**WORKING CAPITAL MANAGEMENT AND PROFITABILITY OF SECURITY
COMPANIES IN MOMBASA COUNTY, KENYA**

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**A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF
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DECLARATION

I declare that this research project is my own work and is yet to be presented for a Master’ s degree or other award in any other University. No section of this research proposal should be duplicated without permission of the author or/and Kenyatta University.

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DEDICATION

My special dedication goes to my beloved spouse Fredrick Baya Kambi and my three children Santinah, Samantha and Stanley for the moral support that they have accorded me while undertaking this research proposal.

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OPERATIONAL DEFINATION OF TERMS

Accounts receivable period:	It is the approximate number of days it takes credit customers to pay the company.
Average Payment Period:	The average number of days it takes before the Company makes payments to its creditors.
Cash conversion cycle:	Refers to the duration of time it takes a Company to convert its current assets into cash.
Inventory holding Period:	It is the number of days on average that a business holds inventory.
Net Profit Margin:	It is a percentage obtained by dividing profits after tax of a Company by the total sales of the Company.
Profitability:	It is the degree to which a business is capable of spending less than what it sells while operating its business.
Return on Assets:	Is a financial ratio arrived at after dividing its profits after taxes by its total assets
Return on Equity:	It is a profitability ratio that measures the capability of a firm to make profits from investments of its shareholders.
Security Companies:	These are companies that deal in provision of services that safeguard the properties or/and the

well-being of people.

Working Capital Management: Refers to all the activities and choices undertaken by the management of an organization which affect working capital components.

ABBREVIATIONS AND ACRONYMS

ACP	Average collection period
APP	Average payment period
CA	Current assets
CCC	Cash conversion cycle
CL	Current liabilities
Co.	Company
EBIT	Earnings before interest and taxes
IHP	Inventory holding period
KK Ltd	Kenya Kazi Security Limited
KSIA	Kenya Security Industry Association
MSA	Mombasa
NACOSTI	National Commission for Science, Technology and Innovation
NP	Net Profit
PAT	Profit after taxes
PCP	Payable conversion period
SC	Security companies
PSIA	Protective Security Industry Association
RCP	Receivable conversion period
ROA	Return on assets

SPSS	Statistical package for Social Sciences
WC	Working Capital
WCM	Working Capital Management
WLS	Weighted Least Square

ABSTRACT

The aim of working capital management is to make sure a firm continues with its operations and has enough ability to satisfy both maturing short-term debt and upcoming operational expenses. In almost all cases, security firms are affected by poor financial performance due to their unique approach to the management of working capital which involves more of accounts receivables than any other working capital management practices. The purpose of this study was to investigate the effect of working capital management on profitability of security companies in Mombasa County. The specific objectives of the study were to establish the relationship between cash management and profitability, to determine the influence of inventory management on profitability, to ascertain the relationship between accounts receivable management and profitability and to find out the relationship between accounts payable management and profitability of Security Companies in Mombasa County. The study covered a period of five years from 2016 to 2020. The study was informed by agency theory, resource-based theory and efficient asset management theory. Descriptive research design and cross sectional survey designs were employed in the study. The target population of the study was the 31 finance managers from the 31 security companies selected. The researcher utilized purposive sampling design. Primary data was collected using structured questionnaires. Data was analyzed using both inferential and descriptive statistics with the help of SPSS version 22. Descriptive statistics consisted of mean and standard deviation. Inferential statistics consisted of multiple regression analysis that were done to establish the relationship between dependent and independent variables. Diagnostic tests that were done to establish the significance of the model were normality test, heteroscedasticity, autocorrelation and multicollinearity. Data presentation was done by use of figures and tables. The study found that the security companies have been invoicing promptly to manage their accounts receivables. The study also found that factors of accounts receivable management affect profitability. The study concluded that accounts receivable management entails managing the firm's inventory and receivables in order to achieve a balance between risk and returns and thereby contribute positively to the creation of a firm value. In relation to policies the study recommends that accounting curriculum should be developed consistently to the changing role of accountants. Accounting Education must equip their students with capabilities in coping with the rapid changing of the business environment so that they can always provide relevant management accounting information to managers.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

One of the main evaluation factors on a firm' s performance is profitability (Wangoma, 2018). The stakeholders are interested in knowing that the company of their interest is financially healthy, and this includes investors, creditors, employees, managers and even potential investors. This is the main reason why external auditors are hired to give an independent opinion on a firm' s financial performance. According to Horne and Wachowicz (2017), when financial statements are prepared and availed to top management in good time, it assists them in the process of examining the condition and performance of a company (Tsagem, Aripin & Ishak, 2019). Business entities exist for purposes of enhancing owners' investment value and the realization of this objective requires refinement in financial strategy and entrenchment of responsive adoption systems. Therefore, firms are required to strike an equilibrium between liquidity and profitability while carrying out their daily operations. Liquidity necessitates a firm to meet its short-term commitments and its continued flow can be certain if it is profitable (Gitman, 2018).

Management of working capital which aims at maintaining an optimal balance between each of the working capital components, that is, cash, receivables, inventory and payables is a fundamental part of the overall corporate strategy to create value and is an important source of competitive advantage in businesses (Deloof, 2018). In practice, it has become one of the most important issues in organizations with many financial executives struggling to identify the basic working capital drivers and the appropriate level of working capital to hold so as to minimize risk, effectively prepare for uncertainty and

improve the overall performance of their businesses (Lamberson, 2019). Working capital management is a very important component of corporate finance because it directly affects the liquidity and profitability of the company. It deals with current assets and current liabilities (Mathuva, 2018). Working capital management is important due to many reasons. For one thing, the current assets of a typical manufacturing firm accounts for over half of its total assets. For a distribution company, they account for even more. Excessive levels of current assets can easily result in a firm's realizing a substandard return on investment. However, firms with too few current assets may incur shortages and difficulties in maintaining smooth operations (Rao, 2019). Many surveys have indicated that managers spend considerable time on day -to-day problems that involve working capital decisions. One reason for this is that current assets are short- lived investments that are continually being converted into other asset types.

Globally, Deloof (2013) did a study on the relationship between working capital management and the firm' s profitability in Belgium. He conducted a valuable study using the data of 1009 firms in the Belgium market for the period of 1992-1996 after excluding many firms that their data are not complete or accurate. Thus, these 1009 were spread over several industries and sectors, firms in energy and water sector, and firms in (banking and finance, insurance, business services, renting, and other services) in order to make his sample more appropriate and verified for the research he conducted. Deloof measured profitability by gross operating income, which is defined as sales minus costs of goods sold, and is divided by total assets minus financial assets, and because for some firms in the sample the financial assets are mainly shares in other firms so it is considered as a major part of the total assets, that' s why return on assets was not considered as a measure of profitability. Deloof found in his empirical analysis using first the Pearson correlation that there is a negative relation between gross operating incomes on one hand,

and the measures of working capital management (number of days' accounts receivable, inventories and accounts payable and cash conversion cycle) on the other hand.

In completely different continent which is Asia. Raheman and Nasr (2017) investigated a research about the effect of working capital management on the Pakistani firms. He selected a sample of 94 Pakistani firms listed on Karachi Stock Exchange from different sectors of the Pakistani economy for a period of 6 years from 1999 to 2004. The reason that were restricting to this period was the availability of data. The sample excluded any firms from the financial sectors, business services, renting and other services due to specific nature of their activities, but included other firms with data available regarding the number of days' account payable, number of days' inventories, number of days' account receivable and operating income. After applying the descriptive analysis the study showed that the descriptive statistics for the non-financial 94 Pakistani companies for a period of 6 years from 1999 to 2004 and for total 564 companies year observation, the result were as the following; the value of profitability could deviate from its mean for both sides by 11.5%, because the mean value of net operating profitability was 13.3% of total assets, and its standard deviation was 11.5%, also the maximum value of the net operating profitability was 68.4% for a company in a year while the minimum was - 46.6%.

In Africa, particularly Nigeria, Barine (2012) conducted a research by taking a sample of 22 quoted corporates listed on the Nigerian Stock Exchange from eight different economic sectors (9 from banking, 1 from petroleum, 2 from healthcare, 2 from breweries, 1 industrial products, 5 from food and beverages, 1 in building materials and 1 from conglomerates) for the year 2010 considering an improvement in working capital positions caused by improved access to bank funding for getting a gross working capital for the quoted manufacturing companies, and an improved liquidity for banks, using the

annual report data. The study found that the standard deviation for the difference between means of the population is 3.99 and after applying t-test, it indicated that returns on improved gross working capital investment positions of the sampled Nigerian firms is lower than the cost of gross working capital investment of these corporates which shows inefficiency in the use of their gross working capital and that it has a negative impact on their profitability. The negative results that the equation of working capital returns and costs, show low levels of returns to shareholders.

In Kenya Makori and Jagongo (2013) analyzed the effect of working capital management on the manufacturing and construction firm' s profitability listed in Nairobi Securities Exchange (NSE) in Kenya. They collected data from NSE handbooks and the Kenya Capital Markets Authority, while the required financial data of the listed firm were taken from the firm' s annual reports. The sample data covered the period of 2003 to 2012. The study obtained a balanced panel dataset of 100 firm year observation, with observation of 10 firms between 2003 and 2012. The descriptive statistics of the variables for 100 firm' s year observation showed that the return on assets has a mean value of 15.7% with a 10.8% value of standard deviation. The collection period had a mean value of 56.535 days with 32.476 days as a standard deviation. The inventory conversion period on average had a value of 93.851 approximately three months, with 47.652 days as a stranded deviation. The statistical analysis of Makori and Jagongo (2013) study also showed that on average the companies used 96.503 days to pay its creditors with a 49.846 days as a value of standard deviation. Totally the cash conversion cycle had a mean value of 53.883 days. In addition to that, Makori and Jagongo (2013) found that on average the firm had a size of 15.668 measured by the natural logarithm of the firm total assets. The leverage ratio had a mean value of 43.9% lagged by total assets. On average, firms had a sales growth value of almost 16.1% annually.

There is increasing need for security in Mombasa being a tourist attraction center necessitated by the insecurity experienced over the last decade (Kinyua, 2017). With increasing population demanding more security, various levels of crime and limitations of public security agencies, SCs have stepped in to provide complimentary resources and capability for managing insecurity. In his study, (Vincent, 2018) stated that security industry was the largest employer at that time but the available security firms could still not be able to satisfy the number of security needs they received. This shortage by the state to provide security in the country is clear evidence that sustainability of SCs is key. Crime statistics are basically too high for the public policing institutions to deal with (Mbuvi, 2018). For the SCs to continue backing up security in the country, they need to be profitable and growing hence proper management of working capital is essential to enhance profitability of the SCs. In Security Companies where the asset side of the balance sheet consists of majorly current assets, proper working capital management is important for them to be profitable and even afford to meet their obligations or else they will be forced to dispose of their non-current assets to pay for their current liabilities. A company that has good profitability tends to have a big market share and thus cannot suffer market failure. Radas and Bozic (2019), emphasized on the significance of knowing the factors that determine profitability of Companies.

1.1.1 Working Capital Management among Security Companies

According to Abrahamsen and Williams (2015), private security industry is made up of actors involved in the provision of private security services to augment state security agencies. The main markets for private security industry are banks, commercial firms, embassies, international organizations, NGOs, and refugee camps. Security Companies have been operating within a very volatile environment, which is characterized by political anxieties, social reforms, advancement in technology, globalization as well as

competition from new entrants in the market (Hawkins & Turner, 2018). Thus it is imperative for the security companies to have adequate working capital to be in a position to carry out their operations. Effective working capital management permits a security Companies to undertake expansion projects as well as, pay back short-term financing that subsequently reduces financing costs. According to Freedonia Report (2011), the security service market globally was worth \$138.6 billion in 2007 and \$152.5 billion in 2009 by estimation; it would rise at a rate of 7.4% yearly, getting to \$218.4 billion in 2014. Much of the growth in the industry would be experienced in the leading emerging economies and is estimated that the turnover would grow at a double-digit rates (Tzifakis, N. 2012). Further, Freedonia Report (2020) forecasts that the industry would continue rising at a rate of 3.6% annually to reach \$263 billion in 2024.

The private security industry in Africa reflects a global trend of expansion and a shift towards privatization pushed by the post-Cold War triumph of neo-liberalism at the turn of the 1990s (Abrahamsen, & Williams, 2015). This has been demonstrated by states in the West whereby some non-core functions are surrendered to private security contractors. Security companies must optimize its working capital since reducing it to a bare minimum will compromise future growth and sales (Rehn, 2019). In South Africa, private security industry has grown over time due to the rising need of securing private entities as well as individuals (Pillay, 2020). The rising crime rate in South Africa has made private individuals and businesses to hire private security guards to enhance security in their residences and business premises (Sibanyoni, 2014). Cash is required in the daily operations of Security companies, inventory is needed to meet buyer requirements during a specific period and accounts receivable are the debts that clients owe the company. Working capital management are the actions and the choices made by

the management of a firm which affects the components of working capital. It requires attention in the current times where there is scarcity of funds but high cost of capital.

