

**SUSTAINABLE PROCUREMENT STRATEGIES AND
SUPPLY CHAIN PERFORMANCE OF FIVE-STAR HOTELS
IN NAIROBI COUNTY, KENYA**

BY

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**Research Project Submitted in Partial fulfillment of the Requirements for
award of the Degree of Masters of Business Administration in
Procurement and Supply Chain Management School of Business
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DECLARATION

This research project is my original work and has not been submitted for the award of a degree or any other qualification in any other university.

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This research project has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

To my beloved Husband and children

ABSTRACT

Sustainable procurement firms do minimize the external factors on the purchased products. The study sought to investigate the influence of sustainable procurement strategies on supply chain performance of five star hotels in Nairobi County, Kenya. The study adopted a descriptive research design and was guided by the following objectives: to establish the sustainable procurement strategies adopted by five star hotels in Nairobi County; and to establish the influence of sustainable procurement strategies on supply chain performance of five star hotels in Nairobi County, Kenya. The respondents in the study were procurement managers of the five-star hotels owing to the fact that supply chain design strategy fall in the domain of procurement managers in most companies who align their strategies to the overall corporate strategy. A census approach was applied in the study in which case, the sampling frame consisted of all the twenty five-star hotels in Nairobi County. Using SPSS version 21 package, a Multivariate regression model was used to analyse the relationship between sustainable procurement strategies and supply chain performance among the five star hotels. The outcome of the study establishes a near perfect positive relationship between sustainable procurement strategies and supply chain performance yielding a Coefficient of Multiple Determination (R^2) of 0.852 implying that up to 85.2% of the variation in the procurement performance of the five star hotels in Nairobi can be attributed to the sustainable procurement strategies they have adopted over the time. The p-value of 0.001 indicates that the impact of sustainable procurement strategies on supply chain performance is significant at the 95% confidence level among five star hotels in Nairobi. The study recommends that local firms implement sustainable procurement strategies to enhance their dynamic capability through supply chain performance. It is clear that a study of this magnitude should include a survey of sizeable number of firms. However time and material resources did not make this feasible and for this reason the study concentrated on five star hotels in Nairobi County. Besides, due to the sensitivity of procurement matters, some of the respondents were non-committal. The study recommends further studies involving confirmatory factor analysis to further test the model so established and to confirm the findings of the study.

TABLE OF CONTENTS

Contents

DECLARATION	ii
ACKNOWLEDGEMENT	iii
DEDICATION	iv
ABSTRACT	v
TABLE OF CONTENTS.....	vi
LIST OF TABLES	x
LIST OF FIGURES	xi
ABBREVIATION & ACRONYMS.....	xii
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background to the Study.....	1
1.1.1 Sustainable Procurement Strategies	2
1.1.2 Supply Chain Performance	3
1.1.3 Five-Star Hotels in Kenya.....	4
1.2 Research Problem	5
1.3 Research Objectives.....	8
1.4 Value of the Study	8

CHAPTER TWO	10
LITERATURE REVIEW	10
2.1 Introduction.....	10
2.2 Theoretical Review	10
2.2.1 Stakeholder Theory	10
2.2.2 Institutional Theory.....	11
2.3 Sustainable Procurement Strategies	12
2.3.1 Supplier Capacity Development	12
2.3.2 Sustainability Criteria in Procurement Contracts	12
2.3.3 Sustainable Supply Roles.....	13
2.4 Supply Chain Performance	13
2.4.1 Metrics for order planning	13
2.4.2 Evaluation of supply link.....	14
2.5 Empirical Literature on Sustainable Procurement Strategies and Supply Chain Performance	14
2.6 Conceptual Framework.....	16
CHAPTER THREE	18
RESEARCH METHODOLOGY	18
3.1 Introduction.....	18
3.2 Research Design.....	18
3.3. Target Population.....	18
3.4 Data Collection	19

