SUPPLY CHAIN RISK MANAGEMENT AND PERFORMANCE OF HOTELS IN KENYA

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DECLARATION

This research project is my original work and has not been presented in any other university or college for award of degree, diploma or certificate.

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This research project has been presented for presentation with my approval as the authorized university supervisor.

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DEDICATION

I dedicate this research paper to my beloved mother, wife and son whose constant and continuous support made it possible for me to complete the postgraduate course and this research project.
ACKNOWLEDGEMENT

I take this opportunity to thank all those who contributed to the completion of the study. Special gratitude is reserved to my supervisor Onserio Nyamwange whose guidance made this research a learning process through his valuable comments, advice, criticism and time. His patience with me was encouraging.

I wish to also thank my lecturers in the School Of Business, University Of Nairobi who assisted me with their intellectual insight and nurtured me academically all the way through.

I also owe it all to the respondents who made the study possible.
ABSTRACT

The research sought to establish the supply chain risk management and performance in three to five star hotels in Nairobi, Kenya. It identified the imperatives for implementation of comprehensive supply chain risk management. A total of 18 hotels were sampled. The research shows that effective supply chain risk management can improve organizational performance but there will be need for adequate infrastructure to be available in companies for implementing SCRM. It was found that the evaluation of risk came out as the major supply chain practice that most of the hotels were using to manage their supply chain risks. The study also shows the implementation of SCRM requires various structural measures to align risk management, strategic planning, information system and organizational culture together in order to realize the better outcome. The influence of SCRM practices on the performance of the hotels supply chain was found through the regression equation, to be positively correlated with the firms supply chain. There was also a little collinearity between the dependent variables found in the study. Risk in the supply chain is explored in terms of risk/performance, drivers, consequences and management responses. The key to effective SCRM is the ability to establish long term strategic relationships with supply chain partners. Practitioners should work to fully develop power, benefits and risk reduction linkages with partners within their specific supply chains in order to maximize value to the ultimate customers of the supply chain.
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CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

The present day business environment is characterized by complexity of operations, specialization, and disintegration of business operations and with these changes come business risk. Risk management in an organizational supply chain is emerging as a major challenge having made them vulnerable to disturbances from both inside and outside the system. Indeed, many recent events have shown how vulnerable long and complex supply chains are. In this context, the quality and competitiveness of individual companies’ operations depend on their ability to identify and mitigate the uncertainties and risks they encounter (Rao and Goldsby, 2009). Supply chain risk management concerns risk as a situation entailing exposure to two essential components: an event and the uncertainty concerning the possible outcomes (Sheffi, 2005). Thus, risk evaluation of a firm was based on the likelihood of the occurrence of the risk situation, and on the kind of damage it might entail if realized. The different types of risk are extensively covered in the relevant literature, but analysis of the concept of risk itself is very limited.

The primary benefit of a risk-based approach to strategic execution was that it allows managers to focus on the opportunities outlined in their firms' strategic plans, while at the same minimize the potential impact of any threats on the firms supply chain. A risk-based management control system allows managers to quickly and confidently react to opportunities (or threats) (Berinato, 2004). Kersnar (2009) notes that another notable advantage of systematically integrating risk into the management control system was that
firms achieve higher stock prices if its managers effectively demonstrate to financial analysts that they understand risk and are managing it (Kaplan and Norton, 2008). Further, Lam (2003) noted that nearly all operational tasks and processes are now viewed through the prism of risk. It was thought that it is not possible to create a business that doesn’t take risk. Thus the end result of successful strategic direction setting must be the capacity to take a greater risk, for this was the only way to improve entrepreneurial performance.

A firms supply chain risk strategies should establish guidelines to include; organizations responsibilities, organizations risk attitudes, ownership of specific risks, criteria of risk assessment and definition of critical risks (Bernstein, 2006). In addition, a firm can include creative risk financing solutions, lending financial, insurance and capital market strategies. Opportunities should be capitalized upon in most circumstances. Not taking advantage of opportunities lead to growth of competitors and thus increased risks. If opportunities are pursued, enterprise strategy can be modified to manage the particular risks involved (Goh et al. 2007). The tenets of risk management must be ingrained within a corporate culture in order for such practices to be effective (Gillett, Fink, and Bevington, 2010).

1.1.1 Supply Chain Risk Management

A firm’s supply chain comprised of a series of activities and processes through which material and information move on their way to the final customer. Peck (2005) described
supply chain vulnerability in this context as exposure to serious disturbance arising from risks within and external to the chain. According to Stulz (1990), vulnerability reflects the susceptibility of a supply chain to disruption, and was a consequence of risks in it. Ju (2005) on his part content that supply chain vulnerability as the propensity of risk sources and drivers to outweigh risk-mitigating strategies, thus causing adverse consequences in the chain and jeopardizing its ability to effectively serve the end customer market. Consequently, supply chain risk management, was a function that aims to identify the potential sources of risk, and to implement appropriate actions to avoid or contain supply chain vulnerability (Narasimhan and Talluri, 2009).

Supply chain risk was commonly considered as a threat that something might happen to disrupt normal activities and that would stop things happening as planned. Stulz (1990). Indeed, risk has been defined by most of the literature as negative consequence, leading to undesired results or consequences. Hetland (2003) view risk as an implicitly uncertain phenomenon. Stulz (1990) explained the difference, suggesting that a risk occurs because there was a certain type of uncertainty about the future. In this traditional risk management context, uncertainty means that unexpected events may occur, but they can be quantified and therefore managed unlike uncertainty which reaches far beyond the traditional conception of risk. Smith, et al. (1985) define supply chain uncertainty as “decision making situations in the supply chain in which the decision maker does not know definitely what to decide as he was indistinct about the objectives; lacks information about its environment or the supply chain; lacks information processing
capacity; was unable to accurately predict the impact of possible control actions on supply chain behavior or, lacked effective control actions.”

Risk management is a process, effected by an entity’s board of directors, management and other personnel (everyone), applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risks to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives, which made it a practice of the organization (Jorion, 2001). Risk was unavoidable in the business activity since economic activity by definition commits present resources to the uncertain future. Hence, to take risk was the essence of economic activity. Business yields greater economic performance only through greater uncertainty, or in other words taking greater risk. (Drucker, 1977, p.256).

Mitchell (1995) point that loyalty to existing suppliers was a risk-reducing strategy and at the same time partnership formation, building strategic alliances, supplier development and developing supplier performance measurement systems will help in the reduction of risks in an organizations supply chain. In a similar vein, some authors show how agency theory can be used to develop risk-sharing strategies (Zsidisin and Ellram, 2003). Agency theory offers a number of approaches to managing risk, including co-operation – working together for mutual benefit to reduce conflict; and information-sharing – to reduce the risk of either party trying to take advantage of the other.
1.1.2 Supply Chain Performance

Supply chain performance refers to the evaluation of supply chain management, and includes both tangible and intangible factors (Presutti, 2003). On the other hand, E-procurement was an electronic procurement system. The wider application context of e-procurement system was e-business. E-business refers to the implementation of business activities through digital technologies over the internet (Amit and Zott, 2001). E-procurement system can improve the effectiveness of operation processes and the transparency of the supply chain (Puschmann and Alt, 2005). It could therefore be implied that an e-procurement system is more pivotal than other e-business applications when studying supply chain performance since in the current economic environment, a value creation perspective was important for improving supply chain performance (Wiengarten et al., 2010).

