INVENTORY MANAGEMENT PRACTICES AND OPERATIONAL PERFORMANCE OF HOTELS IN MOMBASA, KENYA

BY

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DECLARATION

This research project is my original work and has not been submitted to any other University for an award of degree.

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I entrust God to reward you all abundantly.

DEDICATION

This research project is dedicated to my family and especially my parents Joseph Kiboko Kaungu and Jeniffer Mulee Kiboko, my siblings, nephews, niece and my friends for their moral support and encouragement all through.

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ABSTRACT

Inventory management is the responsibility of the entire organization and it is very critical to hotel success. The study sought to establish the inventory management practices used by hotels in Mombasa, Kenya, to determine the relationship between inventory management practices and operational performance of hotels in Mombasa Kenya and to determine the challenges faced when implementing inventory management practices in hotels in Mombasa Kenya. The study used descriptive survey and the population for this study comprised 3star, 4 star and 5 star hotels in Mombasa Kenya considered 37 hotels. Out of 37 questionnaires distributed, 34 were filled and successfully returned for analysis. This represented 92 percent response rate, which was considered sufficient for making generalization of all the hotels in Mombasa. To analyze the data Descriptive statistics and regression analysis were used. FIFO was the most inventory management practice used in hotels in Mombasa Kenya, while marginal analysis, ERP, EOQ model, just in time and VMI were used to a large extent and ABC Analysis and stochastic model were moderately used and RFIS was used to a very small extent. The regression results observed that Stochastic model, FIFO, EOQ Model, ABC Analysis, RFIS, VMI, Just In Time and marginal analysis were statistically not significant since their probability values obtained from the regression model were above 0.05 and z critical value were below 1.96, their p-values are 0.710, 0 .905, 0 .702, 0.146, 0.696, 0.405 and 0.464 respectively. On the other hand ERP was statistically significant since the p-value was less than 5%, p=0.006. The regression model was found to be insignificant since the P value = 0.173 was greater than 5%. This implied that the predictor variables did not provide significant level of explanation of the relationship between inventory management practices and operational performance of hotels in Mombasa Kenya. Further the study concludes that the major challenge faced by hotels in Mombasa Kenya in the implementation of inventory management practice was lack of proper training. Incompetent staffs, failure to invest in modern technologies, unreliable suppliers and poor record keeping were other challenges facing the hotels in Mombasa Kenya to a moderate extent. Lack of commitment by top management was a challenge to a very small extent. The major limitation of the study was limited to hotels in Mombasa Kenya only due to costs and time constraints. It would have been important for future researchers to consider researching on inventory management practices and operational performance in hotels in Kwale, Kilifi, Lamu, Taita Taveta counties to find out whether these findings stand out. The study recommends that the hotels should put more emphasis on creating forums to train and equip their concerned staff with skills of inventory management.

ABBREVIATIONS AND ACRONYMS

EOQ	Economic Order Quantity Model
ERP	Enterprise Resource Planning
GDP	Gross Domestic Product
HRA	Hotel and Restaurant Authority
JIT	Just-In-Time
MRP	Material Requirements Planning System
PMS	Property Management System
RFIDS	Radio Frequency Identification System
TICAD	Tokyo International Conference on African Development
UNCTAD	United Nations Conference on Trade and Development
VMI	Vendor Managed Inventory System

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Inventory management is the responsibility of the entire organization and it is very critical to hotel success. It enables quick response by the company which is an important competitive strategy element; Dilworth (1992). Inventory can double up as stock and asset and inventory management ensures that stock and asset are well managed and to avoid unnecessary and unplanned procurement demand forecasting is enhanced. Minimized operational costs and improved customer satisfaction is achieved when an organization employs demand forecasting, Hines and Bruce, (2007).

Hotels have numerous operations in inventory which happen simultaneously. These operations include sales, room services, food and beverages purchase, other related room consumables and durables. It is difficult to track all these activities and inadequate tracking can result to leakage of revenue, wastage of stock, and fraud www.hospitalitytechnologywordpress.com (2012).Many organizations have not established how much to invest and the right inventory levels to hold so as to satisfy their customers. The best inventory management practice helps a hotel plan its expenditure, ensure tighter control on profit, access business intelligence, predict hotel demand and supply rate accurately and highly reduces the chance of errors.

1.1.1 Inventory Management Practices

Inventory management is vital to the successful functionality of hotel. It emphasizes on keeping a clear track on goods flow, which is from manufactures to the warehouses and from warehouses to the point of sale. Its major concern is to minimizing the inventory total cost while maximizing the ability to provide products on time as required by the customer. Inventory management is increasingly regarded as a tool for achieving the overall operational efficiency across all industries, Gordon and Gupte, (2016).

Inventory management practices are activities and functions used by organizations to manage stocks. Proper implementation of these activities enables the firm to minimize waste and costs and increase revenue Zer and Wei, (2006). Some of the inventory management practices used includes; FIFO, vendor management inventory, minimal stock level ,economic order quantity, radio frequency identification systems, Stochastic model , enterprise resource planning, Just In Time, and ABC Analysis. High stock levels are the results of poor control and low availability Saxena,(2009).Improved inventory management processes to companies focusing on inventory as a principal function and realizing that inventory affects sales and profits is vital. The implementation of inventory management comes with a risk and organizations should review the benefits and drawbacks of inventory management.

1.1.2 Operational Performance

Operational performance is the performance of a firm measured against standards or prescribed indicators for effectiveness, efficiency and environmental

responsibilities like productivity, waste reduction, cycle time and regulatory compliance which are critical to overall competitiveness, Stevenson (2014). Effectiveness is the level that the customer's requirements are met and efficiency monitors usage of firm's resources while providing customer satisfaction at a pre specified level, Shepherd and Gunter (2006). Key performance indicators for hotels include; occupancy rate, average daily rate (ADR), online ratings, Revenue per available room (REVPAR), advertising return on investment (RIO) and customer satisfaction. Performance measure is important for judging whether an operation is good, bad, or indifferent. Internal and external factors influence Operational quality performance.

Garvin (1984) argued that internal operational performance relates to internal functioning of hotels such as increase in productivity, improvement in efficiency, reduction in cost and waste. Operations managers are challenged with finding a way to reduce cost without sacrificing the quality standards required. Operations cost refer to expenses incurred during normal operation of hotels like labor cost ,food cost, energy cost, water cost ,inventory management costs among others, Kimeu (2015).

1.1.3 Hotels in Mombasa, Kenya

Hotel is a premise on which accommodation is supplied or available for supply, with or without food or all other services. Hotel operations vary in size, function and cost. Kenyan hotels are graded in accordance with the star classification system and Hotel and Restaurant Authority under the Tourism Regulatory Authority (TRA) is in charge of classification and continuous control of the

quality of services to be offered. According to East Africa Community vacation hotel classification criteria, 3 stars should be located in a suitable location with a 4 course menu, variety dishes, beverage and quality accommodation. While a 4 stars location should be close to main attraction and offer easy accessibility, safety, comfort and tranquility. It should also have rich cuisine with variety to choose from that is a la carte and table d hote, with at least 5 courses, a rich bar and wine list and superior accommodation. 5 stars has same as four stars and features an excellent cuisine, very rich bar and wine list, quality service, other amenities and luxurious accommodation, http://www.tourismauthority.go.ke.