3.5 Data Analysis	20
CHAPTER FOUR.....	22
DATA ANALYSIS, FINDINGS AND DISCUSSION	22
4.1 Introduction.....	22
4.2 Demographic Information.....	22
4.2.1 Position of Respondents.....	22
4.2.2 Working Experience of Respondents.....	23
4.3 Sustainable Procurement Strategies	24
4.3.1 Supplier Capacity Development	28
4.3.2 Sustainability Criteria in Procurement Contracts.....	30
4.3.3 Vendor Assessment.....	33
4.3.4 Environmental Product Declaration.....	36
4.4.5 Sustainable Supply chain Roles	37
4.5 Sustainable Supply Chain and Supply Chain Performance	44
CHAPTER FIVE	51
SUMMARY, CONCLUSION AND RECOMMENDATIONS.....	51
5.1 Introduction.....	51
5.2 Summary of the Findings.....	51
5.3 Conclusion	53
5.4 Recommendations.....	53
5.5 Limitations of the Study.....	54

5.6 Suggestions for Further Research	55
REFERENCES	56
APPENDICES	61
APPENDIX I: INTRODUCTION LETTER	61
APPENDIX II: THE QUESTIONNAIRE	62
APPENDIX III: LIST OF FIVE-STAR HOTELS IN NAIROBI.....	73
APPENDIX IV: ROTATED COMPONENT MATRIX	75

LIST OF TABLES

Table 4.1 Position of Respondents.....	23
Table 4.2 Working experience	24
Table 4.3 Drivers of Sustainable Procurement	25
Table 4.4 Supplier Capacity Development	29
Table 4.5 Sustainability Criteria in Procurement Contracts	31
Table 4.6 Vendor Assessment.....	34
Table 4.7 Environmental Products Declaration	36
Table 4.8 Sustainable supply Chain Roles.....	38
Table 4.9 Total Variance Explained	40
Table 4.10 Model Summary	44
Table 4.11 ANOVA	45
Table 4.12 Sustainable Procurement Strategies – Model coefficients.....	47

LIST OF FIGURES

Figure 4.1 Scree Plot.....	42
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ABBREVIATION & ACRONYMS

EPD: Environmental Product Declaration

LCA: Life Cycle Assessment

SCOR: Supply Chain Operations Reference

ISO: International Organization for Standardization

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Consumers play vital role in the market environments and communicate their likes and needs. Particularly, there is increased linkage between ethical concerns and the buying preference by the consumers. This has seen the businesses pursue variety of strategies aimed at meeting the ever changing customer demands (Bezençon & Bli 2010). A crucial part of the demand management comprising the stakeholders' opinions during making decisions concerning procurement matters. This ensures that the interests for all parties are well catered for (Ali and Wisniesk, 2010). The demand management also comes into place when the key stakeholders are pointed out and main sustainability issues addressed in the procurement proposals (Phillips, 2003).

This study was founded on the stakeholder theory. The theory is appropriate since it proposes that sustainable procurement requires firm managers should incorporate all stakeholders when making procurement decisions. Stakeholder theory argues that in sustainable procurement, the management aims at maximization of the stakeholders' interests as the top most priority. As such, they will put in place measures aimed at boosting productivity and improving on how operations are undertaken (Gibson, 2010).

Even with the introduction of new procurement strategies for example e-procurement, there still remain various setbacks on the procurement strategies. Thus the main concern rose onto how the sustainable procurement strategies impact on the supply chain performance. Determination of this is vital especially in the hotel industry where the timeliness in delivery and customers' satisfaction is of most importance. (Chimwani, et al, 2014)

1.1.1 Sustainable Procurement Strategies

According to Awaysheh and Klassen (2010), sustainable procurement involves laying emphasis on short-term initiatives to preserve resources for the next production cycle. Consequently, procuring entities use least expensive manufacturing, material-handling, and transportation systems as part of their supply chain process. The sustainable procurement strategies should also encompass the external factors such as the, social, environmental and political factors (Strategic Planning Task Force 2009).