A procurement system was a vital component of a company’s supply chain system. Typically, a company’s procurement function was subdivided into strategic and operational processes since activities and priorities in these two areas are entirely different (Turban et al., 2000). Supplier management, the pooling of purchase requisitions and procurement-oriented product development are tasks that were typically assigned to strategic procurement. E-procurement enables companies to decentralize operational procurement processes and centralize strategic procurement processes as a result of the higher supply chain transparency provided by E-procurement systems. Strategically, e-procurement helped to consolidate purchasing practices that lead to
greater discounts and better service from suppliers, Accelerate the flow of important information between the buyer and supplier, reduce administrative hours, freeing them up to do other work, help to respond quickly to highly competitive new market entrants and improve the chances of winning new business (Eng, 2004).

1.1.3 Three to Five Star Hotels in Nairobi

Nairobi has the best selection of tourist hotels ranging from modest accommodations right up to five-star luxury (KHTA 2014). Nairobi’s 3-5 star hotels are mainly located at its town center or nearby surroundings which makes access and transportation easier.

These hotels offer superior amenities and luxurious services; they also offer a choice of bars, restaurant and state of the art gyms, steam, and sauna facilities. The products and services in these hotels are rated top notch and the cost is high (KHTA 2014). This is due to the quality of staff and their high pay scales. The nature of equipment’s and operating tools are sophisticated to match the fitness anticipated by the patrons. The owners also invest so much in value addition. The levels of the maintenance of the facilities are very high, partially due to the annual audit for star rating by the hotels and restaurants in Kenya. These are also referred to as exclusive hotels. Most of these hotels are part of international hotel chains and employ international expertise for top position. This is a strategy employed in order to ensure that they apply their knowledge of international standards which gives a competitive advantage.
The management of such 3-5 star hotels attaches very high value to exceeding customer expectation, which in turn becomes their competitive advantage. There is continuous monitoring of customer service satisfaction index through guest feedback (KHTA 2014). This will enable the hotels to gauge how their customers rate and whether they would prefer to be their guest again. Customer service satisfaction involves internal and external capabilities.

1.2 Statement of the Problem

An organization's supply chain was a source of competitive advantage. Effective configurations of a firm's supply chain provide access to cheap labor and raw materials, better financing opportunities, larger product markets, arbitrage opportunities, and additional inducements offered by governments to facilitate setting up of firms in their locations (Kogut and Kulatilaka, 1994). However, coupled with these benefits that a firm enjoys an efficient supply chain was the uncertainties and consequent risks that manager’s face in the normal operations of a firm. As Stulz (1990) argues, “An enterprise may have lowest overall costs in a stable world environment, but may also have the highest level of risk – if any one of the multiple gating factors kink up an elongated global supply chain!” As a consequence of the inherent level of risk, most firms develop risk mitigating process, but as Chopra and Sodhi (2004) contend most companies develop plans to protect against recurrent low-impact risks in their supply chains, but many more ignore the high-impact, low-likelihood risks. Therefore it was incumbent upon a firm's management to understand the variety and interconnectedness of supply chain risks so
that they can tailor balance, effective risk-reduction strategies for their companies. Hauser (2003) suggests that in today’s increasingly complex environment, risk adjusted supply chain management can translate into improved financial performance and competitive advantage.

The accelerated competitions as well as the ever increasing consumers demand for value has pushed three to five star hotels to create value through efficient use of limited resources and adoption of efficient supply chain risk management. More recently, there has been increased travel advisory being issued by western countries due to security concerns, and considering that this has come from the traditional tourist countries, its effect in the local tourism industry has been significant (KHTA, 2014). The hotels have registered declined bookings and with increased taxation that was raised in the 2013/2014 budget, the Kenyan hotels have had to adjust to reduced profits. This has necessitated these hotels to search for ways of offloading some of these activities for efficiency and competitiveness. To survive, the hotels must be agile enough to respond to the pressures to compete on levels unrivalled in the past. This has forced the hotels into formulating supply chain strategies such as outsourcing and offshoring large portions of manufacturing and striving to eliminate any risk inherent in the firms supply chain (KHTA, 2014).

Several studies have been undertaken locally on the area of organizational risk management. Abuya (2008) studied on the strategic risk management practices among
state corporations in Kenya. He observed that when faced with risk, strategists often feel challenged or uncomfortable with the demand to make a decision and as result, emotions come into play and these can affect decision making in a number of subtle ways. At the same time he observed that parastatals had sparingly adopted strategic risk management practices in their organization. Safari (2003) undertook a survey of risk factors in the strategic planning process of selected parastatals in Kenya. He noted that with a risk-based approach to strategic execution process, managers will focus on the opportunities outlined in their firms' strategic plans, while at the same minimize the potential impact of any threats. Lubano (2012) researched on strategic risk management at Kenya Revenue Authority and found that a risk-based management control system allows managers to quickly and confidently react to opportunities arising in the business set up. From the above studies, it is evident that a gap exists in the evaluation of the risks in a firm's supply chain. In addition, these studies do not address how managers select among these different risk management strategies based on their environment.

1.3 Objectives of the Study

The study was guided by the following objectives:

i. To identify the types of supply chain risks inherent in hotels in Kenya

ii. To establish the risk management practices employed by the hotels in Kenya

iii. To determine the impact of supply chain risk management on the performance of hotels in Kenya
1.4 Research Questions

The researcher strived to seek the following research questions:

i. What are the existing types of supply chain risks in hotels in Kenya?

ii. How do the managers address different risk management strategies in hotels in Kenya?

iii. How do the managers relate the management of supply chain risks to performance?

1.5 Value of the Study

The findings of the study will be of value to the transaction cost and risk theoretical framework as it will enable the study to conceptualize and empirically operationalized risk management process in an organizations supply chain. Particular attention will be paid to the risks present in the hotels supply chain process and their influence on the performance of the hotels.

The findings of the study will be relevant to management and practices as it will enable the management of the hotels to know the influence that supply chain risks have on the overall hotel performance. The findings of the study will expose the affect risk management and as a result, the companies will be more endowed with knowledge and prepared to fit in the prevailing uncertain business environment. The results may provide the buying firms with the ability to identify best practices that if applied can assist organizations in creating a competitive advantage. Improving supplier’s performance
creates an advantage, resulting in the buying firms’ ability to improve customer value propositions.

The policy makers will obtain knowledge of the hotel industry dynamics and the influence of risk management and therefore obtain guidance from this study in designing appropriate policies that will regulate the industry. The study provides the background information to other researchers and scholars who may want to carry out further research in this area. The study facilitates individual researchers to identify gaps in the current research and carry out research in those areas, the work will also be used by students who will want to study similar area and to come up with comprehensive conclusion and reasoning in regard to management of risk in an organization supply chain.
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter focuses on the review of various studies that have been conducted by other researchers on Supply chain risk management and performance. Among the areas reviewed include risk management practices, risk management process, risk identification and risk analysis and treatment. The chapter also provides research gaps identified and a conceptual framework showing the relationship between dependent and independent variables.