Hotels play a central role in country's tourism sector, yet coastal hotels have gradual growth. According to Economic Survey (2017) accommodation and food services sector growth recovered from 1.3% in 2015 to 13.3 % in 2016.The bed night's occupancy number of hotel went up by 9.7 % from 5878.6 thousands in 2015 to 6448.5 thousands in 2016.This was due to high international visitation which increased by 13.5 % to 1339.7 thousands in 2016. The local conferences also increased by 17.4 % in 2016, while the number of international conferences held increased by 4.1% from 218 in 2015 to 227 in 2016.The successful high profile conferences that is, the 14th session of the UN conference on trade and development (UNCTAD 14), improvement in security and the 6th Tokyo international conference on African development (TICAD VI) helped in the rebound.

Wadongo, Odhuno, Kambona, & Othuon, (2010), stated that for countries economic development the hotel industry makes an important contribution.

Mombasa city is home of some of the most beautiful beach hotels, resorts, lodges and villas. It is the epicenter of the coastal tourism in Kenya, one of the famous tourist destinations in Africa. The hotels present strategies ranging from services to suit tests of customers, Class, elegance, ambiance and quality services are the major distinguishing factors of the hotels. Hotels in Mombasa are operating in high competition, despite the high quality and good facilities of the hotels. Customers' expectation and preferences are also increasing from time to time. Because of these and other globalization factors, companies have revised their strategies and invest more amount of money in their premises on product improvement, adoption of technology and training personnel to compete effectively.

1.2 Research Problem

Inventory management is an essential part of business operation, thou at times it's complicated. Small mistakes can cost a lot of investment, or on the other side, there are small changes that could increase profits. Gonzalez and Gonzalez (2010) noted that staff and management have poor skills and knowledge on economic order quantity and how to apply it which affects organization success. Hotels in Mombasa operate round the year making operational cost high, also customers are demanding satisfaction which comes through making products that meet current technology forcing the market players to develop flexible systems that come with additional cost.

Hotel industry is an important part of the tourism sector which makes a significant contribution to country's economic development in terms of foreign exchange earnings, government revenues and generation of employment and business opportunities. There

has been a gradual decline of former large and successful hotels like Sarova ,Serena and Hotel English point in Mombasa .www.businessdailyafrica.com (2016) states that there was no five star establishment in Mombasa ‘‘Kenya’s tourism hub’’ in the latest classification. Hotels in Mombasa are facing competition and demand is fluctuating, Gitobu (2014). To counter these challenges, the hotels have adopted different strategies like inventory management practices.

There are several studies conducted by different scholars, globally Lapide (2010) and Mehra (2014) concluded that use of technology in inventory management improved efficiency of manufacturing firms and service firms. Akintonye (2014) found that inventory management led to improved performance of German Service firms. Agu, Ozioma and Nnate (2016) in their study discovered that the organization studied, were applying inventory control though they encountered inventory inadequacy; hence affecting their profitability and consequential effectiveness negatively.

Locally a study by Charles (2014) in service quality and customer satisfaction in hotels in Nairobi identified that satisfied customer tend to return and this enables the hotel to make profit therefore hotels top management main objective is to maximize customers satisfaction. Chesaro (2016) in her study found that supply chain management practices to a great extent enhanced service delivery, improved decision making enhanced overall cost reduction and real time delivery of goods and services. Wafula (2016) determined correlation between inventory management techniques and operation performance in the oil marketing companies in Kenya which revealed that in the 75 oil marketing companies, Just in time, activity based management economic order quantity and vendor managed inventories have positive increase on operation performance.

From the ongoing studies it is clear that research on inventory management practices and operational performance of hotels in Mombasa has been done. Therefore this study aimed at answering; what are the inventory management practices used by hotels in Mombasa, Kenya? What was the relationship between inventory management practices and operational performance of hotels in Mombasa, Kenya? What were the challenges faced when implementing inventory management practices in hotels in Mombasa, Kenya?

1.3 Research Objectives

The study general objective was to evaluate inventory management practices and operational performance of hotels in Mombasa, Kenya. The specific objectives that guided the study included the following;

i. To establish the inventory management practices used by hotels in Mombasa, Kenya.
ii. To determine the relationship between inventory management practices and operational performance of hotels in Mombasa, Kenya.
iii. To determine the challenges faced when implementing inventory management practices in hotels in Mombasa, Kenya.

1.4 Value of Study

The study will serve as a recourses base to academicians, scholars and researchers who are interested in carrying out future research and it will enable them to advance their knowledge on inventory management and operation management especially in hospitality industry and this will narrow the gap.

This study will provide adequate information to hotels like vendor performance which helps managers to make decision on better performing vendors, vendor accountability which enables vendors to be accountable for their actions and order management which helps in preventing overstocking and under stocking situations. Hence helping the hotel to predict demand and supply rate accurately which allows hotels meet their major goals.

To other organization the study will be of value because it will provide information on inventory management practices which will guide other organizations in maintaining optimum levels of inventory hence helping them avoid over or under inventory. This is vital for organizations to meet their goals of profit maximization.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter discusses the theoretical literature review, inventory management practices, operational performance, empirical literature review and summary of empirical literature review, challenges of inventory management in hotels, and the conceptual framework.

2.2 Theoretical Literature Review

Theoretical literature review shows how different theories address issues. The relevant theories to the study are strategic choice theory (SCT), theory of constraints and lean theory which are discussed below.

2.2.1 Strategic Choice Theory

This theory reveals the organization performance, top management choices relationships and interaction of the external and internal organization. The theory stresses on the importance of management decisions on organizational performance Child, (1972). The model aims at achieving high performance standards in order to increase efficiency where there are limited resources. Campling and Michelson, (1998) established a strategic choice model that depicts the interdependence among organizations and environment, actions and the overall firm performance. Child, (1972) stated that the organizations where managers a given powers and authority to make inventory investment decisions and direct on the amounts of inventories to have, then those managers have impact on the outcomes of the organization and performance. The relevance of the theory to the

study is that, it will enable managers to make sound decisions on the right inventory management practices that bring about efficient performance and customer satisfaction.

2.2.2 Constraints Theory

This is a management philosophy and it seeks to increase and improve manufacturing throughput efficiency, measured by sales through the identification of those processes that are constraining manufacturing system. The challenges of constraints theory include; longer lead times, high level of unwanted inventories, large number of unfulfilled orders, and lack of customers engagement Goldratt, (2004).The theory emphasis is to focus on managing the capacity and capability of the constraints effectively in order to improve productivity and this is possible by manufacturing firms, applying appropriate inventory control practices. Theory of constraints applies to production in order to minimize inventory Cooper, (2006).A successful theory of constraints implementation increases profits, improves capacity, reduces lead times and inventory which is key to hotels.

2.2.3 Lean Theory

Lean theory elaborates on how manufacturers can gain flexibility in their ordering decisions, eliminate inventory carrying costs and reduce held stocks of inventory on site. Green and Inman, (2005) assessed the impact of lean theory on financial performance and concluded that it helps in eliminating buffer stock and minimizing production process waste. Eroglu and Hofer, (2011) revealed that profit of a business firm is positively affected by inventory leanness, the best control tool. At the aggregate level, the explanation of the strength of lean lies in timing and magnitude of adoption.