In the recent years, private security firms (PSFs) in Kenya have rapidly increased in number, a fact that has led to stiff competition amongst the firms. Owing to the spike in the number of PSFs and the increased competition, coupled with the growing threat from new players in the private security industry, the incumbent firms that have hitherto dominated the industry have been under serious competitive pressure (Mann & Graham, 2016). The management of working capital among the security companies is essential to the sound financial position of all firms (Osundina, 2017). Indicators of working capital for the current study included accounts receivable, accounts payable, inventory management and cash management.

Accounts receivable (AR) are the balance of money due to a firm for goods or services delivered or used but not yet paid for by customers. Accounts receivable are listed on the balance sheet as a current asset. Any amount of money owed by customers for purchases made on credit is AR (Wangoma, 2018). Accounts payable is the money a company owes its vendors, while accounts receivable is the money that is owed to the company, typically by customers. When one company transacts with another on credit, one will record an entry to accounts payable on their books while the other records an entry to accounts receivable. Inventory management refers to the process of ordering, storing, using, and selling a company's inventory (Tsagem et. al. 2019). This includes the management of raw materials, components, and finished products, as well as warehousing and processing of such items. Cash management is the monitoring and maintaining of cash flow to ensure that a business has enough funds to function. Investments, bill payments, and unexpected liabilities can affect a business inflows and outflows, and in turn their cash management

(Gitman, 2018). In order for companies to function autonomously, they need to establish a system that maximizes liquid assets while minimizing outgoing operational and logistical costs. In other words, cash management helps companies ensure that their cash flow covers their financial obligations.

Security companies which are inefficient in managing working capital will achieve both low profits and experience financial crisis. Both scenarios whether inadequate or excessive working capital are harmful for a business concern. More working capital can result to idle funds which could have otherwise been used for earning profit while less working capital will slow down operations which will eventually impair profits. Security companies get their financing of working capital from varied sources. For security companies that have positive net working capital, they can comfortably use long term capital to finance net working capital while those with negative working capital finance it with short term borrowing like asset financing, overdrafts, trade financing and short-term loans.

1.1.2 Profitability of Security Companies

Profitability refers to the financial gains made by a business. It assists in determining if a business is able to generate more earnings compared to the expenses incurred during a specific period (Hawkins & Turner, 2018). Profitability can successfully be measured using profitability ratios that determine the ability of a business to create wealth. The growth of security companies in Kenya can be attributed to increase in insecurity in the last decade. Working capital management is the main predictor of profitability. Since security companies are labor intensive and may experience low profits, they tend to turn to working capital in search of liquidity. This includes proper management of inventory, accounts payables, accounts receivables and cash (Oman, 2017). A liquid security

company will have ability to quickly invest in profitable ventures as well as pay off its creditors and reduce on financial costs. Security companies can also enhance their profitability by providing diverse security related products including manned services, dog patrol services, response services, ambulance services, fire brigade services, cash in transit services, camera installation (Ratemo, 2018). This is only possible if the security company is liquid and able to diversify. When customers are assured to get all their security answers at one place, chances are they will come back for repeat products/services and thus increase profitability. This is because clients can easily access their products of choice.

Even though citizens need private security for their properties and for themselves, security companies have been experiencing challenges with their profitability threatening their closure. Industry profitability refers to the aggregate profitability of all firms in the industry. Chiang, Novazzi and Gerab (2017) listed some parameters for measuring profitability of a business establishment like Return on Assets, and Net Profit Margin. The operational activities of a firm determine if it will be profitable and thus be able to sustain its operations. Profitability of security companies can be measured by ratios like return on assets, return on equity, net profit margin etc. Return on equity compares the profit earned to the total amount of the shareholder's equity invested. ROE shows the shareholders rate of return on the funds invested in the firm (Ratemo, 2018). Return on Assets is an income ratio to its total assets. By utilizing the assets, it measures the ability of a security company to generate revenue. If the ROA is higher it shows the efficient usage of resources by the firm. ROA is a very important indicator for a corporation, as it shows investors how the company is actually behaving in terms of converting assets into net capital. As a result, it can be inferred that the higher the metric (given in percentage), the better it is for the business's management.

1.1.3 Security Companies in Mombasa County

Security companies in Mombasa vary in size and the range of services they offer. Most companies provide guarding services and some use technology. The large companies offer integrated security solutions; small companies offer only manned guarding (Pooler & Hodgson, 2018). The clients include industries, banks, government agencies, educational institutions, business enterprises and international organizations. There are a number of security firms in Mombasa the major ones include K.K Security, G4S, Security group, Securex, Wells Fargo, Guard Force and Winster. These are Companies that work towards the welfare and property of millions of people other than the state agency. There are 37 listed security firms under the Kenya Security Industry Association (KSIA) and 71 under the Protective Security Industry Association (PSIA) - a total of 108 security firms in Mombasa (Pooler & Hodgson, 2018). They are registered under the private security Act to provide private security services to any person/property.

1.2 Statement of the problem

In this era of dramatic change, global alliances, and a variety of environmental pressures, the potential for poor performance is very real (Musau & Wangomba, 2018). Security companies have started to get serious about their profitability because of the challenges they face today. They must find new ways of dealing with the strategic issues facing them including increasing competition which has an overall effect on their profitability. The average profit margin for a security firm is anywhere between 30 and 40 percent off of the operators they supply (Ombati, 2018). From just one security officer, a company will generate roughly USD40,000 to 60,000 per year. It is imperative that working capital is one of the major steps that security companies can take to address the challenges they face in enhancing their profitability position (Pandey, 2017).

According to the Standard newspaper dated January 2, 2020, 150 guards employed by Guard Force Security thronged the security firm's main offices located in Nyali to demand their salaries. This is a clear sign of profitability and liquidity problems. This suggests that the working capital of this firm needs to be managed well for them to remain profitable. The Star magazine dated October 8, 2019; Securex Security company terminated the services of 222 security guards due to losses which can only be attributed to the prevailing difficult economic times prevalent that has recently culminated in the loss of Two Rivers assignment (Mbuvi, 2018). A profitable security firm cannot be dependent on only one client if they are to remain profitable and in existence. Proper working capital management practices will ensure all assignments are profit making and enhance a firm's liquidity.

A number of studies on the relationship between working capital management and financial performance have been done in Kenya though very little research has been conducted on the manufacturing sector in Kenya. For instance, Mathuva (2017) conducted a study on working capital management components on corporate profitability of Kenyan listed firms in the NSE. However, the study did not focus on working capital and profitability in security companies thus creating a knowledge gap. Nyabwanga *et al*, (2018) conducted a study on the effect of working capital management practices on financial performance of small-scale enterprises in Kisii South District, Kenya. The context of the study was different from that of the security companies and thus a knowledge gap as the findings cannot be generalized to the security companies.

Kiilu (2018) conducted a study on working capital management practices among large construction firms in Kenya. Wainaina (2018) studied the relationship between profitability and working capital of small and medium enterprises in Kenya. the two

studies have focused on construction firms and SMEs which have different organization structure form that of security companies. More studies done in Kenya also include; Mathai (2018) who conducted a study on the relationship between working capital management and profitability of retail supermarkets in Kenya. Mutungi (2019) conducted a study on the relationship between working capital management policies and financial performance of oil marketing firms in Kenya.

Given that few studies have been done on the relationship between working capital management and firm' s performance in the security sector in Kenya, this study sought to bridge the gap by undertaking a study on the same. The question that this study sought to answer is; what is the relationship between working capital management and profitability of security companies in Mombasa County, Kenya?

1.3 Objectives of the Study

The objectives of this study were classified into general objectives and specific objectives.

1.3.1 General objective

The main aim of this study was to establish the relationship between working capital management and profitability of security companies in Mombasa County, Kenya.

1.3.2 Specific objectives

1. To ascertain the effect of accounts receivable management on profitability of security companies in Mombasa County, Kenya.
2. To find out the relationship between accounts payable management and profitability of security companies in Mombasa County, Kenya.

3. To determine the effect of inventory management on profitability of security companies in Mombasa County, Kenya.
4. To establish the relationship between cash management and profitability of security companies in Mombasa County, Kenya.

1.4 Research Questions

1. What is the effect of accounts receivable management on profitability of security companies in Mombasa County, Kenya?
2. To what extent does accounts payable management influence profitability of security companies in Mombasa County, Kenya?
3. How does inventory management affect profitability of security companies in Mombasa County, Kenya?
4. In what ways does cash management affect profitability of security companies in Mombasa County, Kenya?

1.5 Significance of the study

The results of the study may guide management and shareholders of security firms within Mombasa county, Kenya on how to effectively improve profitability through proper decision making on management of WC. Researchers who may be interested to do further research on WCM of firms in the security industry may find results of this study valuable unlike existing literature which concentrates on enterprises from other countries and other industries. Academicians and scholars of finance and accounting as well as management will find this study as one of their areas supportive for referencing and as a source of assembled data.

1.6 Scope of the Study

This study focused on the WCM and profitability of security companies in Mombasa County. The choice for Mombasa County is because being a city with increased growth of security companies it was important to establish how they are faring in terms of profitability. The study targeted the 108 finance managers of security companies listed on either PSIA or KSIA. A sample of 31 security companies was picked for those based in Mombasa County, Kenya. Questionnaires were used as the research instrument. The study concentrated on the working capital aspects of cash management, management of account receivable, management of account payable, management of inventory to ascertain if they affect profitability. The study was carried for a duration of 5 years between 2016 and 2020.

1.7 Limitations of the study

The researcher experienced the challenge of lack of co-operation from some respondents however she was able to collect the required data for analysis and presentation of the output. The researcher did not indicate any names on the questionnaires for the respondents not to worry about their company management of working capital being made known to the public.

1.8 Organization of the Study

Chapter one comprised of the background of the research which consists of; statement of the problem, the objectives, significance, scope and the limitations of the study that are encountered when undertaking the study and the organization of the study. Chapter two entailed the literature review and the empirical review related to the study. It summarizes the literature review as well as the research gaps to be filled. The conceptual framework was also outlined in chapter two. The third chapter contained the methodology used in the

study; that is the research design that was adopted in the study, empirical model, the population to be targeted, sampling design, instruments that was used to collect data and collection procedure. Data analysis, data presentation, diagnostics tests and ethical considerations were also contained in chapter three. Chapter four presented the analysis and discussion of findings. Chapter five presented the summary of findings, conclusion and recommendations of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

The purpose of this chapter is to establish among other factors, the theoretical review which are aimed at giving a clearer understanding of the meaning and nature of the problem that the researcher has identified. It highlights the literature that has been done by other researchers and scholars in relation to the topic under study by critically analyzing the resourceful and reliable past information work. The literature reviewed here relates to both the general and specific objectives as highlighted in the research. It goes ahead to discuss theoretical review related to the study, critical review, summary gaps to be filled and the conceptual framework.

2.2. Theoretical Review

In this study, three theories have been adopted, which are agency theory, resource-based theory and efficient asset management theory.

2.2.1 Agency Theory

The theory was developed by Jensen and Meckling in 1976. It indicates the daily operations of a firm handled by managers who act on behalf of the owners with both having different expectations. The theory focuses on how to guarantee agents (executives and managers) will act in the best interests of the principals (shareholders and owners) of an organization. Some of the major problems associated with agency theory includes moral hazard, adverse selection and information asymmetry (Kwame, 2010). The relevance of agency theory to WCM could be viewed from the perspective of financial manager, who is an agent of the principals of a firm, and who takes all the actions and

decisions of WC components of a business. If the managers make bad or good decisions regarding working capital components, then this will determine if firms will be profitable or not.

This theory will be used as a guiding theory in this study. The theory is linked to account receivable management and accounts payable management in that the managers of the security companies will be taken as the agents who act on behalf of the owners and are tasked with deciding how the Companies generate and utilize resources. The study will evaluate the extent to which these agents act through account receivable and accounts payable to the interest of the profitability of the security companies. Agency problems could be minimized through the separation of the ratification and monitoring of decisions from the initiation and implementation of decisions. These decisions can be reflected in a conservative management of accounts receivables, reducing the risk involved in the business operation, such as to offer credit terms above the product turnover, to accept low payment terms not aligned to the market practices, etc. In that case, these investment decisions would be translated in excess of accounts receivables. Therefore, the theory will help us try to investigate if firms that present monitoring mechanisms of managers' actions have lower level of accounts receivables or accounts payables requirement.

2.2.2 Resource Based Theory

The origin of resource-based theory can be linked to several authors but Wenerfelt (1984) stated that, the basis of competitive advantage of a firm lies in the application of the package of valuable resources at the firm' s disposal. Resources are the fundamental unit of analysis as they are inputs into the production process and they include items like brand names, patents, capital equipment, the skill associated with individual employees,

finance and so on. When taking stock of a firm`s resources, a distinction needs to be made between resources and capabilities.

Autonomously, very few resources are productive. For any activity to be productive it requires the coordination and cooperation of various resources, capability is the ability or capacity of a group of resources to perform desired task. Grant (2014) concluded that the capability of a firm is measured by the resources it has. Resource-based theory is used in this study to include the intellectual ability of the managers bestowed with decision making in businesses to ensure proper management of WC of the businesses (Alvarez & Busenitz, 2015). This means that managers have individual-unique abilities that ensures excellent decisions relating to making payments, effective assembling of resources, the recognition of new investment opportunities and collection of receivables as and when they fall due to ensure effective management of WC and eventually the firm`s profitability.