2.2 Theoretical Framework of Organizational Risk Management

The capital market imperfections have been found to be the major reason for firms to seek to manage risks. While these imperfections might be necessary for optimal derivatives use, they are not sufficient conditions. Elliott, Huffman and Makar (2003), argue that, given these incentives, a firm's ultimate decision to manage risk depends on the level of its exposure. In addition, a firm's choice to use currency derivatives depends on the costs of managing foreign exchange-rate risk.

2.2.1 Agency Theory

Agency theory extends the analysis of the firm to include separation of ownership and control, and managerial motivation. In the field of corporate risk management agency issues have been shown to influence managerial attitudes toward risk taking and hedging (Smith and Stulz 1985). This theory explains a possible mismatch of interest between
shareholders, management and debt holders due to asymmetries in earning distribution, which can result in the firm taking too much risk or not engaging in positive net value projects. Consequently, agency theory implies that defined hedging policies can have important influence on firm value (Fite and Pfleiderer, 2005). Agency theory provides strong support for hedging as a response to mismatch between managerial incentives and shareholder interests.

Conflicting interests in the agency relationship between managers and shareholders motivate the use of derivatives. Most senior managers have a highly undiversified financial position because they derive substantial (monetary and non-monetary) income from their employment by the firm. According to Stulz (1990), risk aversion cause managers to deviate from acting purely in the best interest of shareholders by expending resources to hedge diversifiable risk. The time horizon of managers and shareholders may also differ because management compensation is tied to short-term accounting measures. These conflicts of interest can be mitigated by corporate risk management if compensation schemes appropriately link managers’ pay to the stock price of the firm.

This suggests that the use of stock option plans in a corporation can be a determinant of corporate hedging. Executive stock options can effectively reduce a manager’s risk aversion and thus lower the propensity for using derivatives to decrease idiosyncratic risk.
2.2.2 Stakeholder Theory

Stakeholder theory focuses explicitly on equilibrium of stakeholder interests as the main determinant of corporate policy. In certain industries, particularly high-tech and services, consumer trust in the company being able to continue offering its services in the future can substantially contribute to company value. However, the value of these implicit claims is highly sensitive to expected costs of financial distress and bankruptcy. Since corporate risk management practices lead to a decrease in these expected costs, a company values raise (Klimczak, 2005).

Therefore stakeholder theory provides a new insight into possible rationale for risk management. However, it has not yet been tested directly. Investigations of financial distress hypothesis provide only indirect evidence Judge (2006). If a firm enters financial distress then it will face costs of default on debt obligations, costs of filing for bankruptcy, and costs related to reorganization and liquidation. Given these costs, firms have incentives to reduce the probability of financial distress. Firms can reduce the likelihood of financial distress by hedging variability in earnings.

2.2.3 New Institutional Economics Theory

According to Williamson (1998), this theory predicts that risk management practices may be determined by institutions or accepted practice within a market or industry. Further, the theory links security with specific assets purchase, which implies that risk management can be important in contracts which bind two sides without allowing
diversification, such as large financing contract or close cooperation within a supply chain.

Firms in regulated industries provide top management with few opportunities for discretion in corporate investment and financing decisions. Smith and Watts (1992) showed that regulation is a key determinant of a firm's corporate financial policy. Therefore, if regulated firms face tighter scrutiny and face lower contracting costs, then they are less likely to use derivatives to hedge firm risk. According to Froot, Scharfstein, and Stein (2003), if external sources of funds are more costly to a firm than internally generated funds, then the firm could benefit from using derivatives. In particular, firms can hedge cash flows to avoid a shortfall in funds that may require a costly visit to the capital markets and at the same time derivatives are positively related to measures of the firm's investment opportunity set proxies.

2.3 Supply Chain Risk Management

Supply chain risk management is a process of how to handle risks either by proactively mitigating them or by reactively responding to them (Chopra and Sodhi, 2004). At present, supply chain risks views all threats disrupting normal activities as products of the impact and the probability of an event which in the real product lifetime might be impossible to measure. In consideration of the reality that that not all the environmental factors that affect a firm can be managed, it will be necessary for a firm to understand the
existing information on the basis of which probabilities present is formed in more or less imperfect way.

Evidence abound that failure to manage supply chain risks effectively can have a significant negative impact on organizations. Not only can the failure to manage supply chain risks effectively lead to a sharp downturn in an organization’s share price, which can be slow to recover, but it can also generate conflict amongst the organization’s stakeholders. Cousins et al. (2004) identify the wider consequences of a failure to manage risks effectively. These include not just only financial losses but also reduction in product quality, damage to property and equipment, loss of reputation in the eyes of customers, suppliers and the wider public, and delivery delays. Further, there is also evidence that economic, political and social developments over the past decade appear to be increasing the risk of supply chain disruptions as supply chains are getting longer and more complex and are involving more partners due to the increase in global sourcing (Hendricks and Singhal, 2005). Also, the threat of terrorism, such as 9/11, military action, such as the war in Iraq, disease, such as the foot and mouth outbreak in the UK, and natural disasters, all have the power to disrupt, or cause uncertainty in, supply chains (Elliott, 2005). The present day business environment also appears to be living in an era of rapid change in technologies and product markets, and increasing customer expectations in terms of better products, lower prices and quicker response times. All these put together, it is evident that potential risks facing supply chains are growing significantly
Robinson et al. (2004) argued that the level of risk involved for the purchasing organization increased with the newness of the task involved, i.e. rebuys involve relatively low levels of risk whereas new tasks involve relatively high levels of risk. Robinson et al. illustrated how risk varied in these three purchasing situations by breaking down the purchasing process into eight progressive stages, ranging from problem recognition to performance review. Anderson et al. (1987) compressed these into three dimensions of the purchasing process: information needs; newness of the task; and consideration of alternatives.

Mitchell (1995) point that loyalty to existing suppliers is a risk-reducing strategy and at the same time partnership formation, building strategic alliances, supplier development and developing supplier performance measurement systems will help in the reduction of risks in an organization's supply chain. In a similar vein, some authors show how agency theory can be used to develop risk-sharing strategies (Zsidisin and Ellram, 2003). Agency theory offers a number of approaches to managing risk, including co-operation – working together for mutual benefit to reduce conflict; and information-sharing – to reduce the risk of either party trying to take advantage of the other.

Gates (2006) further suggests that other risk-reducers include: choosing a leading company in the field, using an approved list of suppliers, multiple sourcing, visiting supplier operations and establishing good communications with suppliers. Zsidisin et al. (2000) also advocate the use of multiple sources of supply as a risk reduction strategy in
some cases. Rather than advocating multiple sourcing, Lonsdale (1999) advocates product differentiation as an essential tool for managing risk. Lonsdale maintains that increasing the variety of products, particularly in fast-moving markets such as fashion, offers customers a wider choice and reduces the risk of building high inventories of obsolescent products. This approach is also promoted by Krause and Handfield (1999), who argue that inventory management can be an effective and economical strategy for reducing supply chain risk.