Studies indicate that successful companies optimize inventory through lean supply chains practices to achieve high levels of asset utilization and customer satisfaction leading to profitability, increased growth and market share, Waller, Tangari & Williams, (2008).The criticism that is leveled against this theory is that for its applicability there should be long-term and close collaboration between a firm and the trading partners and consistently sharing of information .Therefore, Lean theory is significant to the effectiveness of hotel inventory control which will enable increase in profitability, productivity and customer satisfaction.

2.2 Inventory Management Practices

The Inventory management practices discussed in this study includes; stochastic model, FIFO, Economic order quantity, ABC Analysis, Radio frequency identification system, Vendor management inventory system, Enterprise resource planning, Just –In –Time, and marginal analysis.

A stochastic inventory model is of stochastic (probabilistic) nature, which means it is a random variable with a probability distribution. The stochastic models represent a certain demand, where its explicit expression is known. The demand function may include not only a linear function, but also a function with a polynomial of general degree n, or any other known function. It is merely dependent on the real situation to be modeled. Croom and Jones (2010) indicate that such model is used for unknown demand. The model is relevant and more realistic.

FIFO is a valuation method for inventory that assumes that the first inventory purchases are sold first. FIFO increases income when older inventory costs are less than newer costs

of inventory on the income statements, Heintz and Parry (2008). FIFO is the best practice for getting the oldest products out the door first and this is essential for items with limited shelf life like food stuffs. FIFO Best practice is to have a ideal warehousing procedures and the best documentation so that when new products are being received the oldest are placed in front.

Economic order quantity concept states that, ordering costs decline with inventory holdings, while the holding costs rise. EOQ is the re-order level of inventory and it enables organizations to plan on a timely basis their inventory replenishment. By doing so, the firms attain minimal cost of storage or zero since inventory is coming in and going out immediately, Onyoni (2013).

ABC analysis helps in determining stock value present in the inventory, Kumar and Soni, (2017). ABC analysis determines which items to be prioritized in the management of firm's inventory, Ramanathan (2006). According to Flores and Clay (2012) A-items always have the highest value of consumption annually while B-items have the medium value of consumption annually and the C items are, on the contrary with lowest annual consumption value. ABC analysis clearly suggests that inventories are not of equal values, Lun, Lai and Cheng (2010). The management can modify the ABC analysis cutoffs to classify inventory.

For radio frequency identification system (RFIDS) the items identification is taken and modern technology is used to read and record the data executed Blanchard, (2010). The process is efficient and effective compared to manual process hence it is useful in

minimizing companies costs. It also enhances the supply chain systems integration through information sharing leading to improved performance.

Vendor management inventory involves outsourcing the stocking of your inventory from a specialized service provider. The key aspect in VMI is communication between the supplier and customer and requires good planning from the start of business relations, Frahm (2003). The communication channel needs to be fast and clear when the supplier and customer interact to avoid stock outs. The customer needs to notify the supplier in case they notice abnormal order levels so that they adjust their production and cater for demand, Onyoni (2015). The use of right technology ensures that the firm offers quality services expected by its customers and reduces the operational costs, Kitheka and Ondiek (2014).

Lambert (2011) states that enterprise resources planning system is part of the integrated supply chain management system of an organization that integrates all the partners. This is a database package that allows companies to develop data that will be used in all applications, Watson and Zhang (2005). Such database together with equipment for developing and extracting ensures effective information movement in the organization. According to Song and Zipkin, (2011) this minimizes supply chain communication costs and improves decision making process since the supply chain partners can share information.

JIT Primary objective of JIT is making Inventory available at right quantity in right price and at the right time. Slack, Chambers and Johnston (2002) divides JIT into philosophy and a series of techniques. The actions of managers are guided by the JIT philosophy by

doing things well and simply, improving constantly, and eliminating waste. The means of attaining the fundamentals that the philosophy prescribes are represented by JIT as a set of techniques. It is vital to implement both philosophies together to attain better performance instead of implementing them separately, Vuppalapati, Ahire and Gupta (1995). Singh and Singh (2013) states that balance between optimum inventory quantity and the holding cost is due to JIT inventory management.

Marginal analysis demonstrates change in net benefit. This model applies when a single ordering decision must be made, and the demand during a given period determines whether the quantity ordered was too little, too much, or just enough. There is a cost associated with underestimating demand and not ordering enough items (Cu),and a cost associated with overestimating demand and ordering too many items (Co),this is a net cost that may be moderated by a ”salvage value” for leftover items that permit some recouping of cost. Jacobs, Berry, Whybark and Vollman, (2011) state that marginal analysis determines that the optimal stocking quantity is found at the point where the expected cost of carrying one more unit exceeds the expected benefit of carrying that unit.

2.3 Operational Performance

Inventory Management is important in the operational performance and growth of the hospitality industry. As stated by Johnson, (2008) the firm is protected by quality inventory management from attaining loses due to poor quality products, disappointed customers and lack of social responsibility. Garvin (1984) argued that internal operational performance relates to internal functioning of hotels such as increase in productivity, improvement in efficiency, reduction in cost and waste. Operations managers are

challenged with finding a way to reduce cost without sacrificing the quality standards required. Operations cost refer to expenses incurred during normal operation of hotels like labor cost ,food cost, energy cost, water cost ,inventory management costs among others, Kimeu (2015).

Lawson, cousins, Handfield and Petersen, (2009) states that the measurement system that is most effective assesses performance in the entire firm's procurement function. The measures of performance include cost, quality, time, supplier performance and customer satisfaction measures. The metrics used in measuring the performance should capture the essence of the procurement function performance. Metrics assignments to the most rightful places should be through a measurement system. Measurement goals should amount to the goals of the function and metrics chosen should strike a balance between financial and non-financial measures that can aid in decision making for effective performance measurement. Profits are an indication of good operational performance.

2.4 Empirical Literature Review

Namagembe, Munene, Muhwezi and Eyaa (2012) studied Information sharing and inventory management and customer satisfaction. The study examined information sharing and customer satisfaction relationship and also determined the variance of customer satisfaction explained by information sharing. The study revealed that manufacturing companies in Uganda have not been able to meet customer expectations due to neglecting information sharing and inventory management. The study was limited to customer satisfaction in Uganda only.

Tungo (2014) studied the influence of inventory management practices on organizational financial performance a case study on national microfinance bank headquarters dar es salaam. The study objectives were; to identify factors affecting inventory management practices in organizations, to determine the effect of inventory management practices on return on equity and to determine the effects of inventory management practices on return on sales. The study found out that, staff skills and knowledge, management involvement in procurement planning, and procurement policies affect inventory management in NMB. The study was limited to financial performance it did not handle operational performance.

Kwadwo (2016) carried out a study on the Impact of Efficient Inventory Management on Profitability; Evidence from Selected Manufacturing Firms in Ghana. The main objective was to examine measures of profitability for efficient inventory management by manufacturers. The study revealed that the efficient management of firms raw material inventory leads to profitability of manufacturing firms. The study did not cover operational performance instead it concentrated on financial performance.