The main sustainable procurement strategies include; supplier capacity development, sustainability criteria in contract, vendor assessment and sustainable supply roles (Hart, 2005). The sustainable procurement strategies as a framework acts as a framework aimed at obtaining efficient productions at the lowest possible cost. (Seuring and Müller 2008). The commonly used sustainable procurement strategies adopted and applied by firms include; educating suppliers, sustainability criteria in contract, vendor assessment, and sustainable supply roles.

Sustainable procurement enables firms to reduce the amount of time and cost incurred by improper procurement strategies. As such, it enables the organizations account for its finances to minimize fraud and other malpractices. This has seen most organization yearn to ensure that their procurements are sustainable enough due to the advantages it brings out. The challenge experienced however is on businesses to mitigate life cycle impacts that start from the production up to the supplier. (Skjoett-Larsen, 2009).

1.1.2 Supply Chain Performance

The performance is termed as the degree of achievement of certain effort or undertakings. It relates to the prescribed goals or objectives which form the project parameters (Kipmayo, 2014). Thus supply chain performance refers to the purchasing economies, efficiency and effectiveness. It is an assessment process that starts from the producers and goes way up to the suppliers (Olhager et. al., 2002). Particularly it aims to determine how effective the raw material are transformed to final product and later transported to the buyers.

Supply chain performance indicators are used to establish the efficiency and effectiveness of a current system, or to compare with other systems (Beamon, 1999). According to Shepherd and Gunter (2006) supply chain performance indicators include: Rejects early or late delivery to total number of items delivered; Stock variance to total stock value; Line items on back Order to total line items; Transaction Cost; cycle time; and Average cycle time to targeted average cycle time.

However attaining maximal supply chain performance still proves to be a milestone to most companies. As such various challenges are experienced during the supplying process. Such as creation of awareness and educating the members of the importance of integrity in supply chain management. Also various standards have to be met in order to attain enhanced supply chain performance this may pose a challenge since one may not be able to meet all the regulations. In addition, a company may not have the adequate resources to enable it conduct the supply chain as well as expected. These necessitate the management to come up with strategies aimed at enhancing the supply chain strategies in organizations.

1.1.3 Five-Star Hotels in Kenya

The hospitality sector in Kenya is important as it encourages the inflow of local and international tourists thereby boosting the economy. There are 100 star rated hotels in Kenya presenting diverse range of accommodation and hospitality services. Star-rated hotels in Kenya are gradually adopting sustainable procurement strategies to build their core competency through; cost reduction, enhanced operational efficiency, and improved service quality. In addition, sustainable procurement strategies have enabled the organizations manage their global distribution and marketing systems.

Five star hotels that are sustainable procurement strategies compliant and have achieved international standardization have a competitive edge in attracting local and international tourists and are currently the major market players. The sustainable procurement strategies commonly applied by the five star hotels in

Kenya are working with SMEs and vendor assessment (Kumar, 2009). The dynamic environments and constant fluctuations have necessitated the hotel industry supply chain managers to not only consider but initiate implementation of sustainable procurement strategies to improve both their performance (Green et al., 2012).

1.2 Research Problem

The hospitality sector is a potential foreign exchange earner if well harnessed. The hospitality sector in Kenya contribution to the national GDP is predicted to grow at 5.1% per annum for the next decade. However, the competitiveness in the hospitality industry calls the need for adoption of strategies and increased efficiency in the production if the companies attain competitive advantage. Particularly sustainable procurement strategies have been established to highly impact on the supply chain performance (Carter and Rogers, 2008).

While Nairobi City has developed to become one of the largest metropolises in Africa over the last half a century, the number of five-star hotels in Nairobi has remained low relative to the size of the city. This is partly due to the fact that, the hotel industry in Kenya encounters the greatest form of instability both in structure and in output. This goes along to explain the unsteady setting and management of the industry. Consequently there is need for studies to identify how five-star hotels in Nairobi can enhance their organizational performance. Though some five star hotels in Nairobi may be adopting sustainable procurement

strategies, not many of them have successfully implemented sustainable procurement strategies to improve their supply chain performance. The concept of sustainable supply chain strategies is a relatively new phenomenon particularly among the five-star hotels in Kenya hence the need to check how sustainable procurement strategies enhances the supply chain performance of five-star hotels in Nairobi county.