This theory will be used in the study to guide the researcher in linking organizational resources like inventory to increase profitability. Holding of excessive stocks can lead to spoilages, increased storage costs which reduces profitability while holding less inventory may also result to shortages and thus loss of business. Both material and human resources are central to the study since leadership or management of any organization determines the deployment of resources and hence organizational profitability. Resource-based theory states that the possession of resources is valuable, difficult to imitate, rare, and cannot be substituted. The resource-based theory suggests that organizations should look inside the company to find the sources of competitive advantage through the use of their resources. The study will therefore employ resources and management of resources of security companies in Mombasa County.

2.2.3 Efficient Asset Management Theory

The proponent of the efficient asset management theory was Markowitz in 1959. According to the theory effective asset management is not only a matter of identifying desirable investments: it also requires optimally structuring the assets within the portfolio. This is because the investment behavior of a portfolio is typically different from the assets in it. For example, the risk of a portfolio of U.S. equities is often half the average risk of the stocks in it (Ross et. al., 2018). Prudent investors concern themselves with portfolio risk and return. An understanding of efficient portfolio structure is essential for optimally managing the investment benefits of portfolios.

Effective portfolio management reduces risk while enhancing return. For thoughtful investors, portfolio efficiency is no less important than estimating risk and return of assets. Most institutional investors and financial economists acknowledge the investment benefits of efficient portfolio diversification. Optimally managing portfolio risk is an essential component of modern asset management. Markowitz (2013) gave the classic definition of portfolio optimality: a portfolio is efficient if it has the highest expected (mean or estimated) return for a given level of risk (variance) or, equivalently, least risk for a given level of expected return of all portfolios from a given universe of securities. Markowitz mean-variance (MV) efficiency is a practical and convenient framework for defining portfolio optimality and for constructing optimal stock portfolios and asset allocations. A number of commercial services provide optimizer software for computing MV efficient portfolios.

The theory is significant to the current study in that it explains how cash management from sale of various asset was maintained to increase organization productivity. Cash management can be important for both individuals and companies. It is a key component

of a company's financial stability in business. Cash is also essential for people's financial stability while also usually considered as part of a total wealth portfolio. Individuals and businesses have different options to help them with their cash management needs, including banks into which they could hold their cash assets. Cash management solutions are also available for anyone who wants the best return on cash assets or the most efficient use of cash comprehensively. A primary objective of the theory is to identify asset combinations that are efficient. Here, efficiency means the highest expected rate of return on an investment for a specific level of risk. The primary starting point for portfolio theory requires an assumption that investors are risk averse. This simply means that they will not consider a portfolio with more risk unless it is accompanied by a higher expected rate of return.

2.3 Empirical Review

Numerous researchers have studied the relationship between WCM and firm's profitability in several market industries. The outcomes and conclusions are varied but they have provided evidence to support their findings.

2.3.1 Cash Management and Profitability

Gill, Mathur and Biger (2010) studied the relationship between WCM and profitability of 88 firms in America listed on New York Stock Exchange for a three-year period starting 2005 to 2007. Analysis of data was done using Pearson Bivariate Correlation Analysis and WLS Regression techniques. They found significant relationship between the CCC and profitability, measured profitability using gross operating profit. It was concluded that managers could create profits for their firms by handling correctly the CCC and by keeping optimal levels of accounts receivables. However, the study was done in USA

firms which have different organization structure as compared to Kenya hence a knowledge gap.

Dong and Su (2010) based their study on secondary data collected from listed Companies in Vietnam stock market for a three-year period starting 2006 to 2008. They investigated the relationship existing between profitability, the CCC and other WC components for firms listed in Vietnam stock market. Their finding shows that there exists a strong negative relationship between profitability and the CCC. Profitability was measured using gross operating profit. This indicates that as the CCC increases, profitability of a firm declines. As such, if the managers handle adequate CCC and keep all the different WC components to optimum levels, they will be able to create positive value for the shareholders. However, the study was done in Vietnam stock market which have different organization structure as compared to Kenya hence a knowledge gap.

Wangomba (2015) carried out an empirical study on effects of WCM on profitability of energy companies publicly listed in Kenya by employing an explorative research design and collected data from four target companies for a seven-year period starting 2006 to 2013. The independent variables were CCC, ARP and APP. The study found out that companies in the energy sector do not use ARP and inventory turnover ratio as determining factors related to net profit. Managers from these companies take longer to pay their creditors as well as reduce the CCC to improve profits. It recommends that managers should promote better relations with creditors for them to agree to favorable agreements concerning accounts payable. They should also reduce as much as possible the time it takes to convert non-cash assets like receivables into cash for example they can introduce services that require customers to pay in advance instead of on credit and they can also ensure efficiency in billing. These results from energy sector though a service

industry like security companies, may not be a true reflection of all service industries and hence further research must be done to SCs to ascertain the relationship of WC variables with profitability.

Keshar *et. al.*, (2017) did a study on WC performance of corporate firms in India they employed the methodology developed in 2003 by Anand and Gupta and used the data of non-financial companies to provide estimates. They used three-years publicly available records starting 2001 to 2004 for each company and industry. For the period of study, corporate India had achieved a growth rate of 1.6% in average cash operating margin and a compound Annual Growth rate of 26.3 % in the net sales. The length of the CCC and operating cycle had reduced by 12.7 % and 10.2 % respectively compounded on annual basis. The study found very little evidence on the positive relationship between WCM and profitability. However, the study was done in corporate firms in India which have different organization structure as compared to Kenya hence a knowledge gap.

Reheman (2017) investigated the impact of WCM on profitability of Pakistan firms (94) listed on Islamabad Stock Exchange for the five-year period starting 1999 to 2004. He studied the impact of the different WCM variables namely ACP, APP, CCC and inventory turnover in days on the net operating profitability of firms. His conclusion depicted a strong negative relationship between WC ratios and profitability of firms. He also concluded that managers could reduce the CCC up to an optimum level to be able to create positive value for the shareholders. The study was done in Pakistan firms whose findings may not be a true reflection in service industry such as security firms in Kenya.

Kweri (2014) carried out a study on the manufacturing firms of Kenya to establish the relationship between WCM and profitability of the firms. He found existence of a relationship between the two variables. In the analysis of the conclusions of the study,

emphasis was put on the liquidity position in the sense that firms should always maintain optimum liquidity positions in order to get optimum returns. They should deploy adequate resources to WC without necessarily venturing into too much risk. The study was on manufacturing firms of Kenya whose findings may not be applicable to service industry such as the security firms hence the knowledge gap.

Nyabwanga, Ojera, Lumumba, Odondo and Otieno (2012) studied the effect of WCM practices on the financial performance of Small-Scale Enterprises in Kisii South District. They used a sample of 113 Small Scale Enterprises encompassing 72 trading and 41 manufacturing enterprises. Pearson's correlation coefficients and multiple regression analysis techniques were used to analyze data. The study found out that WCM practices were low amongst Small Scale Enterprises since most of them had not embraced formal WCM practices and their financial performance was on a low average. The study also revealed that Small Scale Enterprises financial performance was certainly related to efficiency of inventory management, efficiency of receivables management and efficiency of cash management. The study sample size may be small as compared to the current study and thus the findings may not be used to benchmark the current study hence the knowledge gap.

2.3.2 Inventory Management and Profitability

A study on 31 supermarkets in Nairobi County conducted by Ratemo (2018) revealed that inventory turnover and profitability of supermarkets are positively and significantly related. The study also established that inventory turnover has a sufficiently great effect on profitability of supermarkets in Nairobi City County. The study found out that accounts payable turnover has a significant effect on profitability of supermarkets in Nairobi City County. The study results revealed that there are high levels of unpaid

suppliers which affects the restocking process which in return affects the sales which ultimately have a significant influence on the profitability of the supermarkets. The study found out that inventory has a great significance on profitability. This study only concentrated on supermarkets in Nairobi County whose findings may not be replicated to supermarkets in other Counties. Also, further studies need to be conducted on other factors that affect profitability of supermarkets.

Onyango (2015) studied the impact on inventory management on profitability and liquidity for large supermarkets in Nairobi city. The research findings were that inventory management directly impacts profitability and liquidity in large supermarkets in Nairobi. The level of profitability depends on how inventories are managed. The study also revealed that inventory mix between slow- and fast-moving stocks affect cash flow and profitability. According to the findings, low inventory turnover ratio would imply slow movement of a product. Further studies need to be conducted and include small supermarkets for results to be replicated to all supermarkets, also more studies need to be done on similar title to other areas within the country Kenya. The study focused on supermarkets which have different operations to that of the security firms hence their performance measure cannot be applicable to the security firms.

Gul,Rehman *et. al.*, (2013) studied the influence of working capital management on financial performance of small medium enterprises based in Pakistan. The study covered a period of seven years starting 2006 to 2012. The data used in this study was obtained from tax offices, Karachi Stock Exchange, Bloom burgee business week and from the company itself. Return on Assets which was used as a proxy for profitability was the dependent variable of the study. Independent variables were Number of Days Account Payable, Cash Conversion Cycle, Number of Days Account Receivable and Number of

Days Inventory. Other variables that were used apart from these included Debit Ratio, Growth and Firm Size. The relationship between WCM and performance of small medium enterprises in Pakistan was determined using regression analysis. The findings suggested that growth, accounts payable period, and size of the firm are positively related with Profitability while cash conversion cycle, inventory holding period, accounts collection period and debt ratio have inverse relationship with profitability. The context of the study was on financial performance of small medium enterprises based in Pakistan which have different organization structure from the security firms in Kenya hence the knowledge gap.

Gakure *et. al.*, (2012) studied the relationship between WCM and performance of 15 manufacturing firms listed at the Nairobi Stock exchange for the period 2006 to 2010. Secondary data was used from a sample of 18 companies listed on the Nairobi Stock Exchange. Regression analysis was used to ascertain the relationship between the dependent and independent variables. The study employed Pearson' s correlation and regression for the analysis. The findings indicated that there is a strong inverse relationship between a firms performance and its liquidity. The study indicated that there is a negative coefficient relationship between average payment period, inventory holding period, accounts collection period, and profitability while the cash conversion cycle was found to be positively correlated with profitability. The study concentrated on manufacturing firms listed at the Nairobi Stock exchange for a particular duration of time and thus the findings cannot be applied in the security company hence the knowledge gap.

Singh (2018) studied the relationship between inventory management and WCM. He found out that firms with well-thought out inventory management practices can reduce

the inventory to an optimal level which doesn't have negative effect on production and sales. The study also found out that the size of inventory directly affects WCM. Furthermore, firms with poor inventory management practices can cause serious problems which destroy the long-term profitability and chances of survival for firms. The context of the study was not indicated for comparison purposes with the findings of the current study. This limits their application to the current study.

Dimitrios (2018) highlighted that too much inventory could lead to financial distress, could demand more physical space and could increase the chances of deterioration, damage and losses of inventories. Moreover, holding large quantities of inventory often indicates inefficient management practices and procedures. On the other hand, holding low quantities of inventories might lead to the interruption of the production process, increase the possibility of losing sales and result to low profitability of the firms. The study has not indicated the methodology that was used to arrive to the study findings. This limits the applications of the findings and hence a study gap.

2.3.3 Account Receivable Management and Profitability

The study by Mathuva (2010) on the influence of WCM on corporate profitability using a sample of 30 firms listed on Nairobi Stock Exchange for a 15-years period starting 1993 to 2008 found out that there exists a highly significant inverse relationship between the time it takes to collect cash from customers and profitability. He explained that firms that take the shortest time to collect cash from customers tend to be more profitable. The study further revealed that inventory conversion period has significant positive relationship with profitability. He explained that firms, which maintain optimum levels of inventory reduce costs of un-expected interruptions in the manufacturing process and loss of business due to shortage of products. Also, the study established that a highly significant positive

relationship exists between the APP and profitability. He held that a firm could also be profitable by taking longer to pay its creditors. Both the fixed effects regression models and the ported OLS were used. This study concentrated on only 30 companies listed on Nairobi stock exchange, further research needs to be done on other companies that are not listed on Nairobi stock exchange.

The study by Akoto *et. al.*, (2013) on the relationship between WCM practices and profitability of listed manufacturing firms in Ghana, the data was collected from annual reports of the 13 listed manufacturing firms in Ghana covering the period from 2005-2009. By use of panel data methodology and regression models, the study found a significant inverse relationship between Profitability and ARP. However, the firms CCC, size, CA Ratio and CA turnover positively influence profitability. The study suggests that managers can create incentives to reduce their accounts receivable days to 30 and thereby creating value for their shareholders. The study further recommended that local laws that controls the activities of importers and protect indigenous firms to be enacted to increase demand for locally manufactured goods in Ghana. This study from outside Kenya may not be suitable in Kenya as laws governing businesses in different countries are not similar. Also, this study is on manufacturing industry and results may not be replicated to service industry or security industry.

The study done by Makori & Jagongo (2013) sampled 20 manufacturing and construction firms listed on Nairobi Stock Exchange. They found out existence of negative correlation between profitability and the firms average collection period and cash conversion cycle. However, the study findings suggested that there is a positive correlation between Inventory Holding Period, Accounts Payment Period and profitability. These findings suggest that managers who are able to reduce the number of days accounts receivable and

increase the APP and inventories to a reasonable level can create value for their shareholders. This study only concentrated on manufacturing and construction companies listed on Nairobi stock exchange, there are many such companies that are not listed and hence the findings may not be generalized to the other companies in similar industry.