Sharma and Arya (2016)studied Inventory management in manufacturing industry .The objectives were to analyzed the need of inventory control and the inventory control system .The research revealed that better inventory management helps in solving problems that companies face with respect to inventory and help in reducing huge investment in inventory. The study concentrated on manufacturing industry only and did not handle operational performance.

Kungu (2014) studied Information technology and operational performance of firms in the Kenyan hospitality industry .The objectives sought to establish the extent to which information technologies is used in operations in the Kenyan hospitality firms and to determine the relationship between information technology and operational performance. The study revealed that to a large extent the hotels adopted IT and IT services use has improved the operational performance and utilization of IT tools has influence on the organizational performance. The study did not cover inventory management practices it was limited to information technology.

Kamau (2015) investigated influence of inventory management practices on organizational competitiveness; a case of safaricom Kenya ltd. The objectives included; to determine the influence of inventory investment on competitiveness of Safaricom Ltd and to explore the effect of inventory turnover on competitiveness of Safaricom Ltd. It found out that inventory management practices in one way or the other affects profit Maximization and customer satisfaction. This study did not cover operational performance and hotels.

Wafula (2016) studied inventory management and operational performance in the oil marketing companies in Kenya. The research objectives were to establish the inventory management techniques used in the oil marketing companies in Kenya, to examine the challenges diverse oil marketing enterprises experience and also to determine correlation between inventory management techniques and operational performance in Oil Marketing Companies in Kenya. The finding revealed that oil marketing companies in Kenya benefit from sound inventory control management systems. The benefits comprise optimal utilization of allocated resources, reduction of associated costs, enhanced

profitability and effectiveness in sales operations. The study was limited to oil marketing companies only.

Cherosa (2016) studied Supply chain management practices and operational performance of multinational manufacturing firms in Kenya. Objectives of the study were to identify supply chain Management practices used by Multinational Manufacturing Firms in Kenya and to established the relationship of supply chain practices and Operational performance of Multinational Manufacturing Firms in Kenya. The study found that adoption of supply chain management practices to a great extent enhances service delivery, improved decision making enhanced overall cost reduction and real time delivery of goods and services. The study was limited to multinational firms in the manufacturing sector in Kenya only it did not cover inventory management practices.

2.5 Challenges in the Implementation of Inventory Management Practices

The implementation of inventory management comes with a risk factor and every organization should review the inventory management practices advantages and disadvantages since their implementation and the impact vary. Most organizations lack enough financial resources to implement inventory management system. Controlling inventory is vital for it formulates the future of the business in terms of its success/failure as competition is intense.

Karen and Cassady (2009), the study stated that among the barriers for inventory management are inconsistent stocking, maintaining the stock, no experience with inventory management keeping, high fixed and variables cost to operate, and other suggestions for inventory control frequently indifferent to suggestions on ways to

improve inventory management. Studies conducted in inventory management practices have revealed that the causes of ineffective management include the costs incurred by organizations, low level of management commitment and the level of skill the workers have, Mahidin, Saad, Asaad, Yusoff (2015).

2.6 Literature review Summary and knowledge gaps

This section covers summary of literature review by scholars locally and globally, it consists of scholar, study, major findings and knowledge gaps

Table 2.1 Summary of Literature review and knowledge gaps

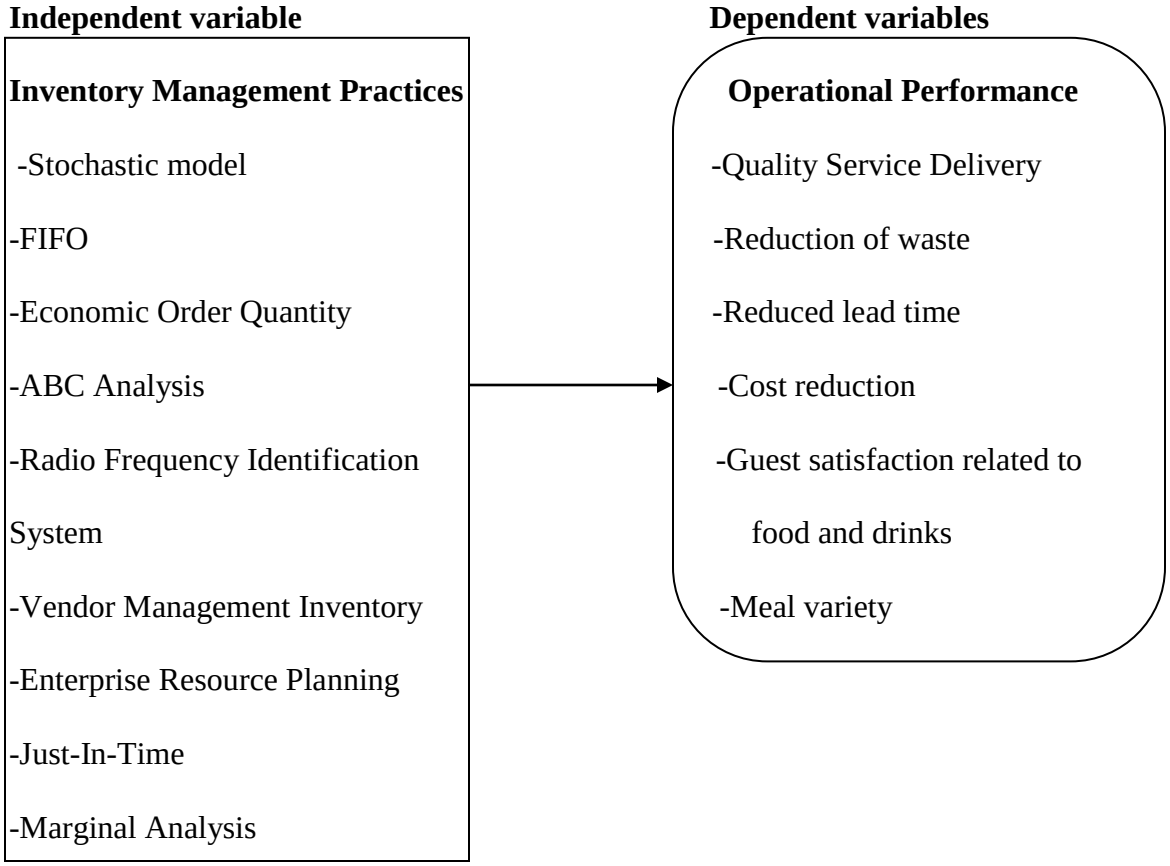
Scholar	Study	Major Findings	Knowledge Gaps
Namagembe et al (2012)	Information sharing and inventory management and customer satisfaction.	Manufacturing companies in Uganda have failed to meet customer expectations due to neglecting information sharing and inventory management.	Study was limited to customer satisfaction in Uganda only.
Tungo (2014)	The influence of inventory management practices on organizational financial performance a case study on national microfinance bank headquarters Dar es Salaam	Staff skills and knowledge, management involvement in procurement planning, and procurement policies affect inventory Management in NMB.	The study was limited to financial performance it did not handle operational performance.
Kwadwo (2016)	The Impact of Efficient Inventory Management on Profitability: Evidence from Selected Manufacturing Firms in Ghana	Efficient management of raw material inventory leads to profitability of manufacturing firms.	The study did not cover operational performance.
Sharma and Arya (2016)	Inventory management in manufacturing industry.	Better inventory management helps in solving problems that companies face with respect to inventory	The study concentrated on manufacturing industry only.
Kungu (2014)	Information technology and operational performance of firms in the Kenyan hospitality industry.	To a large extent the hotels adopted IT and IT services use has improved the operational performance.	The study did not cover inventory management practices.
Kamau (2015)	Influence of inventory management practices on organizational competitiveness; a case of safaricom Kenya ltd.	Inventory management practices in one way or the other affects profit Maximization and customer satisfaction.	The study did not cover operational performance and hotels.
Wafula (2016)	Inventory management and operational performance in the oil marketing companies in Kenya	The finding revealed that variables; Just-in-time, Activity Based Management Economic Order Quantity, and Vendor Managed Inventory have a positive increase in operational performance	The study was limited to oil marketing companies only it did not handle hotels.
Chesaro (2016)	Supply chain management practices and operational performance of multinational manufacturing firms in Kenya	Supply chain management practices to a great extent enhanced service delivery, improved decision making enhanced overall cost reduction and real time delivery of goods and services	The study did not cover inventory management practices.