2.4 Risk Management Practices

Every enterprise is subject to several types of risks and the focus varies across organizations and as such organizations have traditionally entrusted corporate treasurers, portfolio managers, insurers and the hedgers to manage such risks (Shimpi, 2001). Jorion (2001) posit that the success of organizations depends upon the risk management and understanding properly the firm's sensitiveness to different types of risk. Lam (2001) further note that risk management reduces earning volatility, maximizes value for shareholders and promotes job security and financial security in the organization.

Organizations will therefore be advantaged to establish risk management practices to mitigate various risks facing the organization. According to Kersnar (2009), the formal risk management practices entail; risk identification, risk analysis and risk evaluation and control. In order for a formal and documented RM process to work, it must be mandated by the board of directors (Board), chief executive officers, and other top level
management of the organization. Because business is risk management, understanding the risks accepted by the company as it pursues its strategy to achieve its objectives is essential for the board and relevant stakeholders (King, 2001). Risk management is central to the execution of the organization's strategy so there must be a linkage between the organization's strategic plan and initiatives and an understanding of all organizational risks across the entity. The coordination of risk assessment and strategy development will assure that both internal and external stakeholders will consistently manage organizational risk effectively and efficiently. A mandate from the top is needed to assure the risk management team's success in establishing the RM program to aid in the achievement of organizational goals.

2.5 Risk Management Process

According to Jorion (2001), the success of organizations depends upon the risk management practices and understanding properly the firm's sensitiveness to different types of risk. Lam (2001) further posits that risk management reduces earning volatility, maximizes value for shareholders and promotes job security and financial security in the organization. Thus it can be seen that organizations will be advantageous to establish risk management practices mitigate various risks facing the organization. The formal risk management practices entails the following steps namely; risk and control self assessment, identification of risk indicators, incident management, compliance of both internal and external regulations and action tracking.
2.5.1 Risk Identification

Simmons (2000) acknowledges that the definition of the business objectives is a crucial initial step towards mitigation of risk because if an organization does not know where to go it is difficult to identify what risks may arise. In fact, an unclear business objective is a strategic risk in itself, and should be remedied at this stage. By reviewing the strategy and plans, and through interviews and a management session on targets and objectives, the business objectives are assessed for clarity. Further as noted by Kersnar (2009) the risk identification process should try as much as possible to remove ambiguity, discord, disagreements and other vagueness as possible.

The line managers and risk specialist have been found to mostly use past experience analysis and process analysis as tools of identifying risks facing an organization. However, sophisticated tools of identifying risks available like scenario analysis and strengths, weaknesses, opportunities and threats (SWOT) analysis are not frequently used in case of companies where the risk identification responsibility is that of board of directors/executive management team (Gupta, 2009). Based on discussion across the organization, a Risk Dictionary should be developed so that everyone agrees on the meaning of each risk term.

Based on the area's objectives, each reporting department or entity needs to provide input on the risks of not achieving the objectives. At the stage of designing the area's report, the objectives and risks will be tied to performance measures (Simmons, 2000).
2.5.2 Risk Analysis and Treatment of Risks

After an organization has identified its problems, the next step in the risk management practice is for the organization to analyze organization risk exposure. According to Lam (2003), this step involves a brainstorming session and will entail analysis of the institutional strengths, weaknesses, opportunities and threats in order to come out with effective analysis for the strategic risks. In an effort for an organization to evaluate the effect of the risks on asset values and economic performance analysis of potential benefits from different risk mitigation efforts and need for risk transfer and financing arrangements will have to be determined (Berinato, 2006).

Both risks and characteristics should be identified from the widest possible range of issues, including at least strategy, operations, culture, systems, competence and brand. Although, impossible to fully achieve, the issues should be exhausted. In addition, to effectively manage the various exposures that an organization might face, an organization should put in place corporate accounting systems to identify and measure the relevant exposures as well as internal control processes adopted to check whether exposures are kept within bounds and whether processes remain in line (Shimell, 2002).

According to DeLoach (2002), the next step is to determine risk priorities, both for the company and for the business unit by using a risk mapping technique. This process is done before considering the mitigation of risks resulting from internal controls or other risk mitigation methods such as: insurance, risk avoidance or accepting risk are adopted.
Decide what controls are in place that could mitigate the risks and what controls would be needed if they were not already in place.

Based on the analysis of risks, the RM implementation team can work with each reporting department-level to link the organization's strategy to that area's objectives and residual risks to develop performance measures to be reported to the risk department. This will allow the organization to monitor progress on achieving the corporate objectives and highlight areas where improvements need to be made or problems need to be addressed.

### 2.5.3 Risk Evaluation and Control

Gupta (2009) notes that formal strategy process resemble the risk management process by including a strategic control element whereby corporate management is supposed to monitor performance outcomes against intended strategic goal to ensure that corporate activities remain on track and correspond to the set course is that some digression from the beaten track also can hold the key for generating innovation ideas and adaptive responses to changing environmental conditions. Once an organization notices some diversions from the norm, then appropriate mechanism should be put in place to realign the results with what the organization intends to achieve (Shimell, 2002).

Corporate decision on whether these exposures are acceptable in view of prevailing organization responses should be assessed and agreed by the strategy team and then ways
of overcoming the same risks will have to develop. Risk assessments in project management see a need to balance planning with adaptive solutions that arise as the projects are implemented. Once these factors are identified, the vulnerability to the various risks can be analyzed and the potential economic effects determined (Berinato, 2006).

At this stage, the implementation team needs to review company strategy with each business unit to determine how the unit's deliverables result in the achievement of the corporate objectives. Based on the targets, performance measures should be developed to compare actual results to the targets. As performance measures affect behavior, they should be easily understood by all employees, achievable, limited in number, and result in the correct behavior.

Having a risk management plan and implementing is not adequate for ensuring that the plan is followed or that the company is controlling its risks. A feedback loop ensuring that the report results get back to the RM department, upper-level management, and the Board is vital to organizational and strategic success. The reporting structure should do or include the following in a monthly monitoring system. On a regular basis, the RM department should do an analysis of internal and external events that could force revision of the overall strategic plan. Each unit should evaluate how these changes would affect their targets and risks.
2.6 Conceptual Framework

The schematic diagrams below will not only guide the study but will also show the interrelationship among the key variables in the study as illustrated in Fig. 2.0. This study adopts a conceptual framework of strategic importance to identify some underlying forces supply chain risk management practices. In particular, it investigates the significance of customer service, customer tastes and preferences, Psychographic factors and Attitudes with their formation.

Figure 2.1: Conceptual Model

Source: Researcher (2014)
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research methodology that was used to carry out the survey, what informed the selection of the research design, the target population, sampling method to be used, data collection instrument and how data will be analyzed, interpreted and presented.

3.2 Research Design

A descriptive cross sectional research design was used to establish the risk management in organizational supply chain in the three to five star hotels in Nairobi. A similar research design was used by Chege (2012) successfully. A descriptive research design was adopted because the study was concerned about a univariate question in which the researchers asked questions about the size, form, distribution and existence of SCM practices. This permitted the researcher to make statistical inference on the broader population and generalize the findings to real life situations and thereby increase the external validity of the study.