According to Oladipupu & Okafor (2013) who examined the firms working capital management practice on its profitability and dividend payout ratio, they concluded that shorter net trade cycle and debt ratio results to higher corporate profitability using both OLS and the Pearson product moment correlation techniques. The study concentrated on the extent of the effects of WCM on the Profitability and Dividend Payout Ratio. Secondary data on the financial performance was obtained from the Nigeria Stock Exchange for 12 manufacturing companies over a period of 5 years starting 2002 to 2006.

The main part of receivables management entails proper analysis of customers before bringing them on board on credit terms because every credit sale involves the risk of non-payment or delayed payment (Yator, 2019). The ultimate goal of proper receivables management is to maximize the value of a business by striking a balance between liquidity, profitability and risk. However, the study has not been comprehensive in that with the growing complexity, payment ambiguity and other factors that drive up costs in the service delivery, the management of accounts receivables continues to demand more attention. The policy decisions surrounding accounts receivables always have long term impacts on any organizations and its financial structure since reversal of such a policy results to adverse market reactions.

2.3.4 Accounts Payable Management and Profitability

Gakure *et. al.*, (2012) studied the relationship between WCM and performance of 15 manufacturing firms listed at the Nairobi Stock exchange for the period 2006 to 2010.

Secondary data was used from a sample of 18 companies listed on the Nairobi Stock Exchange. Regression analysis was used to ascertain the relationship between the dependent and independent variables. The study employed Pearson correlation and regression for the analysis. The findings indicated that there is a strong inverse relationship between a firm's performance and its liquidity. The study indicated that there is a negative coefficient relationship between average payment period, inventory holding period, accounts collection period, and profitability while the cash conversion cycle was found to be positively correlated with profitability. The parameters used to assess the profitability of the manufacturing firms listed at the Nairobi Stock exchange may not be applicable to the security companies hence creating a knowledge gap.

When Mutungi (2010) carried out a study to find out the correlation between WCM and financial performance of oil marketing firms based in Kenya registered with the petroleum institute of East Africa within Nairobi and its environs she sampled 59 registered oil marketers in Kenya. She noted that management of trade payables decisions have a huge effect on the company's risk, return and share price. The sample population and the data analysis method cannot be applicable to the current study and thus creating a knowledge gap.

Study conducted by Uyar (2019) documents that there is an inverse relationship between accounts payable and profitability this is similar with the view that less profitable firms take longer before they pay their bills. This is also in line with other scholars who argue that there is a significant inverse relationship between profitability and the average payment period, cash conversion cycle, inventory turnover in days and average collection period. These findings suggest that reducing the number of days accounts receivable and inventories to a reasonable minimum by managers can create value for a firm eventually

increase its profitability. The study has not indicated the methodology that was used to analyze data and thus the findings may not be applicable to the current study for benchmarking purposes.

Kiilu (2010) conducted a study on the WCM practices among large building construction firms based in Kenya. The survey revealed that many surveyed firms had a written statement of the amount of cash to hold. The firms lacking a written statement said that the amount of cash to hold at any given time was determined by the cash requirements at that time. The use of cash budgets was one of the main WCM practices that was observed. The study was not comprehensive on the relationship between working capital and performance. No clear findings on the study variables.

2.3.5 Profitability

In his study Katwi (2012) examined working capital management and the profitability of small and medium enterprises in Nakuru Municipality using a sample of 61 enterprises and found a positive relationship between current ratio and profitability as well as debt ratio and profitability. He however found a negative relationship between cash conversion cycle and profitability. His measurement for profitability was return on assets (ROA). The context of the study was on small and medium enterprises which is different from security companies thus creating a knowledge gap.

In her study Moraa (2014) did an analysis of the profitability of the top six commercial banks in Kenya and outlined the determinants of bank profitability being return on assets, return on equity or the net interest margin. This study used ROA as a measure of profitability. It revealed that bank capital strength, operations expenses, bank size, ownership and diversification influence profitability of the top six commercial banks

significantly. The study was not comprehensive on the relationship between the study variables hence cannot be used for benchmark thus creating a knowledge gap.

Lung' aho (2018) researched on WC and profitability of firms listed under the construction and Allied sector at the Nairobi securities Exchange, Kenya and her determinants of profitability were return on assets and net income. She found out that cash conversion cycle and average payment period were positively correlated with profitability but found an inverse relationship between profitability and average collection period and inventory holding period. The context of the study was on s construction and Allied sector at the Nairobi securities Exchange which is different from security companies thus creating a knowledge gap.

In his study on financial innovation usage and profitability John (2019), used ROA to measure profitability. The study concluded that loyalty programs offered was appropriate point systems which can save time and improve accuracy in sales thus increasing profitability. Supermarkets which have implemented rewards schemes cash transaction have advantage if they are effectively designed with loyalty programs. The study focused on financial innovation usage and profitability, however the current study is on working capital management and profitability of security companies hence the knowledge gap.

2.4 Summary of Literature Review and Research Gaps

This section presents the summary of the literature review and the summary of research gaps from the reviewed studies as per each variable. The literature shows that many studies have been conducted on the relationship between WCM and profitability in different markets. The results are quite varied, although most studies conclude an inverse relationship between WCM and firm profitability. Different methodologies such as panel data regression and linear regression have been used in the studies reviewed. Thus, the

literature affirms negative relationships in some cases and positive relationships in others between WCM and profitability. However, as to whether which findings can be replicated to the security industry remains an issue this study aims to uncover. The literature provided in this section proves that a strong relationship exists between WCM and net operating profitability. However, few studies have been carried out on firms within Security industry and that is why the researcher chose to carry out this study. Also, minimal research has been conducted in the context of service industry; majority of studies are centered on manufacturing and construction firms. This study therefore is an attempt to fill this gap and estimate the relationship between WCM variables and profitability of security firms in Mombasa measured by ROA. The gaps are table 2.1.

Table 2.1. Summary of Research Gaps Matrix

Author	Study	Methodology	Findings of the research	Research gaps
Gill, Mathur and Biger (2010)	Relationship between WCM and profitability	Analysis of data was done using Pearson Bivariate Correlation Analysis and WLS Regression techniques	They found significant relationship between the CCC and profitability, measured using gross operating profit.	Data was analyzed using Pearson bivariate correlation analysis unlike current study which used multiple regression analysis
Dong and Su (2010)	Relationship existing between profitability, the CCC and other WC components for firms listed in Vietnam stock	The study was based on secondary data collected from listed Companies in Vietnam stock market for a three-year period starting 2006 to 2008. Measured profitability using gross profit margin	Their finding shows that there exists a strong negative relationship between profitability and the CCC	The study was done in Vietnam stock market which have different organization structure as compared to Kenya hence a knowledge gap. Dependent variable was gross profit, this study used

	market			return on assets.
Wangomba (2015)	Effects of WCM on profitability of energy companies publicly listed in Kenya	The study employed an explorative research design and collected data from four target companies for a seven-year period starting 2006 to 2013. The independent variables were CCC, ARP and APP	The study found out that companies in the energy sector do not use ARP and inventory turnover ratio as determining factors related to net profit	These results from energy sector though a service industry like security companies, may not be a true reflection of all service industries and hence further research must be done to SCs to ascertain the relationship of WC variables with profitability. Study used explorative research design.

<p>Keshar <i>et. al.</i>, (2017)</p>	<p>WC performance of corporate firms in India</p>	<p>The study employed the methodology developed in 2003 by Anand and Gupta and used the data of non-financial companies to provide estimates. They used three- years publicly available records starting 2001 to 2004 for each company and industry</p>	<p>The study found very little evidence on the positive relationship between WCM and profitability.</p>	<p>The study was done in corporate firms in India which have different organization structure as compared to Kenya hence a knowledge gap.</p>
<p>Reheman (2017)</p>	<p>The impact of WCM on profitability of Pakistan firms (94) listed on Islamabad</p>	<p>The study utilized the five-year period starting 1999 to 2004 and used pearsons correlation and regression analysis. Descriptive research design</p>	<p>The study found that managers could reduce the CCC up to an optimum level to be able to create positive value for the shareholders</p>	<p>The study was done in Pakistan firms whose findings may not be a true reflection in service industry such as security firms in</p>

	Stock Exchange	was used.		Kenya.
Kweri (2014)	Establish the relationship between WCM and profitability of manufacturing firms in Kenya	The study utilized descriptive research design	The study found existence of a relationship between the two variables. In the analysis of the conclusions of the study, emphasis was put on the liquidity position in the sense that firms should always maintain optimum liquidity positions in order to get optimum returns	The study was on manufacturing firms of Kenya whose findings may not be applicable to service industry such as the security firms hence the knowledge gap.
Gul, Rehman <i>et. al.</i> , (2013)	Influence of working capital management on	The study covered a period of seven years starting 2006 to 2012. Dependent variable was	The findings suggested that growth, accounts payable period, and size of the firm are	The context of the study was on financial performance of small medium enterprises

	financial performance of small medium enterprises based in Pakistan	ROA, panel data technique was used to study influence of WCM on profitability of SMEs. Descriptive research design was used.	positively related with Profitability while cash conversion cycle, inventory holding period, accounts collection period and debt ratio have inverse relationship with profitability	based in Pakistan which have different organization structure from the security firms in Kenya hence the knowledge gap.
Gakure <i>et. al.</i> , (2012)	Relationship between WCM and performance of 15 manufacturing firms listed at the Nairobi Stock exchange for the period 2006 to	Secondary data was used from a sample of 18 companies listed on the Nairobi Stock Exchange. Regression analysis was used to ascertain the relationship between the dependent and independent variables. The study employed	The findings indicated that there is a strong inverse relationship between a firm' s performance and its liquidity. The study indicated that there is a negative coefficient relationship between average payment period, inventory holding period,	The study concentrated on manufacturing firms listed at the Nairobi Stock exchange for a particular duration of time and thus the findings cannot be applied in the security companies hence

	2010.	Pearson' s correlation and regression for the analysis. Used ROA to measure profitability.	accounts collection period, and profitability while the cash conversion cycle was found to be positively correlated with profitability.	the knowledge gap.
Mathuva (2010)	Influence of WCM on corporate profitability	The study utilized a sample of 30 firms listed on Nairobi Stock Exchange for a 15-years period starting 1993 to 2008. Both pooled OLS and fixed effects regression models were used. Dependent variable was net operating profit.	The study revealed that inventory conversion period has significant positive relationship with profitability. He explained that firms, which maintain optimum levels of inventory reduce costs of un-expected interruptions in the manufacturing process and loss of business due to shortage of	This study concentrated on only 30 companies listed on Nairobi stock exchange, further research needs to be done on other companies that are not listed on Nairobi stock exchange.

			products.	
Akoto et. al., (2013)	Relationship between WCM practices and profitability of listed manufacturing firms in Ghana	The data was collected from annual reports of the 13 listed manufacturing firms in Ghana covering the period from 2005-2009	The study found a significant inverse relationship between Profitability and ARP. However, the firms CCC, size, CA Ratio and CA turnover positively influence profitability	This study from outside Kenya may not be suitable in Kenya as laws governing businesses in different countries are not similar. Also, this study is on manufacturing industry and results may not be replicated to service industry or security industry.
Moraa (2014)	Analysis of the profitability of the top six commercial	This study used ROA as a measure of profitability	It revealed that bank capital strength, operations expenses, bank size, ownership and	The study was not comprehensive on the relationship between the

	banks in Kenya		diversification influence profitability of the top six commercial banks significantly	study variables hence cannot be used for benchmark thus creating a knowledge gap
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Source (Researcher, 2019)

2.5 Conceptual Framework

According to Ranjit (2011) Conceptual Framework is the analytical tool with contexts and several variations which is used to make theoretical distinctions and arrange ideas in order to capture something real and in an easy way to apply and recall; it is the basis of the research problem. The conceptual framework below shows how the profitability of Security Companies in Mombasa is dependent on several independent variables; receivable management (ACP), payable management (APP), Inventory management (IHP) and cash management (CCC). The conceptual framework shows the relationship between the independent variables and the dependent variables. In the study the independent variables are cash management, management of account receivable, management of account payables, management of inventory while the dependent variable is Profitability (ROA). A change in the cash management, management of account receivables, management of account payable, management of inventory will result to a change in the profitability of the security companies. A change in the dependent variable cannot have a change in the independent variables. Therefore, the change in the conceptual framework is one direction.