Source:Author(2017)

2.7 Conceptual Framework

The conceptual framework adopted shows that inventory management practices influences operational performance of hotels. The inventory management practices include; stochastic model, FIFO, economic order quantity, ABC analysis, Radio frequency identification system, vendor management inventory model, enterprise resource planning system and Just in Time. Operational performance indicators are; quality service delivery, reduction of waste, reduced lead time, cost reduction, guest satisfaction related to food and drinks, and meal variety.

Figure 1.1 Conceptual Model



Source: Author (2017)

Hypothesis

Ho: There is no statistically significant relationship between inventory management practices and Operational performance of Hotels in Mombasa, Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discussed the research design, population study, data collection process with the instrument used to collect data and finally the process of data analysis with the tools that were employed in presenting the analyzed data.

3.2 Research Design

The study used Descriptive survey. Descriptive survey was preferred in this study since it was effective in obtaining information concerning phenomena of current status. The purpose of the descriptive survey method is to describe what exists at present with respect to situational variables. Descriptive research helps researcher in collecting data from a population by observing, describing, recording, analyzing and reporting the conditions that operate at that moment, Cooper and Schindler (2006). This research design was useful because it allowed comparative analysis.

3.3 Population of the Study

The population for this study comprised 3star ,4 star and 5 star hotels in Mombasa, Kenya (Appendix II).The study considered 37 hotels, using a census survey of 5 stars, 4star, 3 star hotels in Mombasa as classified by Hotel and Restaurant Authority(HRA).

3.4 Data Collection

Primary data collected by a semi-structured questionnaire was used to get information for quantitative and qualitative analysis for the study. The semi-structured questionnaires had four sections. The first section covered questions about general information about the organization and the respondents. The second section covered questions on the first objective which was to establish inventory management practices used by hotels in Mombasa, Kenya. The third section contained questions on the second objective of this study which was to determine the relationship between inventory management practices and operational performance of hotels in Mombasa, Kenya. Fourth section contained questions on the third objective which was to determine the challenges of implementing inventory management practices by hotels in Mombasa, Kenya. Respondents for the study were senior procurement officers or their equivalents. This group of respondents was selected because they had relevant experience in inventory management concept and how it impacts on performance of hotels in Mombasa. The semi-structured questionnaires used the method of “drop- and- pick later”.

3.5 Data Analysis

Data collected in the questionnaire was extracted and quantitatively analyzed as per the statistical information acquired through the detailed research questions as follows; demographic information, the extent of inventory management practices application, relationship between inventory management practices and operational performance and challenges faced while implementing inventory management practices. The data results were presented in tables. The study employed regression equation to evaluate the correlation between inventory management practices and operational performance in

hotels in Mombasa Kenya. Regression model consists; The independent variables: inventory management practices (Stochastic, FIFO, Economic Order Quantity, ABC Analysis, Radio Frequency Identification System, Vendor Management Inventory, Enterprise Resource Planning, Just In Time, Marginal Analysis and the dependent variable Operational performance as provided in the model below.

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5 + b_6 X_6 + b_7 X_7 + b_8 X_8 + b_9 X_9 + e$$

Where;

Y = Operational Performance

a = Y intercept when x is zero (Constant)

b_1, b_2, b_3 and b_4….. = Regression Coefficients

$X_1 \ldots X_n$ = Independent variables

X_1 = Stochastic model

X_2= FIFO

X_3= Economic Order Quantity

X_4 = ABC Analysis

X_5= Radio Frequency Identification System

X_6 = Vendor Management Inventory

X_7= Enterprise Resource Planning

X_8 = Just In Time

X_9= Marginal Analysis

€ = Error

The table below gives a summary of how the data collected was analyzed as per the objectives of the study.

Table 3.1 Data Collection and Analysis Summary

Objectives	**Data collection**	**Data Analysis**
General information	Section A of questionnaire	Descriptive Statistics
Objective 1	Section B of questionnaire	Descriptive Statistics
Objective 2	Section C of questionnaire	Regression Analysis
Objective 3	Section D of questionnaire	Descriptive Statistics

Source: Author (2017)

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND INTERPRETATION

4.1 Introduction

This chapter consists of data analyzed; this is demographic information and study objectives which were; to establish the inventory management practices used by hotels in Mombasa, Kenya, to determine the relationship between inventory management practices and operational performance of hotels in Mombasa, Kenya and to determine the challenges faced when implementing inventory management practices in hotels in Mombasa, Kenya.

4.2 Response Rate

Out of 37 questionnaires distributed, 34 of them were filled and successfully returned for analysis. This translates to 92 % response rate which is considered high enough to represent all the hotels in Mombasa, Kenya.

4.3 General Information

This section provides demographic information of the respondents and the organization. The information is important in evaluating whether the respondents are qualified to give reliable information relevant to the study objectives.

4.3.1 Star Classification of Hotel

The study sought to determine star classification of hotels in Mombasa, Kenya in order to find out the star that uses inventory management practices most, the findings are presented in table 4.1 below;

Table 4.1 Hotel Star classification

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3 star	22	64.7	64.7	64.7
	4 star	8	23.5	23.5	88.2
	5star	4	11.8	11.8	100.0
	Total	34	100.0	100.0	

Source: Research data (2017)

From the above findings the response indicates that 64.7% of the hotels are 3 stars, 23.5% are 4 stars and 11.8% are five stars. Therefore, it can be concluded that 3 stars hotels are more in numbers compared to other stars.

4.3.2 Ownership of Hotel

This study sought to determine the number of public and privately owned hotels in Mombasa, Kenya. The findings are presented below in table 4.2;

Table 4.2 Hotel Ownership

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	public	1	2.9	2.9	2.9
	private	33	97.1	97.1	100.0
	Total	34	100.0	100.0	

Source: Research data (2017)

The response indicate that 2.9% are the publicly owned hotels in Mombasa Kenya and privately owned hotels are 97.1%, hence from findings it can be concluded that majority of hotels in Mombasa Kenya are privately owned.