3.3 Population of the Study

The target population was three to five star hotels in Nairobi, Kenya (Appendix II). Given the relatively small number of the respondents a census survey was conducted. The respondents were Supply Chain managers and operations managers or their equivalent.
3.4 Data Collection

Primary data was collected by means of a questionnaire (Appendix I). The questionnaire was administered through the use of email, drop and pick later method to the firms. The questionnaire had three parts; Part A covered the demographic and respondent’s profile, Part B covered the extent to which supply chain risk management practices have been employed and finally Part C examined the impact of supply chain risk management on the performance of three to five star hotels in Nairobi. The questionnaire allowed greater uniformity in the way questions were asked, ensuring greater compatibility in the responses. (Field, 2005).

3.5 Data Analysis

Below is a summary of how the data collected was analyzed.

Table 3.1: Data Analysis

<table>
<thead>
<tr>
<th>Objective/ General information</th>
<th>Questionnaire</th>
<th>Data analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Section A</td>
<td>Descriptive statistics</td>
</tr>
<tr>
<td>II</td>
<td>Section B</td>
<td>Descriptive statistics</td>
</tr>
<tr>
<td>III</td>
<td>Section C</td>
<td>Regression analysis</td>
</tr>
</tbody>
</table>

The dependent variable in the study was supply chain performance. The independent variables for the study were the various supply chain risk management practices; Risk
Identification, Risk Analysis and treatment, risk evaluation and control. The regression equation assumed the following form:

Performance = f (x₁, x₂, x₃, x₄);

More specifically, the regression will be of the form;

\[ Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 \]

Where

- \( Y \) = Supply chain performance
- \( \beta_0 \) = Constant
- \( x_1 \) = Royalty to existing suppliers
- \( x_2 \) = Building strategic alliances
- \( x_3 \) = Multiple sourcing
- \( x_4 \) = Effective communication
CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND DISCUSSIONS

4.1 Introduction

The research objective was to establish role of supply chain risk management and performance in three to five star hotels in Nairobi, Kenya. This chapter presents the analysis, findings and the discussion with regard to the objective. The analysis is presented in mean and standard deviations while the findings are presented in frequency distributions and tables.

4.2 General Information

The demographic information considered in this study included the age of hotel, existence of a well structured and documented supply chain risk management and also determine whether the respondents consider the existence of supply chain risk management practices to improve the hotels performance. A total of 20 questionnaires were issued out. The completed questionnaires were edited for completeness and consistency. Of the 20 questionnaires distributed, 17 were returned. The returned questionnaires’ represented a response rate of 85% and this response rate was deemed to be adequate in the realization of the research objectives.

The researcher sought to establish whether the hotel has document a risk management tool that is been followed when dealing with its suppliers. From the findings, majority of the hotels had established risk management practice (82%) while only 3 of the hotels
indicated that they did not have a document supply chain risk management tool. This implies that a high proportion of the firms that had the SCRM tool will be a valuable source to the present research. This finding supports that made recently to the effect that the need for risk management has become evident following Snell’s (2010) study showing that 90 per cent of the respondent companies feared supply risks, whereas only 60 per cent felt confident or knowledgeable enough to cope with them. In addition, Hendricks and Singhal (2005) found out that firms that experience supply chain disruptions experience on average 40 per cent stock returns. Consequently, it can be deduced that the hotels fear the consequences of supply disruption and hence have put in place supply chain risk management tools. In addition, the results shows that all the respondents appreciate the position that management of supply chain risk has the potential of improving the firms’ performance. All the hotels held this position. For example, the decision by an hotel chain to develop a new direct channel to the consumer, bypassing existing distribution channel members, would expose the business to new risks both from the reaction of the consumer and the retaliatory actions of the other channel members, although possibly improving potential performance outcomes.

4.3 Supply Chain Risks in the Hotels

This section of the questionnaire sought to identify the various types of risk that the hotels face in their day-to-day operations. The results are presented in table 4.3. The range was ‘very low extent (1)’ to ‘very great extent’ (5). The scores of very low extent/low extent have been taken to present a variable which had a mean score of 0 to
2.5 on the continuous Likert scale; (0 ≤ Moderate Extent < 2.4). On the other hand scores of 3.5 to 4.8 on the continuous Likert was taken to be great extent and very great extent.

**Table 4.1: Supply Chain Risk**

<table>
<thead>
<tr>
<th>Risk Source</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental risk sources due to the limited knowledge about the future on such aspects as political, social and natural uncertainties</td>
<td>3.1538</td>
<td>.98710</td>
</tr>
<tr>
<td>Process risks design and implementation of processes within and between the entities in the supply chain that will impact on the hotels supply chain activities</td>
<td>2.9231</td>
<td>1.03775</td>
</tr>
<tr>
<td>Demand and supply risk sources that result from the supplier unpredictability on inbound goods and services</td>
<td>2.8462</td>
<td>1.06819</td>
</tr>
<tr>
<td>The need to balance the business interest of different stakeholders rather than seeking to minimize risk altogether</td>
<td>2.8462</td>
<td>1.06819</td>
</tr>
<tr>
<td>Resource risks associated with unanticipated differences in resource requirements in foreign markets.</td>
<td>2.6923</td>
<td>.85485</td>
</tr>
</tbody>
</table>
The findings shows that the major type of supply chain risk that the hotels face is the risk that comes from uncertain business environment due to uncertain business environment such as political, social and natural uncertainties (Mean=3.1538). The demand and supply risk that result from the supplier unpredictability on inbound goods and services and also need to balance the business interest of different stakeholders rather than seeking to minimize risk altogether was found to have affect the operations of the hotels (Mean=2.8462). However, the least worry to the hotels was found to be the resource risks associated with unanticipated differences in resource requirements in foreign markets (Mean =2.6923). Thus whilst the organisation may not be able to manage the source of the risk exposure, the adoption of particular strategies may enable the organisation to modify or ameliorate the causes and the eventual impact on performance. Environmental risk sources comprise any external uncertainties arising from the supply chain such as disruption caused by political (travel advisories), natural (fire, earthquake) or social (e.g. terrorist attacks) uncertainties. These types have been prevalent in Kenya in the recent past and this could explain the high mean result from this type of risk.

The findings above reinforces the findings by Mason-Jones and Towill (1998) who suggested that there are five overlapping categories of supply chain risk sources which might affect an organization and these include environmental risk sources, demand and supply risk sources, process risk sources and control risk sources. As the above findings shows, the supply chain risks that affect hotels vary depending on the resource available to the hotel, environmental conditions as well as demand and supply risks. Hence by
understanding the variety and interconnectedness of supply chain risks, hotel managers can tailor balanced, effective risk-reduction strategies for their companies. As was correctly pointed by Hauser (2003), in today’s increasingly complex environment, risk adjusted supply chain management can translate into improved financial performance and competitive advantage.