A number of studies exist globally on sustainable procurement strategies and the supply chain performance. Wang (2014) in his study found out that; sustainable supply chain strategies have a positive relationship with how operations are conducted. While this study provides vital insights on sustainable supply chain strategies, the study falls short of establishing the link between sustainable procurement strategies and supply chain performance.

The current study seeks to investigate the extent to which sustainable procurement strategies impacts on supply chain performance. Kumar, Dieveney and Dieveney (2008) in their study identified that eco-design boosted the various performance outcomes namely; intangible outcomes environmental, cost reductions, and economic. Their study is however limited to the extent that they focus on a single dimension of sustainable procurement strategies

The current study diverges from past studies on sustainable procurement by taking a holistic approach view of sustainable procurement strategies including; vendor assessment and sustainability criteria in contract strategies. Versat (2012)

in his study found that sustainable public procurement is critical in the supply chain operations. Despite the fact that the study shades light on the role of supplier selection in green supply chain strategies, the study focuses on the public sector hence the study findings may not be generalized across all sectors.

In Kenya there are very few studies that have found a significant relationship between sustainable procurement strategies and supply chain performance of five star hotels. Chege (2012) in her study established a significant relationship between GSCM and supply chain performance among private hospitals in Nairobi. However, her findings may not be generalizable to the five-star hotel industry as there exists contextual differences between the health sector which the study investigated and the five-star hotel sector. In addition, the study did not touch on sustainable procurement strategies. Obiso (2011) in his study found that petroleum marketing firms in Kenya have not adopted sustainable procurement strategies. However, the study failed to determine the link between sustainable procurement strategies and supply chain performance, hence the current study. Gatari (2014) identified the shortcomings facing the implementation of GSCM in Kenya's manufacturing sector. The study however did not focus on five-star hotel nor link the sustainable procurement strategies with supply chain performance but focused on manufacturing industry hence the need for the current study.

Informed by this knowledge gap, this study sought to establish the influence of sustainable procurement strategies on supply chain performance of five-star hotels

in Nairobi County. The study therefore, sought to answer the research questions: What are the sustainable procurement strategies commonly used by five star hotels in Nairobi County, Kenya? What is the influence of sustainable procurement strategies on supply chain performance of five star hotels in Nairobi County, Kenya?

1.3 Research Objectives

- i. To establish the sustainable procurement strategies adopted by five star hotels in Nairobi County, Kenya
- ii. To establish the influence of sustainable procurement strategies on supply chain performance of five star hotels in Nairobi County, Kenya.

1.4 Value of the Study

At managerial level, the study will benefit the hotel industry and service providers through improving their performance by ensuring better service delivery and competitive advantage by acquiring big market share even globally. The findings from this study will inform decisions of procuring personnel on various aspects of procurement that will require interventions for purposes of improving procurement efficiency. Through the findings of this study, hotel management will be able to understand the interplay between sustainable procurement strategies and procurement performance of the various five star hotels in Kenya.

At theoretical level this study is scholarly in nature hence it will help identify gaps that will trigger further studies on sustainable procurement strategies. Some of the

results of these results will add additional knowledge on the supply chain strategies.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter presents the theoretical and empirical literature of the study based on the study objectives.

2.2 Theoretical Review

The section provides the theories that guide the study. The study is based on stakeholder theory and institutional theory.

2.2.1 Stakeholder Theory

Stakeholder theory was embedded in the management discipline in 1970 and gradually developed by Freeman (1984). It incorporates corporate accountability to a broad range of stakeholders. Stakeholder theory focuses entirely on the issues concerning the stakeholders in an institution (Hung, 1998). The theory holds that organizations should be responsible to (stakeholders) in the society other than just the organizations owners or principals (Hung, 1998). Stakeholders are groups and individuals who benefit from and whose rights are violated or respected by corporate deeds.