Independent variable

Dependent variable

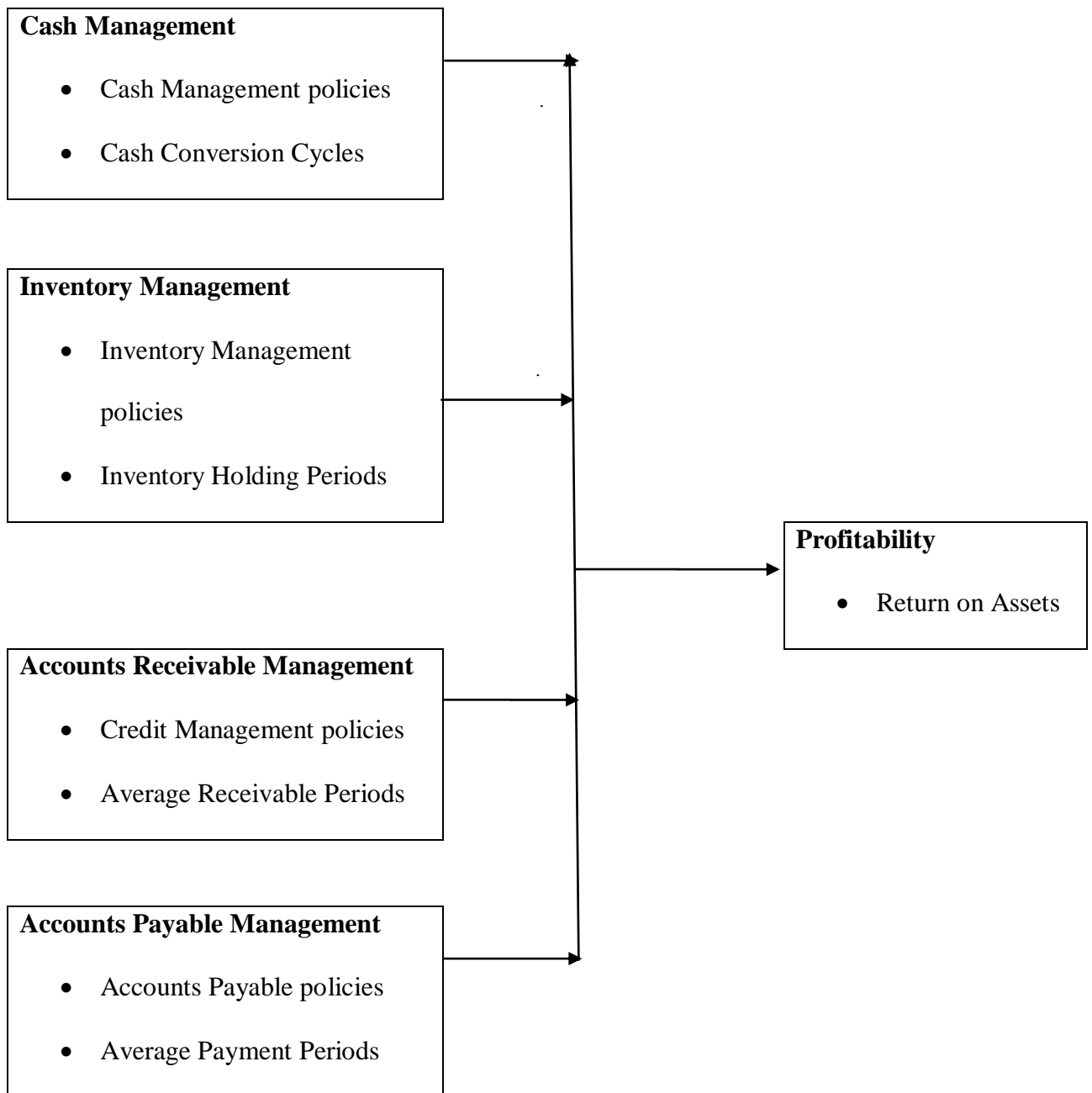


Figure 2.1. Conceptual Framework

Source: Author (2021)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology that was used in the study. It presents the research design, target population, sampling design, data collection instrument, reliability and validity. It also presents the data collection procedure, data analysis and presentation and ethical consideration.

3.2 Research design

The study adopted descriptive research design because it was based on the facts given from the field. The SCs in Mombasa are representative of other Kenya SCs and was described the way it is. According to Saunders *et. al.*, (2009), a descriptive research design is inexpensive and enables one to obtain a lot of information. It also gives standardized details that is easy to compare and analyze. This study also adopted a cross-sectional survey design. Cross-sectional survey research is used to collect information about characteristics, experiences, or opinions of a group for purposes of description, explanation, and exploration (Babbie, 2013). It is also capable of collecting data representing multiple variables of interest and can be administered in a number of ways including email, fax, mail, and online. The costs of administering surveys vary, but are relatively inexpensive when compared to more sophisticated experimental designs. A cross-sectional survey is administered at a single time point and it is also useful in identifying associations between multiple variables of interest.

3.3 Target Population

This study targeted 108 security companies listed on the Kenya Security industry Association and Protective Security Industry Association in Kenya as per appendices IV and V respectively. The unit of analysis were the security companies while the unit of observation was one finance manager in each security company.

3.4 Sampling design

The researcher used purposive sampling design. The criteria used was to select the security companies which had been in operation for more than 10 years. Fama and Kenneth (2015) indicated that most businesses take at least 2 to 3 years to be profitable and become truly successful once they have hit the 7 to 10-year mark. Once businesses start becoming profitable, the management have interacted long enough with working capital variables. The sample size was 31 security companies. The unit of analysis were the 31 security companies while the unit of observation were 31 finance managers from the 31 security companies since they are acquainted with the working capital variables.

3.5 Data collection Instruments

The researcher relied on primary data which was collected using structured questionnaires that contained both open ended and closed ended questions. The study also used likert scale to come up with the questionnaire items. This instrument is advantageous since it is convenient, cheap and requires less manpower. The researcher was also able to gather in-depth information regarding the phenomenon under investigation.

3.5.1 Reliability

Reliable data gathering instrument was achieved by utilizing the Cronbach Alpha reliability coefficient by using SPSS application for analysis. According to Saunders (2009) for the instruments to be reliable, the alpha coefficient must be more than 0.7.

3.5.2 Validity

The questionnaire was tested for validity through pilot testing. A small representative sample was used for pilot testing. Four participants were chosen from the target group, but they were not expected to participate in final data collection. Pilot testing is necessary for unforeseen corrections is undertaken before the questionnaire is released to the respondents (Osman, 2017). It also ensures amendments in the wording, formatting, typo errors, and nature of questions will be corrected in advance.

3.6 Data collection Procedure

The researcher sought an authorization letter from Kenyatta university to allow her to conduct the study. The researcher also sought permission from the Nation Commission for Science, Technology and Innovation (NACOSTI) before conducting the study. For the primary data collection, the researcher adopted drop and pick method for the questionnaires. A research assistant was engaged to assist in following up and picking of the questionnaires.

3.7 Data Analysis and Presentation

3.7.1 Empirical Model

The study utilized multiple regressions analysis to find out the relationship between working capital management and profitability of security companies in Mombasa County, Kenya. The model is indicated below:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where

Y= Profitability of security companies in Mombasa County, Kenya

α = constant term

$\beta_1, \beta_2, \beta_3, \beta_4$ = Parameters

X_1 = accounts receivable management

X_2 = accounts payable management

X_3 = inventory management

X_4 = cash management

ϵ = Error term

3.7.2 Operationalization and Measurement of variables

This study is on WCM and profitability of security firms in Mombasa County in Kenya. The dependent variable was profitability denoted by return on assets and net profit margin. The independent variables were accounts receivables management, inventory management, accounts payables management and cash management. Likert scale was used to collect data on the variables of the study to rate the degree to which they agree or disagree with a statement on various variables including profitability, average receivable period, average payment period, cash conversion, cycle and inventory holding period.

Table 3.2. Operationalization and Measurement of variables

Variable	Type	Operationalization	Measurement
Profitability	Dependent	ROA	$\frac{\text{Earnings before Interest \& tax}}{\text{Total Assets}}$
Average Receivable Period	Independent	ARP	$\frac{\text{Accounts Receivable} * 365}{\text{Annual credit sales}}$
Average Payment Period	Independent	APP	$\frac{\text{Accounts payable} * 365}{\text{Cost of sales}}$
Cash Conversion Cycle	Independent	CCC	$\text{IHP} + \text{ACP} - \text{APP}$
Inventory Holding Period	Independent	IHP	$\frac{\text{Inventory} * 365}{\text{Cost of Sales}}$

Source: Author (2019)

3.8 Diagnostic Tests

Diagnostics test were done to establish the significance of the model. The tests done included normality, heteroscedasticity, autocorrelation and multicollinearity.

3.8.1 Normality Test

The test will be run to see whether independent variables and their corresponding regression coefficients will show no skewedness in determining the normalcy of the research data set. The normal distribution shouldn't be extremely steep or overly flat (platykurtic) (leptokurtic). It should also not be positively or negatively skewed, and if the data with the estimators are not non-normal, interference with efficiency and statistical tests may be seen, invalidating the data (Green, 2008). High skewness and kurtosis in the values indicate a high likelihood of anomaly in the data distribution. Similar to this, Kerlinger (2011) explains that when the values of skewness and kurtosis are greater than 3, the data may be considered anomalous.

3.8.2 Homoscedasticity Test

Homoscedasticity, also known as homogeneity of variances, is the assumption that differences across the groups under comparison are comparable or equal. This is a crucial premise since parametric statistical tests are sensitive to any differences. When sample variances are inconsistent, test results are skewed and biased. The study will use the Breusch and Pagan Lagrangian multiplier test for random effects to examine the homogeneity of variances.

3.8.3 Autocorrelation Test

For a model to produce the intended results, there should be no serial correlation or autocorrelation. The Wooldridge method will be used to assess autocorrelation in panel data. If the probability value is greater than 5%, it will be stated that there is no data correlation between the residual of the calculated equations and the dependent variable. It will not be ideal for the model to be found to exhibit serial correlation or autocorrelation. The coefficient estimates' variance is inflated by autocorrelation. Moreover, it has a negative effect on the standard errors. To solve the problem, a fixed effects regression with AR (1) disturbances will be performed. The influence of the first-order serial correlation is removed, and the coefficient variance is stabilized by taking into account the AR (1) disturbances in the model.

3.8.4 Multicollinearity Test

With the help of this test, multicollinearity issues can be found that, if left unchecked, could provide unstable parameter estimators, making it more difficult to assess and understand how independent factors affect the dependent variable (shareholder value creation). The variance inflation factor will be used by the SPSS program to find multicollinearity problems in the model created from the study variables (VIF). When a

variable's VIF value is greater than 10, multicollinearity problems need to be addressed. When there are too many independent variables being used to measure the same dependent variable, this problem frequently arises. If so, the problem will be remedied by removing the variable with a high VIF to make the remaining variables more significant.

3.9 Ethical considerations

The researcher handled extreme confidentiality for the data that was collected. The data collected was not altered to meet any hidden interests. Alteration of data was not done since there was a supervisor and independent ICT person to assist in entering the data into the SPSS computer program. The respondents of the questionnaires were neither disclosed nor coerced to respond to questionnaires. The researcher clarified to the target participants the intention behind the analysis and guaranteed them of confidentiality of their identities, participation status and responses. Lastly, formal citations have been appropriately used to recognize literary materials obtained from previous academicians and scholars. The researcher sought approval for data collection which was obtained from Kenyatta University and a letter granted by NACOSTI to allow conducting of the research in Mombasa County.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSIONS

4.1. Introduction

This chapter presents the data that was collected on the effect of working capital management on profitability of security firms in Mombasa, County. Questionnaires were administered to a sample size of 284 respondents. The chapter also consists of analysis of background information and analysis of study objectives.

4.2. Response Rate

Out of 31 questionnaires administered, 25 were duly filled and send back making the response rate 80.6%. Mugenda and Mugenda, (2003) observed that a response rate above 50% is adequate for analysis and reporting, a rate of 60% is good and a response rate of 70% and over is excellent. The response rate for this study, 80.6%, was therefore representative and adequate to answer the research questions. The response rate is a shown in table 4.3.

Table 4.3. Questionnaire Return Rate

Response	Frequency	Percentage
Filled in questionnaires	25	80.6
Un returned questionnaires	6	19.4
Total Response Rate	31	100

Source: Data (2021)

4.3. Test for Statistical Assumptions

Statistical procedures are founded upon basis assumptions which when violated would not only undermine meaningful research but also would result in biased and inefficient research inferences (Wilkinson & Akenhed, 2013). In order to avoid invalidation of

statistical assumption, this study conducted diagnostic tests to ensure that: a) error terms are normally distributed with a mean of zero, b) error terms have a constant variance to avoid heteroscedasticity, c) error terms are lineally independent to avoid autocorrelation, d) no multicollinearity or strong linear relationship between variables that are jointly fitted in repressor models and e) there is panel level stationary. The explanation of how best Type I and Type II errors were controlled during statistical tests and the transposition of the ordinal data gathered using Likert scales in to quasi interval data for higher statistical computations was also expounded.

4.3.1 Test for Normality

This study used some parametric tests such as correlation analysis, regression analysis and analysis of variance owing to the assumption that that the population was normally distributed. This assumption should be taken carefully to ensure that it holds otherwise the conclusions may be rendered inaccurate and unreliable with regard to the phenomenon under consideration (Field, 2013). In order to ascertain that research data was gathered from a normal population, Shapiro-Wilk Test which is based on correlation between data and corresponding normal scores was used as it offers a higher power compared to K-S test even after Lilliefors correlation.

Shapiro-Wilk Test is also recommended by researchers since is uses power to measure and detect the values of tests of normality (Thode, 2002). In addition, since this study had a sample greater than 30, a single Shapiro-Wilk Test for normality was just enough since non-normality wont significantly affect parametric tests. Shapiro-Wilk test tests null hypothesis is tested for a sample from a normally distributed population is given by X_1, X_2, X_3, X_4, X_n , Shapiro-Wilk Test (W) is given by:

$$W = \frac{\left(\sum_{i=1}^n a_i x_{(i)}\right)^2}{\sum_{i=1}^n (x_i - \bar{x})^2}$$

where:

x_i are the ordered random sample values,

a_i are constants generated from the covariances, variances and means of the sample (size n) from a normally distributed sample.