4.4 Supply Chain Risk Management Practices

The respondents were requested to indicate the extent to which they have adopted different risk management practices in their hotels in a five point Likert scale, ranging from 1(strongly disagree) to 5 (strongly agree) and the results are represented below.
## Table 4.2: Risk Management

<table>
<thead>
<tr>
<th>Risk Identification</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The hotel assesses the well-being of the business's supply chain resources to determine its vulnerabilities and therefore develop plans to minimize their impact</td>
<td>3.5385</td>
<td>.66023</td>
</tr>
<tr>
<td>The risk management practice in the hotel supply chain helps identify areas of underutilized capacity, perhaps offering the option to capitalize on developing opportunities</td>
<td>3.5385</td>
<td>.77625</td>
</tr>
<tr>
<td>The hotel’s response techniques include risk avoidance, risk reduction, risk sharing, and risk acceptance</td>
<td>3.5385</td>
<td>1.05003</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Risk Analysis and Treatment</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line managers are the most prominent people responsible for the risk identification in the hotel supply chain followed by the board of directors/executive management team</td>
<td>3.7692</td>
<td>.83205</td>
</tr>
<tr>
<td>The hotel has established a comprehensive supply chain risk inventory of the risks that it expects the managers to manage</td>
<td>3.6923</td>
<td>.63043</td>
</tr>
<tr>
<td>Guidance on risk identification in the supply chain is offered by the organization both directly (internal consulting services) or indirectly (documents, such as “tool kits”)</td>
<td>3.1538</td>
<td>.80064</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Risk Evaluation and Control</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The hotel management has put in place measures to evaluate the success of risk management strategies in the supply chain.</td>
<td>3.6923</td>
<td>.85485</td>
</tr>
<tr>
<td>The hotel management monitors supply chain risk performance outcomes against intended strategic goal to ensure that corporate activities remain on track and correspond to the set course</td>
<td>3.5385</td>
<td>.66023</td>
</tr>
<tr>
<td>The hotel communicates the evaluation results openly to all the departments and employees concerned</td>
<td>3.5385</td>
<td>.96742</td>
</tr>
</tbody>
</table>
From the findings, the most popular risk management practice undertaken by the hotels is the risk evaluation and control process (mean=3.5898) followed by both the risk identification and risk analysis and treatment (mean=3.5385). The risk identification steps ranking was found to apply to all the respondents hotels equally while the practice of line managers being the most prominent people responsible for the risk identification in the hotels supply chain followed by the board of directors/executive management team was found to have higher mean (mean= 3.7692) and the point that most of the hotels had established a comprehensive supply chain risk inventory of the risks that it expects the managers to manage (mean=3.7692). Every organization should have in place appropriate mechanism to identify the likely risk that might affect its operations. In the hotel industry, risk in the supply chain centres around the disruption of flows between organisations. These flows relate to information, materials, products and money. However, they are not independent of each other but connected. A key feature of supply chain risk is that, by definition, it extends beyond the boundaries of the single firm and, moreover, the boundary spanning flows can become a source of supply chain risks.

The findings whereby all of the respondents hotels were found to understand the importance of risk management practices contradicts that found by Hussaini and Al-Ajmi (2012) who found that only 40 percent of respondents hotels in Kuwaiti stated that the importance of risk management is widely understood throughout their company, suggesting that more needs to be done to embed a strong culture of risk management in the hotel industry in Kuwait. Further, the findings show reinforce the need for an
organization’s RM practices be an holistic one such that the effect of the environment on the performance of the firm is also a risk and need to be evaluated. As KPMG (2001) noted, ERM need to change from being a silo type to portfolio type whereby risk management need to be a means of strategic business management and that links business strategy to day-to-day risks.

Further, the findings is consistent to that posited by Doherty (2000) who observed that RM need to adopt an integrated approach whereby it should be tailored to support optimal investment, based on transaction cost and inclusive coordinated but discriminating. The risk management practices should focus to being strategic one and risk involvement must be universal and thorough in the organization. There is need for the management of a firm to appreciate that risk management exercise revolves around the importance of the entity to the stakeholders, in an uncertain environment in which the uncertainty can be both perceived as risk or opportunity since it can either enhance or diminish vale. The firm’s value will be created, preserved or eroded by management decisions ranging from strategy setting to day-to-day operations of the enterprise.
### 4.4.1 Risk Management in the Hotel Firms

#### Table 4.3: The Risk Management in the Hotels

<table>
<thead>
<tr>
<th>Description</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The management of hotels' inventory is given attention considering the perishability of most of the products</td>
<td>3.7692</td>
<td>.92681</td>
</tr>
<tr>
<td>The hotel chain continuously evaluates supplier quality/auditing/certification programmes</td>
<td>3.7692</td>
<td>.83205</td>
</tr>
<tr>
<td>This hotel's primary supply chain has the ability to minimize channel safety stock throughout the supply chain</td>
<td>3.6154</td>
<td>.76795</td>
</tr>
<tr>
<td>The hotel has multiple sources of supply and not giving preference to single sourcing of products and services</td>
<td>3.6154</td>
<td>.96077</td>
</tr>
<tr>
<td>This hotel's primary supply chain has the ability to minimize all types of waste throughout the supply chain</td>
<td>3.6154</td>
<td>.96077</td>
</tr>
<tr>
<td>The hotel practices intentional risk sharing and knowledge transfer with its suppliers</td>
<td>3.5385</td>
<td>.77625</td>
</tr>
<tr>
<td>This hotel's primary supply chain has the ability to deliver small lot sizes to final customers</td>
<td>3.3846</td>
<td>1.04391</td>
</tr>
<tr>
<td>Product differentiation of the hotel's offering has helped in cushioning the hotel during the periods of travel advisories and downturns in the industry</td>
<td>3.3846</td>
<td>1.19293</td>
</tr>
<tr>
<td>The hotel chain has developed strategic alliances with various players within and without the industry to increase its product offering and also clientele</td>
<td>3.3077</td>
<td>1.31559</td>
</tr>
<tr>
<td>This hotel's primary supply chain has the ability to deliver products precisely on-time to final customers</td>
<td>3.1538</td>
<td>1.21423</td>
</tr>
</tbody>
</table>
The researcher also sought to establish the extent to which the hotel chains manage various supply chain risks and the results are presented in table 4.5 below. Supply chain risk exposure determines its vulnerability which is concerned with the level of exposure to serious disturbance arising from supply chain risks and affecting the supply chain’s ability to effectively serve the end customer market.

The findings show that majority of the hotels, as a way of managing their supply chain risks, continuously evaluates supplier quality through auditing and certification of the services being provided (Mean=3.7692) and with a lower standard deviation, there was high level of concurrence among the respondents. The other strategies that are being employed by the hotels include having multiple sources of supply and not giving preference to single sourcing of products and services (mean=3.6154), management of hotels inventory given that a significant proportion are perishable (mean=3.7692) as well as developing strategic alliances with various players within and without the industry to increase its product offering and also clientele (mean = 3.3077).

Because supply chain risk sources arise from the interactions between organisations, they are likely to affect several organisations through rippling effects. Trying to identify the rippling effects that a range of events might have caused along the other partners is an important step in the risk management process in a hotel. The hotels were found to manage the risks in the downstream supply chain through a process of close collaboration, effective communication and the building of trust within the partnership.
relationships. The development of performance standards was not seen by the distributors as the imposition of a risk management strategy to protect the principal but rather a collaborative approach that resolved the risks within the chain to the mutual benefit of all partners.

4.5 Relationship between Adoption of SCRM and Supply Chain Performance through Inferential Statistics

The effect of supply chain risk management on the performance of the supply chain parameter was determined for the 20 hotels surveyed. The linear regression model was used as described below.