4.3.3 Duration of Operation

The study sought to find out the duration of Hotel operation in order to rate, whether it was long enough for the Hotel to have adequately used inventory management practices. The results findings are presented below in the table 4.3:

Table 4.3 Duration of Operation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 10 years	15	44.1	44.1	44.1
	more than 10 years	19	55.9	55.9	100.0
	Total	34	100.0	100.0	

Source: Research data (2017)

From the table above, 56% of the respondents indicated that more hotels in Mombasa have operated for a period of more than ten years and 44% have operated for less than 10 years. It can therefore, be concluded that most hotels in Mombasa have operated for a period of more than 10 years, hence implying that they used inventory management practices for a long period.

4.3.4 Position of Respondents

The respondents indicated the position that they served which helped in finding out if they were qualified to give information with regard to the inventory management practices and operational performance of hotels in Mombasa. The results findings are presented below in table 4.4;

Table 4.4 Positions of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	procurement manager	18	52.9	52.9	52.9
	operations manager	6	17.6	17.6	70.6
	others	10	29.4	29.4	100.0
	Total	34	100.0	100.0	

Source: Research data (2017)

The respondents indicated that 53% worked as procurement managers, 29% of the respondents served as operations manager while 17% of the respondents served on other positions of accounts and cashier. From the findings it can be concluded that, most of the respondents working for hotels in Mombasa Kenya had a relevant experience in inventory management.

4.3.5 Education Level

The study sought to find the education level of the respondents and determine if they understood inventory management practices and how these practices contributed to operational performance of Hotels in Mombasa. The results of findings are presented below in the table 4.5;

Table 4.5 Education Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	masters	6	17.6	17.6	17.6
	degree	7	20.6	20.6	38.2
	diploma	12	35.3	35.3	73.5
	certificate	6	17.6	17.6	91.2
	others	3	8.8	8.8	100.0
	Total	34	100.0	100.0	

Resource: Research data (2017)

The findings shows 35% had diplomas, 21% of the respondents had degree, 18% of the respondents had certificates, and 18% of the respondent's attained master degrees while 9% of the respondents had other qualification. This is an indication that most of the respondents understood inventory management practices in hotels in Mombasa.

4.3.6 Length of Service

The study sought to find the duration the respondents served in the Hotel. This was intended to determine whether the respondents had a relevant working experience in the field of inventory management practices. The results are shown below in the table 4.6;

Table 4.6 Service Length

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	10 years and below	21	61.8	61.8	61.8
	more than 10 years	13	38.2	38.2	100.0
	Total	34	100.0	100.0	

Source: Research data (2017)

It was found that 62% of the respondents worked for a period of 10 years and below and 38% of the respondents worked for more than 10 years. The findings gave an implication that most of the respondents who responded had experience in inventory management practices in hotels in Mombasa, Kenya.

4.4 Inventory Management Practices

The study sought to determine inventory management practices used by hotels in Mombasa, Kenya and the extent to which they are used. The results of findings are in table 4.7 below;

Table 4.7 Inventory Management Practice

	N	Mean	Std. Deviation
FIFO	34	4.4118	1.10420
Marginal Analysis	34	3.7059	.79884
ERP	34	3.5294	.99195
EOQ model	34	3.1471	1.23417
Just In Time	34	3.0588	.98292
VMI	34	3.0588	1.04276
ABC Analysis	34	2.7059	1.08793
Stochastic model	34	2.5000	1.18705
RFIS	34	1.8824	1.38749
Valid N (list wise)	34		

Source: Research data (2017)

Table 4.7 ranks inventory management practices used by the hotels in Mombasa Kenya in a descending order that is the most practice used to the least used. It indicates that FIFO was highly used practice with a mean of 4.41 response rate, while marginal analysis, ERP, EOQ model, Just in Time and VMI had a mean of 3.71, 3.53, 3.15, 3.06 and 3.06 response rate respectively hence implying that, they were used to a large extent. ABC Analysis and stochastic model were moderately used with a mean of 2.71 and 2.5 response rates respectively while RFIS was used to a very small extent with mean of 1.88 response rate. These finding are consistent with the study by Kitheka, (2012) who indicated that RFIS was least implemented in public hospitals in Nairobi County. On the other hand it is in contradiction with the study by wafula, (2016) who found that VMI were used in inventory management to enhance operational performance to a very high extent.

4.5 Inventory Management Practices and Operational Performance of Hotels in Mombasa, Kenya

The second objective of this study was to establish the relationship between inventory management practices and operational performance of hotels in Mombasa, Kenya, and analysis to evaluate the extent of the relationship are presented by the tables below;

4.5.1 Model coefficient

The regression equation shows the results of the relationship below. The values in column B represented the extent to which the value of predictor variables brings about change to the value of dependent variable. The other column shows significance level of the study variables.

Table 4.8 Model Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.516	1.129		2.228	.036
	Stochastic model	.050	.133	.070	.377	.710
	FIFO	-.018	.146	-.023	-.120	.905
	EOQ model	-.050	.130	-.073	-.387	.702
	ABC Analysis	-.113	.142	-.144	-.794	.435
	RFIS	-.169	.113	-.276	-1.501	.146
	VMI	-.060	.151	-.073	-.395	.696
	ERP	.442	.147	.515	3.008	.006
	Just In Time	.126	.149	.146	.847	.405
	Marginal Analysis	.139	.187	.131	.745	.464

Source: Research Data (2017)

a. Dependent Variable: operational cost reduction

The regression model obtained for this study is as follows;

$Y=2.516 + .050 X_1 -.018 X_2 - .050 X_3 -.113 X_4 - .169 X_5 -.060 X_6 + .442 X_7 + .126 X_8 + .139 X_9$

The regression model obtained showed a +ve relationship between stochastic Model, ERP, and Just in Time and marginal analysis with operational performance of hotels in Mombasa Kenya. This implies that holding all other factors constant a unit increase in one of the variables obtained in the regression model results to an increase in operational performance of hotels in Mombasa Kenya.

FIFO, EOQ, ABC Analysis, RFIS and VMI showed a negative relationship with operational performance of hotels in Mombasa Kenya. This was in contradiction with Wafula, (2016) findings that showed that EOQ, ABC and VMI had positive correlation with operational performance.

Significance Testing

The model was subjected to statistical significant tests to establish the significance of inventory management practices. The analysis was calculated at 5% significance level. To compare if the predictor variable is significant in the model, the probability value and z value was used. If the probability value is ≤ 0.05 and z critical is ≥ 1.96, then the predictor variable is significant. The regression results observed that Stochastic model, FIFO, EOQ Model, ABC Analysis, RFIS, VMI, Just In Time and marginal analysis were statistically not significant since their probability values obtained from the regression model were above 0.05 and z critical value were below 1.96, their p-values are 0.710, 0 .905, 0 .702, 0.146, 0.696, 0.405 and 0.464 respectively. On the other hand ERP was statistically significant since the p-value was less than 5%, p=0.006 and z critical=3.008.

4.5.2 Coefficient of Determination, R^2

Table 4.9 is model summary illustrating variation in the value of the dependent variable. The findings are provided below in table 4.9:

Table 4.9: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.612[a]	.374	.139	.78920

Source: Research data (2017)

From this table R^2 was 37.4 %, this means that 37.4% variation in operational performance of hotels in Mombasa, Kenya was explained by the variation in the predictors in the model. Thus 62.6% variation in operational performance of hotels in Mombasa, Kenya was due to other predictors not in the regression model and chance variation. This contradicts the findings of wafula, (2016) which revealed that 81.7% performance change in equitable operational could be accounted by inventory management techniques.