The results of a small value of W indicates that the sample is not normally distributed thus rejection of null hypothesis that the population is normally distributed for values in a given significance level (Peat & Barton, 2005). In this study, Shapiro-Wilk (W) was computed using SPSS software at a significance level of 95%. Since p -values were approaching 1 for $\alpha \geq 0.05$, the null hypothesis was not rejected hence the conclusion that the research population was normally distributed. The results of Shapiro-Wilk Test are presented in Table 4.4

Table 4.4. Shapiro-Wilk Test for Normality

Variable	Shapiro-Wilk Test (W)		
	Statistic	Df	Sig
Profitability	0.942	25	0.064
accounts receivable management	0.961	25	0.076
accounts payable management	0.966	25	0.053
inventory management	0.972	25	0.043
cash management	0.975	25	0.064

4.3.2 Test for Multicollinearity

Multicollinearity between independent variables was tested using Variance Inflation Factor (VIF) or Tolerance Analysis at 2.5 so as to inform integration of other analysis techniques like factor analysis. The level of inflation of the variance of the estimated regression coefficients in relation to when the experiment variables are non-linearly related. While the acceptable levels of VIF to indicate that no multicollinearity exists is between 1 and 10 (Allison, 1991). In this study Tolerance values (1/VIF) of less than 0.4 (VIF greater than 2.5) indicates presence of multicollinearity thus depicting large standard errors which can be eliminated by large sample sizes (Allison, 1991).

4.3.3. Test for Heteroscedasticity

Heteroscedasticity occurs when the variance of the error terms differs across observations. Heteroscedasticity is useful to examine whether there is a difference in residual variance of the observation period to another period of observation (Godfrey, 1996). The study utilized Glejser test (1969) conducted by regression residual value of the independent variable. In the case, there is an assumption that if the Sig. value >0.05, then there is no problem of heteroscedasticity. The results for tests of Heteroscedasticity were as presented in Table 4.5.

Table 4.5. Test for Heteroscedasticity

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error			
(Constant)	1.182	.018		3.856	.000
accounts receivable management	.115	.027	.148	0.156	.001
accounts payable management	.102	.045	.121	0.258	.002
inventory management	.156	.051	.432	0.481	.0014
cash management	.162	.089	.221	0.463	.002

a. Dependent Variable: Profitability of security companies in Mombasa County, Kenya

Based on the output coefficients, the obtained Sig. values are >0.05 , thus there is no problem of Heteroscedasticity. Hence, there is no difference in residual variance of independent to dependent variables tested.

4.4 Demographic Information

The background information included cadre/designation, gender, age, highest level of education, and length of service in the company. The respondents were the finance managers in the various security firms. The findings are shown in the following subsections.

4.4.1. Cadre/Designation

The respondents were requested to indicate their cadre/designation in the firm. From the findings, all (100%) of the respondents were financial managers.

4.4.2. Gender of the Respondents

The respondents were requested to indicate their gender. From the findings, majority (59%) of the respondents were male while 41% of the respondents were female. This implies that even though most of the responses emanated from males there was gender balance.

4.4.3. Respondent Highest Level of Education

The study sought to establish the respondent highest level of education. From the findings majority (87%) of the respondents had masters level of education, 9% had undergraduate level, while 4% had PhD level of education. This depicts that majority of the respondents were learned and thus were in a position to understand the effect of working capital management on profitability of security firms.

4.4.4. Respondent's Length of Service in the Company

The respondents were requested to indicate the length of service in the company. The findings are shown in table 4.6.

Table 4.6. Respondents Length of Service in the Company

Duration	Frequency(n)	Percentage (%)
1-5 years	2	8.0%
6-10 years	15	60.0%
11-15 years	5	20.0%
Above 15 years	3	12.0%
Total	25	100%

Source: Data (2021)

From the findings majority (60.0%) of the respondents indicated that they had worked in the company for a duration between 6-10 years, 20.0% indicated 11-15 years, 12.0% indicated more than 15 years, while 8.0% indicated between 1-5 years. This depicts that the respondents had worked in the company for a sizeable duration of time and thus had a clear understanding of effect of working capital management on profitability of security firms.

4.5. Account Receivables Management

The first objective was to ascertain the effect of account receivables management on profitability of security companies in Mombasa County, Kenya. This section presents findings on accounts receivables management. The findings are as shown in the subsections below.

4.5.1. Effect of Management Practice on Account Receivables

The respondents were requested to indicate how the company uses various techniques to manage its account receivables. The findings are shown in the table 4.7

Table 4.7. Effect of Management Practice on Account Receivables

Management Practice	Mean	Std. Dev
Reduction of time frame a customer is given to pay	3.98	0.1124
Follow up on collection of accounts receivables	3.52	0.1982
Repayment ability of the client before they are provided with services	3.72	0.1482
Review of credit policies	3.88	0.1724
Review of level of bad debts	4.02	0.2139
Sending reminder notices on overdue amounts	3.90	0.2104
Invoicing promptly	4.28	0.1963
Emphasizing on cash payments	3.61	0.4219

Source: Data (2021)

From the findings the respondents indicated that the company has been invoicing promptly to manage its accounts receivables (mean=4.28), followed by review of level of bad debts (mean=4.02), reduction of time frame a customer is given to pay (3.98), sending reminder notices on overdue amounts (mean=3.9), review of credit policies (mean=3.88), repayment ability of the client before they are provided with services (mean=3.72), emphasizing on cash payments (mean=3.61), and follow up on collection of accounts receivables (mean=3.52). This depicts that the company has been invoicing promptly to manage its accounts receivables. The findings agree with a study by (Wambugu, 2013) who found that the time span of cash conversion cycle has a

substantial impact on the profitability of Small and Medium Enterprises. The study also found out that shorter CCC are better than longer ones and therefore reducing CCC increases the returns of a firm. The study found that accounts receivables management entails managing the firm's inventory and receivables in order to achieve a balance between risk and returns and thereby contribute positively to the creation of a firm value. Excessive investment in inventory and receivables reduces the profit, whereas too little investment increases the risk of not being able to meet commitments as and when they become due.

4.5.2. Accounts Receivable Management Factors and Profitability

The respondents were requested to indicate whether factors of accounts receivable management affect profitability. From the findings majority (67%) of the respondents indicated that factors of accounts receivable management affect profitability while 37% were of the contrary opinion. This depicts that factors of accounts receivables management affect profitability. The respondents further stated that accounts receivable management entails managing the firm's inventory and receivables in order to achieve a balance between risk and returns and thereby contribute positively to the creation of a firm value. Excessive investment in inventory and receivables reduces the profit, whereas too little investment increases the risk of not being able to meet commitments as and when they become due. The findings contradict a study by (Subromany, 2009) who stated that low levels of bad debts, shortened debts collection period, and a sound credit policy translates to efficient receivables management. This efficiency in receivables management often improves the firm' s ability to attract new clients and subsequently increase financial performance. Firms need sound credit policies that ensures value optimization. Analysis of debtors aging is key when dealing with collection from debtors

because it lists all customers who owe the company, amount they owe it and their due date of payment.

4.5.3. Payment Policy

The respondents were requested to indicated their company accounts receivable payment policy. The findings are shown in table 4.8.

Table 4.8. Accounts Receivable Payment Policy

Duration	Frequency(n)	Percentage (%)
Below 15 days	4	16.0%
16-30 days	7	28.0%
31-60 days	13	52.0%
60 days and above	1	4.0%
Total	25	100%

Source: Data (2021)

From the findings majority (52%) of the respondents indicated that the company accounts receivable payment policy is 31-60 days, 28% indicated 16-30 days, 16% indicated below 15 days, while 4% indicated over 60 days. This depicts that the company accounts receivable payment policy is 31-60 days. The findings agree with a study by (Wangomba, 2015) who states that the period of account receivable should be between a duration of one to two months to increase the profitability of the firm. The time taken to convert non-cash assets is of essence to the profitability of the firm. Companies should reduce as much as possible the time it takes to convert non-cash assets like receivables into cash for example, they can introduce services that require customers to pay in advance instead of on credit and they can also ensure efficiency in billing.

4.5.4. Bad Debts on the Accounts Receivables

The respondents were requested to indicate the percentage of bad debts on the accounts receivables. From the findings most (49%) of the respondents indicated that the percentage of bad debts on the account receivables was between 2%-5%, 28% indicated 6%-10%, 18% indicated below 1%, while 5% indicated above 11%. This depicted that the percentage of bad debts on the account receivables was between 2%-5%. The implication is that the bad debts will lead to an offsetting reduction to accounts receivable on the balance sheet though businesses retain the right to collect funds should the circumstances change.

4.6. Accounts Payable Management

The second objective was to find out the relationship between accounts payable management and profitability of security companies in Mombasa County, Kenya. This section presents findings on accounts payables management. The findings are as shown in the subsections below.

4.6.1. Effect of Management Practice on Accounts Payable

The respondents were requested to indicated the extent of agreement on how the company uses various techniques to manage its accounts payables. The findings are shown in the table 4.9

Table 4.9. Effect of Management Practice on Accounts Payable

Management Practice	Mean	Std. Dev
The duration it takes to pay creditors has a material effect on profitability of security firms in Mombasa county	4.05	0.4009
Payments to creditors should be delayed as much as possible to maximize returns	3.61	0.4210
Firms should negotiate for extended credit period with suppliers	3.82	0.4192
Proper policies on management of creditors can enable a firm to get credit discounts	3.96	0.4219

Source: Data (2021)

From the findings the respondents agreed that the duration it takes to pay creditors has a material effect on profitability of security firms in Mombasa county (mean=4.05), followed by proper policies on management of creditors can enable a firm to get credit discounts (mean=3.96), firms should negotiate for extended credit period with suppliers (mean=3.82), and that payments to creditors should be delayed as much as possible to maximize returns (mean=3.61). This depicts that the duration it takes to pay creditors has a material effect on profitability of security firms in Mombasa county. The findings are in agreement with a study by Ross *et. al.*, (2008) who stated that reducing the length of time cash tied up in the CCC increases a business' s profitability and market value. This explains why efficient cash management practices improve business performance. 56% of respondents agreed that each Small and Medium Enterprise should set its standard level of CCC.

4.6.2. Factors of Accounts Payable and Profitability

The respondents were requested to indicate whether factors of accounts payables affect profitability. From the findings majority (78%) of the respondents indicated that factors of accounts payable affect profitability while 22% were of the contrary opinion. This depicts that factors of accounts payable affect profitability. The respondents further indicated that accounts payable affect profitability and thus the company has to pay its bills on time. The findings agree with a study by Gakure *et. al.*, (2012), who stated that bills should always be paid on time to avert any effect on profitability in negative manner. The authors further stated that there is a negative coefficient relationship between average payment period, inventory holding period, accounts collection period, and profitability while the cash conversion cycle was found to be positively correlated with profitability.

4.6.3. Accounts Payable Payment Policy

The respondents were requested to indicated their company accounts payable payment policy. The findings are shown in table 4.10

Table 4.10. Accounts Payable Payment Policy

Duration	Frequency(n)	Percentage (%)
Below 15 days	4	16.0%
16-30 days	18	72.0%
31-60 days	2	8.0%
60 days and above	1	4.0%
Total	25	100%

Source: Data (2021)

From the findings majority (72%) of the respondents indicated that the company accounts payable payment policy is 16-30 days, 16% indicated below 15 days, 8% indicated below

31-60 days, while 4% indicated over 60 days. This depicts that the company accounts payable payment policy is 16-30 days. The implication for this is that it allows the firms to be in a position to prepare their financial statements monthly without spilling over to the next month.

4.6.4. Induction for Paying Accounts Payable

The respondents were requested to indicate what induces them to pay accounts payable in good time. From the findings most (49%) of the respondents indicated that discount what induces them to pay accounts payables in good time, 45% indicated reduced prices, while 6% indicated after sale services. This depicts that discount what induces the respondents to pay accounts payables in good time. the findings agree with a study by (Mutungi, 2010) who noted that management of trade payables decisions such as discount have a huge effect on the company' s risk, return and share price. When there are discounts on various products and services the respondents tend to pay in good time thus increasing profitability.

4.7. Inventory Management

The third objective was to determine the effect of inventory management on profitability of security companies in Mombasa County, Kenya. This section presents findings on inventory management. The findings are as shown in the subsections below.

4.7.1. Opinion on Inventory Management

The respondents were requested to indicate the extent of effect of inventory management practices. The findings are shown in the table 4.11

Table 4.11. Opinion on Inventory Management

Management Practice	Mean	Std. Dev
Regularity of budgeting for inventory	4.27	0.1324
Frequency of review of inventory levels	4.22	0.1632
Frequency of stock monitoring	3.99	0.1002
Frequency of stock out costs of inventory	4.34	0.1125

Source: Data (2021)

From the findings the respondents indicated frequency of stock out costs of inventory and affects inventory management (mean=4.34), followed by regularity of budgeting for inventory (mean=4.27), frequency of review of inventory levels (mean=4.22), and frequency of stock monitoring (mean=3.99). This depicts that frequency of stock out costs of inventory affects inventory management. The findings agree with a study by Wambugu, (2013) indicated that cost of stocks influences inventory management. He further stated that costs of stock determine the price fluctuation in the market. Empirical studies done in the past have shown that a negative relationship exists between inventory conversion period and business' s performance.