Table 4.4: Effect of Supply Chain Risk Management on Supply Chain Performance

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>(Constant)</td>
<td>11.045</td>
<td>4.654</td>
<td>1.373</td>
<td>0.174</td>
<td></td>
</tr>
<tr>
<td>X₁</td>
<td>2.457</td>
<td>1.498</td>
<td>0.007</td>
<td>0.67</td>
<td>0.947</td>
</tr>
<tr>
<td>X₂</td>
<td>0.925</td>
<td>0.283</td>
<td>0.071</td>
<td>0.69</td>
<td>0.492</td>
</tr>
<tr>
<td>X₃</td>
<td>3.012</td>
<td>1.654</td>
<td>0.086</td>
<td>0.789</td>
<td>0.433</td>
</tr>
<tr>
<td>X₄</td>
<td>2.929</td>
<td>1.413</td>
<td>0.093</td>
<td>2.861</td>
<td>0.392</td>
</tr>
</tbody>
</table>

Source: Research data
From Table 4.5 above, the established multiple linear regression equation becomes:

\[ Y = 11.045 + 2.457X_1 + 0.925X_2 + 3.012X_3 + 2.929X_4 \]

The coefficient of the independent variables (X₁ – X₄) is significant at 5% significance level except the coefficient of X₄ because the test statistics (t-values) are less that the critical \( P \)-value of 1.697 at the 5% significance level. The coefficient of evaluating the risk level of the hotel is the highest of the independent variables and this means that a unit increase in the risk evaluation will increase the performance of the supply chain by 2.929 units.

The variance inflation factor (VIF) quantifies the severity of multicollinearity in an ordinary least squares regression analysis. It provides an index that measures how much the variance of an estimated regression coefficient is increased because of collinearity. The variance inflation factor of the model variables is small which means that there is a small collinearity between the independent variables and the SD of around 1.0 for the independent variables indicates that the standard error of the variables will decrease by a unit if one of the variables is excluded.

### 4.5.1 F- Test for the Full Model

To ascertain the extent of the difference in the adoption of SCRM practices and the hotels supply chain performance, ANOVA Test was applied. ANOVA is carried out for each SCRM practices (independent variable) versus the SC performance (dependant variable) at \( F_{0.05} \).
Table 4.5: ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of squares (SS)</th>
<th>Df</th>
<th>Mean Square (MS)</th>
<th>F</th>
<th>P- Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression (ESS)</td>
<td>1047.142</td>
<td>33</td>
<td>0.0614</td>
<td>5.905</td>
<td>0.004</td>
</tr>
<tr>
<td>Residual (RSS)</td>
<td>217.501</td>
<td>6</td>
<td>0.562</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total (TSS)</td>
<td>1264.643</td>
<td>39</td>
<td>0.6234</td>
<td>5.905</td>
<td>0.004</td>
</tr>
</tbody>
</table>

It is observed from Table 4.11 that the calculated F-value (5.905) is more than the table value (F value =2.61 at 5% significance level). In addition the p-value ≤ 0.05 and this means that there is a significant effect of SCRM practices on the hotels supply chain performance. The one-way ANOVA results show that the differences observed are very much significant (p value=0.004 < 0.05). The implication of this result shows that the supply chain risks affect the performance of a firm's supply chain. This means that managers of hotels should manage effectively supply chain risks and come up with appropriate mechanism to minimize the same.
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the key findings of the study as well as the conclusions, limitations of the study, and recommendations for further research.

5.2 Summary

The primary data in this analysis was collected from the targeted hotels which was the research target population. Supply chain risk management is the identification and evaluation of risks and consequent losses in the supply chain, and implementation of appropriate strategies through a coordinated approach among supply chain members with the objective of reducing losses, for supply chain outcomes that in turn lead to close matching of actual cost savings and profitability with those desired. The findings reveal that supply chains operating in the hotels attempt to avoid risks within the constraints of acceptable returns such as revenue and profit targets. The first step in identifying risk typically starts when an opportunity to reduce costs or to increase revenues is recognized by a firm in the supply chain. Consequently, operational decisions related to inventory policies and levels, transportation contracts, and warehouse capacity and locations have to be linked with sourcing and marketing decisions to optimize supply chain operations.

The hotels no longer concentrate on their internal operations alone as the source of risk but rather a more strategic approach where external operating environment is also
analyzed to enable the hotel develops appropriate risk mitigation measures. The SCRM practices that were analyzed included: risk and control assessment; assessment of key risk indicators, incident management, and evaluation. It was found that the evaluation of risk came out as the major supply chain practice that most of the hotels were using to manage their supply chain risks. The study also shows that implementation of SCRM requires various structural measures to align risk management, strategic planning, information system and organizational culture together in order to realize the better outcome.

The findings also show that the implementation of SCRM practices by the hotels affects various supply chain performance measures of the firm and financial parameters. Some of the factors that are affected include the accuracy of the orders placed, full delivery on requests and proposals, stock availability, stock turn over and operational efficiency. It is because of the holistic approach of the supply chain risk management process that their effect cuts across the operations of the hotel. The influence of SCRM practices on the performance of the hotels supply chain was found through, the regression equation, to be positively correlated with the performance of the firm supply chain. There was also little collinearity between the independent variables found in the study.

5.3 Conclusions

Supply chain risk management is increasingly receiving attention from practitioners. This is because as organizational environments become increasingly turbulent and complex, the management of risks has become a critical function for managers of business entity.
In addition, traditional risk management approaches derived from a single company perspective are not ideally suited to accommodate the requirements in a supply chain context. In the case of a supply chain, the key to effective SCM is the ability to forge long-term, strategic relationships with supply chain partners for the purpose of maximizing value to the ultimate customer. The results presented support this general proposition. More specifically, this study and the reported results identify the supply chain linkage variables of power, benefits, and risk reduction as important to the performance of the supply chain. Risk reduction is found to be the important variable in service oriented supply chains.

Traditionally, firms have managed risk in silos but the same approach is no longer tenable in the present day competitive environment. Integrated risk philosophy has replaced the silo system and requires an extensive training on risk management. Risk communication will therefore come in handy to take advantage of and build confidence in risk management. The communications of organization’s supply chain risks must be efficient enough to ensure that the risk appetite is built even at the lower management level. Operational risks have been sole focus area of attention in many companies for many years. However, there are other risks which may be relatively more important. Consequently, the approach to risk assessment needs a drastic change in companies.
5.4 Recommendations

The study has sought to improve understanding of the main constructs underpinning supply chain risk and performance, especially the linkage between these two. The possibility of prescribing effective supply chain risk management strategies or responses and gaining an understanding of the risk necessitates, the development of the conceptual framework. This will require the development of a framework, exploring the main components of SCRM in more depth. This should provide scope for guiding organisations on the more appropriate strategies for given risk drivers emanating from different supply chain structures and contexts. In addition, a potential exists to improve the measurement of the risks and performance consequences in most settings to provide improved guidance to decision makers prior to exercising their choices.