4.5.3 F-Test for the Full Model

The ANOVA was conducted to determine the significance of the relationship among the variables in the regression model. The findings are presented in table 4.10 below;

Table 4.10 Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.934	9	.993	1.594	.173[b]
	Residual	14.948	24	.623		
	Total	23.882	33			

Source: Research data (2017)

The numerator for α = 5% whose df =9, denominator df =24 and critical F value is 2.703. From the findings the computed F value is 1.594.hence, the regression model is not significant since the critical F value exceeds the computed F-value that is 2.703 > 1.594. This is consistent with the P value =17.3% which is greater than 5%. This implies that, all the independent variables considered together do not provide a significant level of explanation of the relationship between inventory management practices and operational performance of hotels in Mombasa Kenya. These findings contradict with a study by Kitheka (2012) whose regression results shows a statistically significant relationship between inventory management automation and performance of supermarkets in Kenya. Wafula, (2016) findings in analysis of variance revealed that the model was statistically significance in predicting how just in time, ABC Analysis, EOQ and VMI affect the operational performance of oil marketing firms with hence contradicting above findings.

4.6 Challenges in the Implementation of Inventory Management Practices

The final objective of this study sought to determine the challenges faced by hotels in Mombasa, Kenya in the implementation of inventory management practices. The result findings are presented below in table 4. 11:

Table 4.11 Challenges in the Implementation of Inventory Management practices

	N	Mean	Std. Deviation
Lack of proper training	34	2.9118	1.42207
Incompetent staffs	34	2.7059	1.36025
Failure to invest in modern technologies	34	2.6176	1.57662
Unreliable suppliers	34	2.2941	1.00089
Poor record keeping	34	2.2353	1.53857
Lack of commitment by the top management	34	1.7353	.99419

Source: Research data (2017)

From the above findings, the respondents indicated that the major challenge faced by hotels in Mombasa Kenya in the implementation of inventory management practice was lack of proper training with a mean of 2.91.Incompetent staffs, failure to invest in modern technologies, unreliable suppliers and poor record keeping were challenges facing the hotels in Mombasa Kenya to a moderate extent with a mean of 2.71, 2.62, 2.29 and 2.24 response rate respectively while lack of commitment by top management was a challenge to a very small extent with a mean of 1.74 response rate. Their standard deviations were as follows 1.422, 1.360, 1.576, 1.000, 1.538, and 0.994 respectively.

The findings were in line with a study by wafula, (2016) who explains that lack of proper employee training on inventory management affects implementation of inventory management techniques to a very large extent.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter covers a comprehensive review of the major findings that were drawn from chapter four. These findings were intended to answer; the inventory management practices used by hotels in Mombasa, Kenya, the relationship between inventory management practices and operational performance of hotels in Mombasa, Kenya And the challenges faced when implementing inventory management practices in hotels in Mombasa, Kenya. The chapter was structured as follows: Summary, conclusion of the study, recommendations from the study, limitations and suggestions for further research.

5.2 Summary of Findings

Most hotels in Mombasa Kenya had operated for a period of more than 10 years, hence implying that most hotels in Mombasa used inventory management practices for a long period. FIFO was mostly used in hotels in Mombasa with average score of 4.41 while Economic order quantity model, ABC analysis, radio frequency identification, vendor management inventory, just-in-time and marginal analysis had 3.15, 2.71, 1.88, 3.06, 3.53, 3.06, 3.71 average score respectively. RFIS was used to a very small extent, these finding were in line with the study by Kitheka, (2012) who indicated that RFIS was least implemented in public hospitals in the county of Nairobi.

The findings revealed that stochastic Model, ERP, Just in Time and marginal analysis had positive relationship stochastic Model, ERP, Just in Time and marginal analysis with operational performance of hotels in Mombasa while FIFO, EOQ, ABC Analysis, RFIS and VMI showed a negative relationship. The regression results observed that Stochastic model, FIFO, EOQ Model, ABC Analysis, RFIS, VMI, Just In Time and marginal analysis were statistically not significant since their probability values obtained from the regression model were above 0.05 and z critical value were below 1.96, their p-values are 0.710, 0 .905, 0 .702, 0.146, 0.696, 0.405 and 0.464 respectively. On the other hand ERP was statistically significant since the p-value was less than 5%, p=0.006 and z critical=3.008.

The regression model was not significant since the P value = 0.173 was greater than 5%. This implied that, independent variables of the study do not provide significant level to explain inventory management practices and operational performance of hotels in Mombasa, Kenya relationship. The findings revealed 37.4 % variation in operational performance of hotels in Mombasa Kenya which was explained by predictors in the model. However 62.6% variation in operational performance was due to other factors not in the regression model.

The major challenge faced by hotels in Mombasa in the implementation of inventory management practice was lack of proper training with a mean of 2.91.Incompetent staffs, failure to invest in modern technologies, unreliable suppliers and poor record keeping were challenges facing the hotels in Mombasa to a moderate extent with a mean of 2.71, 2.62, 2.29 and 2.24 response rate respectively while lack of commitment by top management was a challenge to a very small extent with a mean of 1.74 response rate.

Their standard deviations were as follows 1.422, 1.360, 1.576, 1.000, 1.538, and 0.994 respectively. The findings were in line with a study by wafula, (2016) who explains that lack of proper employee training on inventory management affects implementation of inventory management techniques to a very large extent.

5.3 Conclusion

The study concludes that most hotels in Mombasa Kenya had operated for a period of more than 10 years, hence implying that they used inventory management practices for a long period. The study further concludes that FIFO was the most inventory management practice used in hotels in Mombasa, while marginal analysis, ERP, EOQ model, just in time and VMI were used to a large extent and ABC Analysis and stochastic model were moderately used and RFIS was used to a very small extent.

Further the study concludes that the major challenge faced by hotels in Mombasa in the implementation of inventory management practice was lack of proper training. Incompetent staffs, failure to invest in modern technologies, unreliable suppliers and poor record keeping were other challenges facing the hotels in Mombasa to a moderate extent. Lack of commitment by top management was a challenge to a very small extent.

5.4 Recommendations from the Study

This study recommends the hotels to put more emphasis on creating forums to train and equip their staff with skills of inventory management and build the capacity of existing supply chain staff and or hire a team of competent supply chain management staff who can effectively manage hotel inventory systems. This will cut costs, reduce wastage and ultimately improve the effectiveness of hotels in Mombasa, Kenya.

The study recommends that the hotels should invest in modern information technologies that will provide and increase information sharing, reduce operational costs and ultimately improve the delivery of quality services in the hotels.

The researcher suggest that the government of Kenya allocates more funds to hotels in Mombasa to invest in modern information technologies which will account for hotel inventories accurately reducing the wastage and lead time. On the other hand, the government should also train both public and private hotels procurement officers on procurement procedures and inventory control to ensure smooth operational performance in hotels in Kenya.

5.5 Limitations of the Study

The purchasing and supplies department of hotels are busy during morning hours, this is due to order arrival in the morning and issuing of products to be used by kitchen department hence it was impossible to meet the procurement manager in the morning hours hence taking me a lot of time and patience for the questionnaires to be filled.