4.7.2. Effectiveness of Inventory Management Techniques

The respondents were requested to indicate the extent of agreement on effectiveness of inventory management techniques. The findings are shown in the table 4.12

Table 4.12. Effectiveness of Inventory Management Techniques

Management Practice	Mean	Std. Dev
Inventory budgeting has helped in allocating enough funds for buying inventory hence maintaining optimal inventory	4.25	0.1324
Inventory budgets are reviewed frequently to avoid shortages or excesses	4.22	0.1164
Reorder levels are determined appropriately	4.11	0.1976

Source: Data (2021)

From the findings the respondents agreed that inventory budgeting has helped in allocating enough funds for buying inventory hence maintaining optimal inventory (mean=4.25), followed by inventory budgets are reviewed frequently to avoid shortages or excesses (mean=4.22), and that reorder levels are determined appropriately (mean=4.11). This depicts that inventory budgeting has helped in allocating enough funds for buying inventory hence maintaining optimal inventory. The findings contradict a study by Ratemo, (2018) revealed that inventory turnover and profitability of supermarkets are positively and significantly related.

4.7.3. Factors of Inventory Management and Profitability

The respondents were requested to indicate whether factors of inventory management affect profitability. From the findings majority (66%) of the respondents indicated that factors of inventory management affect profitability while 34% were of the contrary opinion. This depicts that factors of inventory management affect profitability.

4.8. Cash Management

The fourth objective was to establish the relationship between cash management and profitability of security companies in Mombasa County, Kenya. This section presents findings on cash management. The findings are as shown in the subsections below.

4.8.1. Extent of Effect of Cash Management on Profitability

The respondents were requested to indicate the extent of effect of cash management on profitability. The findings are shown in the table 4.13

Table 4.13. Extent of Effect of Cash Management on Profitability

Management Practice	Mean	Std. Dev
Cash shortages	4.14	0.1189
Business expenses	3.97	0.1128

Source: Data (2021)

From the findings the respondents indicated to a great extent that cash shortages affect profitability (mean=4.14) followed by business expenses (mean=3.97). This depicts that to a great extent that cash shortages affect profitability.

4.8.2. Management Techniques Used by Firms to Manage Their Cash

The respondents were requested to indicate the extent to which firms use management techniques to manage their cash. The findings are shown in table 4.14

Table 4.14. Management Techniques Used by Firms to Manage Their Cash

Management Practice	Monthly	Quarterly	Half	Annually
			annually	
Frequency of billing customers	78%	20%	1%	1%
Maximum incentive time for customers who pay their bills in time	45%	35%	15%	5%
How often is bank reconciliation done?	58%	32%	5%	5%
How often are cash budgets prepared?	67%	23%	7%	3%

Source: Data (2021)

From the findings 78% of the respondents indicated that frequency of billing customers in done monthly, 67% indicated that cash budgets are prepared monthly, 58% indicated that bank reconciliation is also done monthly while 45% indicated that maximum incentive time for customers who pay their bills in time is done monthly. The implication for this is that the financial statements are done monthly and its important in that it established whether the firms are operating at a profit or loss.

4.8.3. Factors of Cash Management and Profitability

The respondents were requested to indicate whether factors of cash management affect profitability. From the findings majority (95%) of the respondents indicated that factors

of cash management affect profitability while 5% were of the contrary opinion. This depicts that factors of cash management affect profitability.

4.9. Profitability

The respondents were requested to indicate the range for balances for the financial details for the last financial year. The findings are shown in table 4.15

Table 4.15. Balances of Financial Details

	Amount (Ksh '000')			
	Below 10,000	10,001- 20,000	20,001- 50,000	Above 50,000
Earnings before Interest & Taxes	25.1%	27.5%	31.2%	35.0%
Earnings after taxes & Interest	15.8%	22.1%	25.0%	27.9%
Total Assets	12.8%	21.3%	29.5%	30.8%

Source: Data (2021)

From the findings it is evident that Earnings before Interest & Taxes, Earnings after taxes & Interest and total assets were 35.0%, 27.9% and 30.8% for amount above 50,000 which was seen to be the highest for the financial year that ended.

4.10. Inferential Statistics on Return on Assets

The study utilized multiple regression analysis to find out the relationship between the predictor variables and profitability of security firms in Mombasa, County. The researcher utilized the SPSS version 24 to code the data and produce the output of the regression analysis. The coefficient of determination was used to explain how the change in the dependent variable can be explained by the change in the independent variables. The dependent variable for the current study was profitability of security firms in

Mombasa County while the independent variables were account receivable, accounts payable, inventory management and cash management.

4.10.1. Model Summary

The table below provides the model summary of the relationship between the predictor variables and profitability of security firms in Mombasa, County. The findings are as shown in table 4.16

Table 4.16. Model Summary

Model	R	R Square	Adjusted R Square		F	P-value
			Adjusted R Square	Std. Error of the Estimate		
1	0.89	.792	.811	.312	31.341	.001

a. Predictors: (Constant), account receivable, accounts payable, inventory management and cash management.

b. Dependent Variable: Profitability of security firms in Mombasa, County

Source: Data (2021)

From the results in the table $R^2=0.792$ that is 79.2% disparity in Profitability of security firms in Mombasa, County is explained by the independent variable in the model. However, 20.8% unexplained difference in profitability of security firms in Mombasa, County is as a result of other unrepresented determinants in the regression model. As per the findings in the above table it can be ascertained that the model is good and can be utilized for the purposes of estimation. From the results in the table a significant relationship was established which is indicated by the variables as depicted by $R^2=0.792$ that is 79.2% which shows that a significant relationship exists between the independent variables and the Profitability of security firms in Mombasa, County.

4.10.2 ANOVA Results

The table below provides the ANOVA results of the relationship between the predictor variables and Profitability of security firms in Mombasa, County. The findings are as shown in table 4.17

Table 4.17. ANOVA of the Regression

Model		Sum of		Mean	F	Sig.
		Squares	df	Square		
1	Regression	12.492	4	3.123	25.185	.034 ^a
	Residual	2.48	20	.124		
Total		14.972	24			

a. Predictors: (Constant), account receivable, accounts payable, inventory management and cash management.

b. Dependent Variable: Profitability of security firms in Mombasa, County

Source: Data (2021)

The significance value is 0.034 which is less than 0.05 thus the model is statistically significance in predicting how the factors (account receivable, accounts payable, inventory management and cash management) impact the profitability of security firms in Mombasa, County. The F critical at 5% level of significance since the F calculated is greater than the F critical (value = 25.185), this shows that the overall model was significant.

4.10.3 Coefficient of Determination

The table below provides the coefficient of determination on the relationship between the predictor variables and the profitability of security firms in Mombasa, County. The findings are as shown in table 4.18

Table 4.18. Coefficient of Determination

	Unstandardized		Standardized		
	Coefficients		Coefficients		
	B	Std. Error	Beta	T	Sig.
Model					
1(Constant)	0.289	0.116		0.223	0.005
Account					
receivable	0.319	0.122	0.514	3.25	0.001
Accounts					
payable	0.287	0.117	0.452	2.13	0.002
Inventory					
management	0.245	0.106	0.413	1.87	0.001
cash					
management	0.229	0.098	0.398	2.16	0.001

a. Dependent Variable: Profitability of security firms in Mombasa, County

Source: Data (2021)

Simple regression analysis was conducted as to determine the profitability of security firms in Mombasa, County. As per the SPSS generated table below, regression equation

$$(ROA = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon)$$

Becomes:

$$(ROA = 0.289+ 0.319X_1 + 0.287X_2 + 0.245X_3 + 0.229X_4 + \varepsilon)$$

From the regression taking the independent variable at constant (account receivable, accounts payable, inventory management and cash management) constant at zero, profitability of security firms in Mombasa, County was 0.289. The data findings analyzed also showed that taking all other independent variables at zero, a unit increase in account receivable will lead to a 0.319 increase in profitability of security firms in Mombasa, County, a unit increase in account payable will lead to a 0.287 increase in profitability of security firms in Mombasa, County, a unit increase in inventory management will lead to a 0.245 increase in profitability of security firms in Mombasa, County, and a unit increase in cash management will lead to a 0.229 increase in profitability of security firms in Mombasa, County. This infers that account receivable contribute the most to profitability of security firms in Mombasa, County, followed by accounts payable. At 5% level of significance and 95% level of confidence, account receivable, accounts payable, inventory management and cash management were all significant on profitability of security firms in Mombasa, County. Susan (2014) in her study on the analysis of the profitability of the top six commercial banks in Kenya outlined the determinants of bank profitability being return on assets, return on equity or the net interest margin. This study used ROA as a measure of profitability. It revealed that bank capital strength, operations expenses, bank size, ownership and diversification influence profitability of the top six commercial banks significantly.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMENDATIONS

5.1. Introduction

This chapter presents summary, conclusion and recommendations on the effect of working capital management on profitability of security firms in Mombasa, County.

5.2. Summary of Findings

This section presents the summary of the findings.

The first objective was to ascertain the effect of accounts receivable management on profitability of security companies in Mombasa County, Kenya. The study found that factors of accounts receivable management affect profitability. The study found that accounts receivable management entails managing the firm's inventory and receivables in order to achieve a balance between risk and returns and thereby contribute positively to the creation of a firm value. Excessive investment in inventory and receivables reduces the profit, whereas too little investment increases the risk of not being able to meet commitments as and when they become due. The study found that the companies accounts receivable payment policy is 31-60 days. The study also found that the percentage of bad debts on the account receivables was between 2%-5%.

The second objective was to find out the relationship between accounts payable management and profitability of security companies in Mombasa County, Kenya. The study found that the duration it takes to pay creditors has a material effect on profitability of security firms in Mombasa county. The study also found that factors of accounts payable affect profitability. Accounts payable affect profitability and thus the company has to pay its bills on time. A simple best practice, but nothing else will work if the company doesn't do this. The study found that the companies accounts payable payment

policy is 16-30 days. The study also found that discount induces the respondents to pay accounts payables in good time.

The third objective was to determine the effect of inventory management on profitability of security companies in Mombasa County, Kenya. The study found that frequency of stock out costs of inventory affects inventory management. The study also found that inventory budgeting has helped in allocating enough funds for buying inventory hence maintaining optimal inventory. The study found that factors of inventory management affect profitability.

The fourth objective was to establish the relationship between cash management and profitability of security companies in Mombasa County, Kenya. The study found that to a great extent that cash shortages affect profitability. The study also found 78% of the respondents indicated that frequency of billing customers is done monthly, 67% indicated that cash budgets are prepared monthly, 58% indicated that bank reconciliation is also done monthly while 45% indicated that maximum incentive time for customers who pay their bills in time is done monthly. The study found that factors of cash management affect profitability. The study found that at 5% level of significance and 95% level of confidence, account receivable, accounts payable, inventory management and cash management were all significant on profitability of security firms in Mombasa, County.

5.3. Conclusion of the Study

Regarding first objective on effect of accounts receivable management on profitability of security companies in Mombasa County, Kenya, the study concluded that the sampled companies have been invoicing promptly to manage its accounts receivables. The study also concluded that factors of accounts receivable management affect profitability. The study concluded that accounts receivable management entails managing the firm's

inventory and receivables in order to achieve a balance between risk and returns and thereby contribute positively to the creation of a firm value. The study concluded that the duration it takes to pay creditors has a material effect on profitability of security firms in Mombasa county.

In relation to the second objective on the relationship between accounts payable management and profitability of security companies in Mombasa County, Kenya, the study also concluded that factors of accounts payable affect profitability. Accounts payable affect profitability and thus the company has to pay its bills on time. A simple best practice, but nothing else will work if the company doesn't do this.

In relation to the third objective on the effect of inventory management on profitability of security companies in Mombasa County, Kenya, the study also concluded that inventory budgeting has helped in allocating enough funds for buying inventory hence maintaining optimal inventory. The study concluded that factors of inventory management affect profitability.

In relation to the fourth objective on the relationship between cash management and profitability of security companies in Mombasa County, Kenya, the study concluded that to a great extent that cash shortages affect profitability. The study concluded that at 5% level of significance and 95% level of confidence, account receivable, accounts payable, inventory management and cash management were all significant on profitability of security firms in Mombasa, County.

5.4. Recommendations of the Study

There exists a negative relationship between average collection period and firm's profitability. This therefore means that a decrease in the collection period results to increase in profitability and thus security firms should try as much as possible to reduce

the period for collecting receivables from customers. Firms should however be careful that this does not harm their volume of credit sales which can adversely affect its profitability.

However, it is not practical for security firms to have all sales paid for in cash due to their trade credit policy or competitor's pressure. Almost all firm's keep some daily receivables in their daily operations. The advantage of reduced receivables is that it results to reduced bad debts through accelerated collections. The security firms can reduce cash conversion cycle period so as to increase the company liquidity. A careful reduction of cash conversion cycle period will improve the liquidity of a security firm and excess cash can be reinvested in the firm. The accounts receivable should be collected soon and they should stretch the payments for better liquidity position.

5.5. Recommendations for Further Research Studies

Research should be carried out that also includes those companies in other sectors to establish if they also consider the working capital management practices as important and to establish the frequency of usage of the practices.