The theory holds that a corporate entity invariably seeks to provide a balance between the interests of its diverse stakeholders in order to ensure efficiency in operations. The theory focuses on managerial decision making and recognizes

that interests of all stakeholders have intrinsic value and no sets of interests are assumed to dominate the other (Hung, 1998). The importance of ST is that, taking the consideration of the stakeholders' welfare, the management will be necessitated at putting in place production-effective methods such as the sustainable procurements.

2.2.2 Institutional Theory

The institutional theory was formulated as a way of explaining the similarity in strategies and responses among companies. The theory as described by Lee et al., (2013) holds that three main components of institutions namely; the normative, regulatory and cultural cognitive. Regulatory is concerned about laws and regulations, cultural are concerned about the norms and beliefs while the normative is concerned about the daily occurrences and procedures. Alignment of all these three is what forms the basis of the institutional theory.

The importance of this theory is that it provides a framework for understanding why a particular strategy may be adopted by more than one company. The theory thus makes an assumption that supply chain level actions are mainly as a result of external pressure (Carbone & Moatti 2011, Adebajo et al., 2013, and Lee et al., 2013). Hence the theory's preposition is that implementation of sustainable procurement strategies was as a result of normative, regulatory and cultural influences. Thus through proper coordination of these three, supply chain performance is likely to be enhanced.

2.3 Sustainable Procurement Strategies

2.3.1 Supplier Capacity Development

In order to enhance supply chain sustainability, individuals should have the abilities to be able to react to external pressures and identify their own solutions to problems that arise (Baser, 2007). Once the policy has been approved it is important that staffs, especially those with procurement authority, are oriented to the policy and sustainable purchasing tools to build capacity and awareness of the new approach. If need be organizations should endeavor to communicate successes through case studies. Sustainable procurement strategies should be supported by clear lines of accountability, with incentives and penalties for delivery (Fortune, 2011).

2.3.2 Sustainability Criteria in Procurement Contracts

The procurement sustainability criteria in contract is meant to ensure that procurement activities are undertaken consistently to a high standard, efficiently and economically whilst helping achieve economic, social and environmental benefits for all the communities. This strategy is aimed at promoting effective procurement and should be read in conjunction with the common contract rules, procurement code and individual partner financial procedure rules and corporate priorities (Belfitt et al., 2011). The aims of the procurement sustainability criteria in contract are; to establish a clear strategic direction and ensure the importance of efficient procurement is recognized throughout the partners including the political level; to be clear about what each partner wants to achieve with robust business

cases and clearly drafted tender specifications based on outcomes; to ensure that current legislation and good strategies are applied to all procurements.

2.3.3 Sustainable Supply Roles

The focus of the standard should be on sustainable supply, not sustainable supplier. This means using procurement techniques to deliver the outcomes required by the buying organizations' corporate responsibility objectives or policy outcomes for public sector. It should not primarily focus on the sustainability strategies of the supplier in their own organizations unless this represents a risk to the purchasing organization (labor standards) (Awaysheh and Klassen, 2010). Companies need to monitor the environmental impact of suppliers, and develop an environmental purchasing policy that aims to reduce the environmental impact of their own and their suppliers 'activities, goods and services (otherwise known as 'green buying') (Avery, 2005). However, supplier diversity actually refers to initiatives that aim to increase the number of diversely controlled (e.g. ethnic-minority owned or women-owned) businesses that supply goods and services to public and private sector organizations (Disney & Towill, 2003).

2.4 Supply Chain Performance

2.4.1 Metrics for order planning

Metrics for order planning include; order entry method, order lead-time, and customer order path. The order entry method determines the way and extent to which customer specifications are converted into information exchanged along

the supply chain. The customer order path traverses is another important measure whereby the time spent in different channels can be determined. By analyzing the customer order path, non-value adding activities can be identified so that suitable steps can be taken to eliminate them.