The study was limited to hotels in Mombasa only due to costs and time constraints. It would have been important for future researchers to consider researching on inventory management practices and operational performance in hotels in Kwale, Kilifi, Lamu, Taita Taveta counties to find out whether these findings stand out.

The researcher did not have any control over the filling process of the questionnaires. Some of the respondents refused to fill the questionnaires while others hotels could not allow access to procurement manager and others did not complete filling the questionnaires even after follow-ups. This negatively affected the accuracy of the study findings.

The other challenge that was faced by the researcher was that some of the respondents especially the head of supply chain delegated filling and completion of the questionnaires to their juniors who do not have similar experience and qualifications as compared to their managers. This might have affected the accuracy and findings thereof obtained in this study. The hotels from which data was collected were far apart so the researcher had to cover long distances, which was not easy especially where numerous follow ups were required. The researcher had to create additional time to work on the project, perfect on her APA skills and data analysis. This was not easy given the strict deadline for the defense and final project submission as per the schedule followed by the University of Nairobi.

5.6 Suggestions for Further Research

There is need to replicate the study to other counties across the country other than Mombasa to know the extent of implementation of inventory management practices and their operational performance. This will create a platform to make a comparison on the findings upon which reliable conclusion can be made based on solid facts.

A comparative study should be conducted between all stars of the hotels on the inventory practices they use and how they are cost effective to operational performance to each hotel. This will allow comparison, borrowing and adoption and implementing of some of the best inventory management practices that are competitive and compatible with the hotel needs.

Moreover, it would be interesting to investigate the extent to which private hotels implement inventory management practices compared to public hotels and what to learn

from each other in relation to operation cost reduction and quality service delivery; this will provide insights into areas for improvement for the hospitality sector as a whole.

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APPENDICES

APPENDIX 1: RESEARCH QUESTIONNAIRE

INTRODUCTION

The questionnaire is basically for data collection on inventory management practices and operational performance of hotels in Mombasa, Kenya. The overall purpose of the data collected shall be for academic furtherance and it will be confidential.

SECTION A: GENERAL INFORMATION

The Hotel name……..

1. Star classification of the Hotel…….
2. The Ownership of the Hotel.
   i. Public [ ]
   ii. Private [ ]
3. Duration that the Hotel has been operating.
   i. Less than 10 years [ ]
   ii. More than 10 years [ ]
4. The position you hold in this Hotel?
   i. Procurement manager [ ]
   ii. Operations manager [ ]
   iii. Any other (specify)……
5. What is your highest professional qualification in supply chain management?
   i. Masters [ ]
   ii. Degree [ ]
   iii. Diploma [ ]
   iv. Certificate [ ]
   v. Any other (specify)……
6. Duration that you have served in this position.
   i. 10 years and below [ ]
   ii. More than 10 years [ ]

SECTION B: INVENTORY MANAGEMENT PRACTICES IN HOTELS IN MOMBASA, KENYA

Please indicate the extent that you use an inventory management practices in your Hotel. The scale applicable will be: 1 = NOT at all, 2 = to a small extent, 3 = to a moderate extent, 4 = to a large extent and 5 = to a very large extent.

NO	INVENTORY MANAGEMENT PRACTICE	1	2	3	4	5
1	Stochastic model					
2	FIFO					
3	Economic Order Quantity Model					
4	ABC Analysis					
5	Radio frequency identification					
6	Vendor Management Inventory					
7	Enterprise resource planning					
8	Just in Time					
9	Marginal Analysis					

Any other (specify)……

SECTION C: RELATIONSHIP BETWEEN INVENTORY MANAGEMENT PRACTICES AND OPERATIONAL PERFORMANCE OF HOTELS IN MOMBASA, KENYA

Please indicate the relationship that exists between inventory management practices on operational performance of hotels in Mombasa. Following rating are applicable; 5= strongly agree, 4= Agree, 3= neither neither agree nor disagree, 2= Disagree and 1=strongly disagree.

No	Statement	1	2	3	4	5
	Stochastic					
1	Use of stochastic helps in making business decision					
2	Stochastic helps in measuring and analyzing risk of our business					
	FIFO					
1	Use of FIFO reduces obsolete inventory					
2	FIFO reduces inflationary impact felt by company as the oldest inventory items are used					
	Economic Order Quantity					
1	Use of EOQ model minimizes operational cost					
2	Use of marginal analysis techniques helps control optimal stock levels of perishable goods					
	ABC Analysis					
1	Use of ABC leads to efficient management of resources					

2	ABC reduces stock holding costs					
	Radio Frequency Inventory System					
1	Use of RFID improves effectiveness in stock management					
2	Use of barcodes in tracking stock items has enhanced availability of items					
	Vendor Management Inventory System					
1	Use of VMI has enhanced supplier relations partnership					
2	Use of VMI reduces stock out cost					
	Enterprise Resource Planning					
1	Use of ERP improves planning for inventory					
2	Use of ERP has led to improved inventory accuracy					
	Just In Time					
1	Use of JIT improves timely delivery of goods and services					
2	Use of JIT improves quality					
	Marginal Analysis					
1	Use of marginal analysis helps in making business decision					
2	use of marginal analysis helps to find optimal amount of production					

Other (specify)…….

SECTION D: CHALLENGES FACED WHILE IMPLEMENTING INVENTORY MANAGEMENT PRACTICES

Please indicate the challenges faced by your Hotel in implementation of inventory management practices. Using the following rating please tick appropriate box in the following order, 5 for strongly agree, 4 for Agree, 3 for neither neither agree nor disagree, 2 for Disagree and 1 for strongly disagree.

No		5	4	3	2	1
1	Failure to invest in modern technologies					
2	Poor record keeping					
3	Unreliable suppliers					
4	Lack of commitment by the top management					
5	Incompetent staffs					
6	Lack of proper training					

Other (specify)…….

Source: Author (2017)

THANK YOU

Appendix II: List of 3, 4, and 5 stars hotels in Mombasa Kenya

	3 STARS		4 STARS		5 STARS
1	Pride Inn Nyali	1	Flamingo beach resort and spa		
2	Nyali Beach Holiday Resort	2	Travelers beach hotel		
3	Baobab holiday resort	3	Serena beach resort and spa		
4	Bahari beach hotel	4	Severen sea lodge		
5	Continental hotel	5	Pride Inn paradise beach hotel		
6	Bamburi beach hotel	6	Hotel English point		
7	Neptune beach hotel	7	Cowrie shell beach		
8	Savanna cottages	8	Best western plus creekside hotel		
9	Milele beach hotel	9	Pride inn hotel		
10	Kahama hotel	10	Coast gate hotel		
11	Nyali international beach hotel and spa	11	Voyager beach resort and spa		
12	Dolphin beach hotel	12	Hotel radiance		
13	Lido hotel	13	Sarova whitesands beach resort		
14	Nightingale apartments	14	Sentrim castle royal hotel		
15	Reef hotel	15	Mombasa beach hotel		
16	Sun Africa beach resort	16	English point		
17	Sanana conference center and holiday resort				
18	The shaza				
19	Eden resort and spa				
20	Kenya bay beach hotel				
21	Sunset paradise holiday homes				

Source: www.hotels.com/mombasa/hotel