Further research is important in other countries with similar or almost same micro and macroeconomic environments for security companies. The findings would enhance a cross-country comparison of the working capital management practices and their impact on profitability.

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APPENDICES

APPENDIX I: INTRODUCTION LETTER

To All respondents,

27th June 2020.

Dear Sir/Madam,

RE: RESEARCH QUESTIONNAIRE

I am a student at Kenyatta University undertaking a Master' s degree in Business Administration (Finance Option). I am conducting a study on working capital and profitability of security companies in Mombasa County, Kenya which is mandatory requirement before Award of the Degree. I am kindly requesting you to fill the questionnaire below to enable me attain my objectives. The information provided will be handled with extreme confidentiality. Your assistance as the Finance Manager will be appreciated to ensure that accurate and relevant information is obtained to assist me in making correct and accurate recommendations that will help security companies to maximize profitability and subsequently grow their businesses.

Much gratitude is given to you as you support in the development of new understanding to the business as well as the sector. Thank you in advance.

Yours faithfully,

EDYLINE MUTEMBETE

The Researcher/Student

APPENDIX II: QUESTIONNAIRE

QUESTIONNAIRE NUMBER _____ DATE: _____

The following questions are intended to answer on working capital management and profitability of security companies in Mombasa County, Kenya. Please fill in with a tick

[√] to answer the closed ended questions or writing your response in the spaces provided

(all information given will be treated confidentiality)

SECTION A: BIODATA

1. Cadre/Designation

- a) General Manager
- b) Finance Manager
- c) Chief Accountant
- d) Others (specify) _____

2. Gender

- a) Male
- b) Female

3. Highest level of Education

- a) PhD
- b) Masters
- c) Undergraduate
- d) Others (specify) _____

4. Length of Service in the Company

- a) 1-5 years
- b) 6-10 years

c) 11-15 years

d) Above 15 years

SECTION B: WORKING CAPITAL MANAGEMENT AND PROFITABILITY OF SECURITY COMPANIES IN MOMBASA

1. ACCOUNTS RECIEVABLES MANAGEMENT

This section is geared towards the techniques this company uses to manage its accounts receivables. Kindly provide appropriate answers to the following questions.

Management Practice	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Very often (5)
a) Reduction of time frame a customer is given to pay					
b) Follow up on collection of accounts receivables					
c) Repayment ability of the client before they are provided with services					
d) Review of credit policies					
e) Review of level of bad debts					
f) Sending reminder notices on overdue amounts					
g) Invoicing promptly					
h) Emphasizing on cash payments					

i) Do the factors of accounts receivables management mentioned above from a to h affect profitability?

Yes ()

No ()

To a small extent ()

Please explain your answer

j) What' s your accounts receivable payment policy? (Tick where appropriate)

Below 15 days () 16-30 days () 31-60 days () 60 days and Above ()

k) What is the percentage of bad debts on the account' s receivables? (Tick where appropriate)

Below 1% () 2%-5% () 6%-10% () Above 11% ()

2. ACCOUNTS PAYABLES MANAGEMENT

This section is geared towards the techniques this company uses to manage accounts payables. Kindly provide appropriate answers to the following questions.

Management Practice	Strongly (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly disagree (5)
a) The duration it takes to pay creditors has a material effect on profitability of security firms in Mombasa county					
b) Payments to creditors should be delayed as much as possible to maximize returns					
c) Firms should negotiate for extended credit period with suppliers					
d) Proper policies on management of creditors can enable a firm to get credit discounts					

e) Do the factors of accounts payables mentioned above from a to d affect profitability?

Yes () No () To a small extent ()

Please explain your answer

f) What' s your accounts payable payment policy? (Tick where appropriate)

Below 15 days () 16-30 days () 31-60 days () 60 days and Above ()

g) What induces you to pay accounts payables in good time Tick where appropriate)

Reduced prices () Discounts () After sales services ()

Any other (specify).....

3. INVENTORY MANAGEMENT

The following is geared towards understanding inventory management practices. On a scale of 1 to 5(1-Never, 2-Rarely, 3-Sometimes, 4-Often, 5-Very often) kindly respond to the following questions appropriately.

Management Practice	Never (1)	Rarely (2)	Sometime (3)	Often (4)	Very Often (5)
a) Regularity of budgeting for inventory					
b) Frequency of review of inventory levels					
c) Frequency of stock monitoring					
d) Frequency of stock out costs of inventory					

The following areas are geared towards understanding the effectiveness of inventory management techniques used in your company. Please give your opinion on how each has helped in making working capital management effective by ticking the appropriate answers;

Management Practice	Strongly (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly disagree (5)
e) Inventory budgeting has helped in allocating enough funds for buying inventory hence maintaining optimal inventory					
f) Inventory budgets are reviewed frequently to avoid shortages or excesses					
g) Reorder levels are determined appropriately					

h) Do the factors of inventory management mentioned above from a to g affect profitability?

Yes ()

No ()

To a small extent ()

Please explain your answer

4. CASH MANAGEMENT

To what extent do you think the following factors related to cash management affect profitability? Use to a very large extent (1), to a large extent (2), moderate extent (3), to a small extent (4), not at all (5)

Management Practice	(1)	(2)	(3)	(4)	(5)
a) Cash shortages					
b) Business expenses					

This section aims to understand management techniques used by firms to manage their cash. On a scale of 1 to 5 respond appropriately

Management Practice	Monthl y (1)	Quarte rly (2)	Half annuall y (3)	Annuall y (4)	Not at all (5)
c) Frequency of billing customers					
d) Maximum incentive time for customers who pay their bills in time					
e) How often is bank reconciliation done?					
f) How often are cash budgets prepared?					

g) Do the factors of cash management mentioned above from a to f affect profitability?

Yes ()

No ()

To a small extent ()

Please explain your answer

5. FINANCIAL PERFORMANCE

a) Please tick on an estimate of the following financial details for the past financial year

Year	Earnings before Interest & Taxes			
	Below 10,000 (1)	10,001-20,000 (2)	20,001-50,000 (3)	Above 50,000 (4)
2016				
2017				
2018				
2019				
2020				
	Earnings after taxes & Interest			
2016				
2017				
2018				
2019				
2020				
	Total Assets			
2016				
2017				
2018				
2019				
2020				

THANK YOU FOR THE RESPONSE

APPENDIX III: LIST OF SECURITY COMPANIES LISTED ON KSIA

1	Absolute Security Limited
2	AKKAD Systems
3	Apache Group
4	Bedrock Security Services Ltd
5	Bob Morgan Services Limited
6	Brinks Security Services
7	Cobra Security
8	Collindale Security
9	Crest Security Services
10	Cybertrace
11	Envag Associates
12	Fidelity Security Services
13	Frontier Interfrated Solutions Ltd
14	FSI Worldwide
15	G4S Security Services Kenya Limited
16	Homeland Security
17	Infama Ltd
18	Instarect
19	Ismax Security Limited
20	KK Security
21	Nine one one Group
22	Northwood Services
23	On the Mark Security
24	P.G Security Limited
25	Pinkerton's
26	Radar Security Limited
27	Riley Services Limited
28	Saladin Kenya
29	Securex Agencies Kenya
30	Security Group of Companies Limited
31	Tandu Security
32	Texas Alarms
33	Total Security Surveillance Limited
34	Twenty-Four Secure Security Company
35	Ultimate Security Limited
36	Usalama
37	Watchdog

Source: KSIA website (2019)

APPENDIX IV: LIST OF SECURITY COMPANIES LISTED ON PSIA

1	Eagle Watch Company Ltd
2	Jeff Hamilton Services
3	Perimeter protection ltd.
4	Pride kings' services ltd
5	Tick Security Services Ltd.
6	Vickers security Services Ltd
7	Allied barton services ltd
8	Anchor Security Services Ltd
9	Asset Security Systems Ltd
10	Babs Security Services Ltd
11	Basein Security Services Ltd
12	Bedrock Holdings Ltd
13	Beemark holdings ltd
14	Benro Security
15	Best Africa Security Experts Ltd (BASE)
16	Boeramain Security Ltd
17	Bonarys security Services
18	Bridge Security Services Ltd
19	Casa Security Ltd
20	Catch security links ltd
21	Davkos Security Services Ltd
22	Delta Guards Ltd
23	Ekosowan Security Express Services Ltd.
24	Flashcom Security Ltd
25	Frontiers Security Consultants Ltd
26	Gateamour Security Services Ltd
27	Gillys Security &Investigations Services Ltd
28	Glosec Services Ltd.
29	Gratom Babz Services Ltd
30	Gyto Security Ltd.
31	Hatari Security Services Ltd
32	Idar Groups Security Services Ltd
33	Ideal Security Services Ltd
34	Intercity Secure Home Ltd.
35	Intersecurity Services Ltd
36	Ivory security services ltd.
37	Kemirwa Global Security Services Ltd
38	Kenwatch Security Services Ltd.
39	Kenya School of Security Management Ltd

40	Kleen homes security services ltd
41	Kong Security Ltd
42	Kruggers security services ltd
43	Lakers Pride (LP) Security Services ltd
44	Lavington Security Guards Ltd
45	Lions Security Limited
46	Marco Security Ltd.
47	Masterpiece Security Services Ltd.
48	Metropol security services ltd
49	Mocam Security Ltd.
50	Newnham Security Ltd.
51	Pachaz Kenya ltd
52	Pada Private Investigators Ltd.
53	Papaton Security Services Ltd
54	Pelt security services Ltd
55	Private Security Training Academy Ltd.
56	Protective Custody Ltd
57	Race Guards Security Ltd
58	Rapid security ltd.
59	Robinson Security Guards Ltd
60	Samo Security Services
61	Saos Security Ltd.
62	Securitas (K) Ltd.
63	Senaca E.A Security Ltd.
64	Snipper Security Ltd.
65	Solvit Security Solutions
66	Straight Security Ltd
67	Tofada Security Services Ltd..
68	Top-Flight Security Ltd
69	Two Four Seven Guards Ltd.
70	Vazguards protection services ltd
71	Wecan Security Risk Management Solutions Ltd

Source: PSIA website (2019)

APPENDIX V: LIST OF SECURITY COMPANIES BASED IN MOMBASA

1	Jeff Hamilton Services	PSIA
2	Tick Security Services Ltd.	PSIA
3	Vickers security Services Ltd	PSIA
4	Babs Security Services Ltd	PSIA
5	Bedrock Security Services Ltd	KSIA
6	Bob Morgan Services Limited	KSIA
7	Brinks Security Services	KSIA
8	Catch security links ltd	PSIA
9	Cobra Security	KSIA
10	Crest Security Services	KSIA
11	Delta Guards Ltd	PSIA
12	G4S Security Services Kenya Limited	KSIA
13	Hatari Security Services Ltd	PSIA
14	KK Security	KSIA
15	Lavington Security Guards Ltd	PSIA
16	Nine one one Group	KSIA
17	Northwood Services	KSIA
18	P.G Security Limited	KSIA
19	Pinkerton' s	KSIA
20	Protective Custody Ltd	PSIA
21	Radar Security Limited	KSIA
22	Riley Services Limited	KSIA
23	Robinson Security Guards Ltd	PSIA
24	Securex Agencies Kenya	KSIA
25	Security Group of Companies Limited	KSIA
26	Senaca E.A Security Ltd.	PSIA
27	Solvit Security Solutions	PSIA
28	Texas Alarms	KSIA
29	Total Security Surveillance Limited	KSIA
30	Twenty-Four Secure Security Company	KSIA
31	Two Four Seven Guards Ltd.	PSIA

Source: Researcher (2019)

APPENDIX VI: APPROVAL OF RESEARCH



KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke

Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 810901 Ext. 4150

Internal Memo

FROM: Dean, Graduate School

DATE: 23rd October, 2020

TO: Edylne Musanya Mutembete
C/o Accounting & Finance Dept.

REF: P53-CL/MNA/20626/2014

SUBJECT: APPROVAL OF RESEARCH PROJECT PROPOSAL

This is to inform you that Graduate School Board at its meeting of 21st October, 2020 approved your Research Project Proposal for the MBA Degree Entitled, "Working Capital Management and Profitability of Security Companies in Mombasa County, Kenya".

You may now proceed with your Data collection, Subject to Clearance with Director General, National Commission for Science, Technology and Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking and Progress Report Forms per semester. The forms are available at the University's Website under Graduate School webpage/downloads.

Thank you

ELIJAH MUTUA
FOR DEAN, GRADUATE SCHOOL

Chairman, Accounting and Finance Department

Supervisors

E. Nansen Kapfela
C/o Department of Accounting and Finance
Kenyatta University

APPENDIX VII: RESEARCH PERMIT

Republic of Kenya
National Commission for Science, Technology and Innovation

Ref No: 575772

RESEARCH LICENSE



This is to Certify that Ms. EDYLINE MUSANYA MUTEMBETE of Kenyatta University, has been licensed to conduct research in Mombasa on the topic: WORKING CAPITAL MANAGEMENT AND PROFITABILITY OF SECURITY COMPANIES IN MOMBASA COUNTY, KENYA for the period ending : 02/December/2021.

License No: NACOSTI/P/20/7994

Applicant Identification Number: 575772

Director General
NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY &
INNOVATION

Verification QR Code



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Date of Issue: 02/December/2020