5.5 Limitation of the Study

The study is subject to some methodological limitations. First, it is suggested that the size and nature of the sample must be enhanced to ensure variability and control for possible extraneous variation. While the sample is restricted to only a single industry, it would be recommended that data should be gathered from other industries in Kenya. In addition, since, the data in this research was collected from top managers of the organizations on the basis of their subjective evaluations, objective performance indicators should also be employed in the analysis. Further, the study did not account for certain behavioral factors – related to employees’ and managers’ characteristics, attitudes, and experience levels –
as well as organizational factors – such as structure, size, and business nature – that play a moderating role in the relationships highlighted in this study.

5.6 Suggestions for Further Research

The study finds some research areas. The first area is exploring whether the risk management function as a separate distinct discipline would lead to risk aversion or reduction in risk capabilities. In addition, the research, evaluation and dissemination of the risk management responses and practices being employed in different sectors and in response to differing situational risk scenarios. Conducting a replication study with random sample selection can enhance the methodological rigor of the study and increase the possibility of having a better and a supported external validity. Also, another possible source of data could be the customers whose opinions, along with those of executives, can give a better insight. Furthermore, taking into consideration certain factors that may have a moderating role in these relationships, such as the country culture, could enrich the research results.
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APPENDICES

APPENDIX I

QUESTIONNAIRE

The questionnaire seeks to collect information on ERM practices on the financial performance of commercial banks in Kenya.

PART A: GENERAL INFORMATION

1) Name of the hotel (optional)……………………………………………………………

2) When was the Hotel established?
   
   Less than two years [ ] 6-10 years [ ]
   2-5 years [ ] Over 10 years [ ]

3) Does your hotel have a structured and well documented supply chain risk management approach?
   
   Yes ( ) No ( )

4) Does your supply chain risk management practices improve your organization’s financial performance?
   
   Yes ( ) No ( )

PART B: SUPPLY CHAIN RISKS INHERENT IN HOTELS

5) Below are some of the risks faced by various hotels in their supply chain. Please indicate the extent to which your hotel faces the named risks.

Key:

5) Very great extent ( ) 4) Great extent ( ) 3) Moderate extent ( )
1) Low extent ( ) 1) Very low extent ( )
Environmental risk sources due to the limited knowledge about the future on such aspects as political, social and natural uncertainties

Demand and supply risk sources that result from the supplier unpredictability on inbound goods and services

Process risks design and implementation of processes within and between the entities in the supply chain that will impact on the hotels supply chain activities

Resource risks associated with unanticipated differences in resource requirements in foreign markets.

The need to balance the business interest of different stakeholders rather than seeking to minimize risk altogether

6) Please tick appropriately the extent to which your hotel has been practicing the following supply chain risk management practices (use the scale below to tick the most appropriate response).
5) Strongly agree; 4) Agree; 3) Moderate extent; 2) Disagree; 1) strongly disagree

<table>
<thead>
<tr>
<th>Risk management Practices</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Risk Identification</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>The hotel assesses the well-being of the business's supply chain resources to determine its vulnerabilities and therefore develop plans to minimize their impact</td>
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<tr>
<td>The risk management practice in the hotel supply chain helps identify areas of underutilized capacity, perhaps offering the option to capitalize on developing opportunities</td>
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<tr>
<td>The hotel's response techniques include risk avoidance, risk reduction, risk sharing, and risk acceptance</td>
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<tr>
<td><strong>Risk Analysis and Treatment of risks</strong></td>
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<tr>
<td>Line managers are the most prominent people responsible for the risk identification in the hotel's supply chain followed by the board of directors/executive management team</td>
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<tr>
<td>The hotel has established a comprehensive supply chain risk inventory of the risks that it expects the managers to manage</td>
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</tr>
<tr>
<td>Guidance on risk identification in the supply chain is offered by the organization both directly (internal consulting services) or indirectly (documents, such as &quot;tool kits&quot;)</td>
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</tbody>
</table>
### Risk Evaluation and control

| The hotel management has put in place measures to evaluate the success of risk management strategies in the supply chain. |
| The hotel management monitors supply chain risk performance outcomes against intended strategic goal to ensure that corporate activities remain on track and correspond to the set course |
| The hotel communicates the evaluation results openly to all the departments and employees concerned |

### PART C: SUPPLY CHAIN RISK MANAGEMENT AND PERFORMANCE

7) Please indicate the extent to which following supply chain risk management practices are being employed by your hotel chain and their effect on the supply chain performance;

| Key | 5) Strongly Agree | 4) Agree | 3) Moderate extent | 2) Disagree | 1) Strongly Disagree |

<table>
<thead>
<tr>
<th><strong>Approach</strong></th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>This hotels’ primary supply chain has the ability to minimize channel safety stock throughout the supply chain</td>
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<tr>
<td>The hotel chain continuously evaluates supplier quality/auditing/certification programmes</td>
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<tr>
<td>The hotel has multiple sources of supply and not giving preference</td>
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</tbody>
</table>
to single sourcing of products and services

- This hotel’s primary supply chain has the ability to minimize all types of waste throughout the supply chain

- The hotel practices intentional risk sharing and knowledge transfer with its suppliers

- The management of hotels inventory is given attention considering the perishability of most of the products

- This hotel’s primary supply chain has the ability to deliver small lot sizes to final customers

- Product differentiation of the hotel’s offering has helped in cushioning the hotel during the periods of travel advisories and downturns in the industry

- The hotel chain has developed strategic alliances with various players within and without the industry to increase its product offering and also clientele

- This hotel’s primary supply chain has the ability to deliver products precisely on-time to final customers

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8) Please indicate the scale that appropriately shows how you rate the performance of your supply chain for the past five years with regards to the parameters listed. Use the scale of 1= To a very large extend 2= Large extend 3= moderate extend 4= small extend 5= very small extend
<table>
<thead>
<tr>
<th>No</th>
<th>SUPPLY CHAIN PERFORMANCE PARAMETERS</th>
<th>Units of measure</th>
<th>YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>2013</td>
</tr>
<tr>
<td>1</td>
<td>Profit maximization</td>
<td>KES</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Revenue maximization</td>
<td>KES</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Cost minimization</td>
<td>KES</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Market share maximization</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Customer satisfaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Accuracy of orders delivered</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Full delivery on requests and proposals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Supplier response time</td>
<td></td>
<td></td>
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<tr>
<td>9</td>
<td>Quality of orders</td>
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<td></td>
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<tr>
<td>10</td>
<td>Stock availability</td>
<td></td>
<td></td>
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<tr>
<td>11</td>
<td>Stock turn over</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Order cycle time</td>
<td></td>
<td></td>
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<tr>
<td>13</td>
<td>Operational efficiency</td>
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</tbody>
</table>
APPENDIX II

THE LIST OF THREE TO FIVE STAR HOTELS IN NAIROBI

1. Eka Hotel
2. Fairmont The Norfolk
3. Hotel La Mada
4. Intercontinental hotel
5. Laico regency
6. Boma Hotel
7. Nairobi Serena  Five star
8. Panari Hotel
9. Sarova Stanley
10. Tribe Hotel
11. Vilarosa Kempinski
12. Hilton Hotel
13. Windsor Golf Club
14. Southern Inn Mayfair  
15. Best Western Premier
16. Crowne Plaza Nairobi  Four star
17. Sarova Panafric Hotel
18. Oryx Hotel
19. Sentrim 680 Hotel  Three star
20. Hennessis Hotel

Source: Kenya Hotels Trip Advisor (2014)