2.4.2 Evaluation of supply link

Traditionally supplier performance measures were based on price variation rejects on receipt and on time delivery. For many years, the selection of suppliers and product choice were mainly based on price competition with less attention accorded to other criteria like quality, reliability, etc. Strategic level measures include lead time against industry norm, Quality level, Cost saving initiatives, and supplier pricing against market. Tactical level measures include the efficiency of purchase order cycle time, booking in procedures, cash flow, quality assurance methodology and capacity flexibility. Operational level measures include ability in day to day technical representation, adherence to developed schedule, ability to avoid complaints and achievement of defect free deliveries.

2.5 Empirical Literature on Sustainable Procurement Strategies and Supply Chain Performance

The companies adopt sustainable procurement as a strategy aimed to ensure that the organization gets maximum gain from the operations. Various studies have been conducted trying to examine the relationship that exists. To begin with, Belfit et al (2011) noted that engaging in market differentiation acts as a driver that encourages the companies to adopt sustainable procurement strategies. As

such, the companies will yearn to use the supply chain strategies which will give them competitive advantage.

Koplin et al (2007) discussed brand reputation and image suggesting that focal companies are held responsible for the environmental and social impacts of the entire supply chain and indeed this is true with companies who possess strong brands. The impact of this will rely heavily on impact of brand image as circumvent negative brand attention and direct positive attention to their brands through sustainability purchasing initiatives. Boost in brand image has been attributed to sustainability purchasing, as they can both evade negative brand attention and direct positive attention to their brands through sustainability purchasing initiatives (Coro, 2008).

Jonas and Tom (2014) argue that with Strong media attention and growing awareness among consumers about the need for sustainability initiatives, a company's reputation and brand image has become critically dependent on the inclusion of sustainability in sourcing decisions. Companies are now under close watch in the implementation of sustainable strategies throughout their supply chain and in fact these organizations dread being caught on unethical or illegal strategies.

According to Awaysheh (2010) procuring organizations are more seriously involved in designing and implementing sustainable procurement policies focusing on how environmental issues and issues relating to other aspects of the

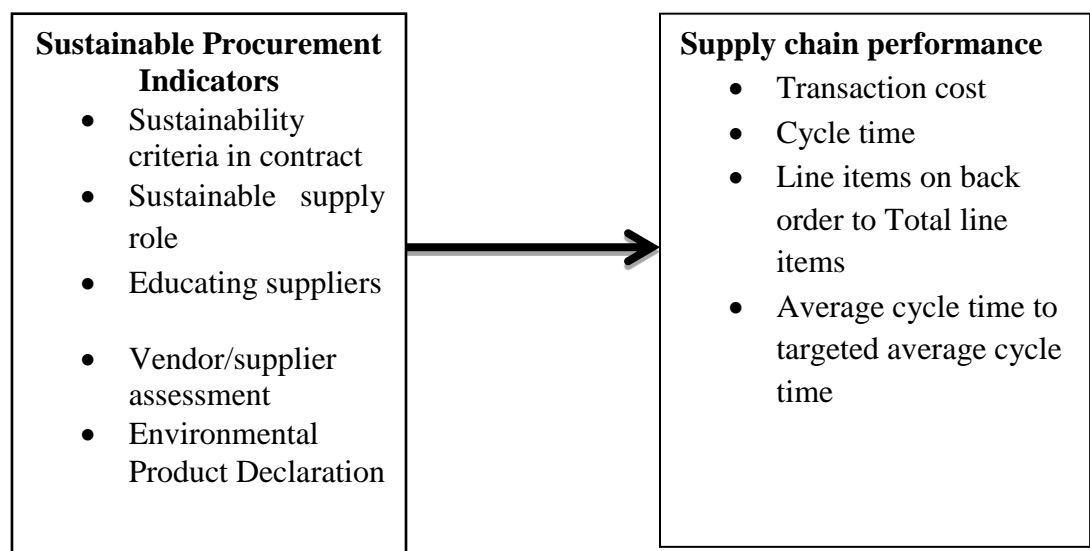
sustainable development pillars (society and economy) can be integrated in the procurement with a view to enhance their supply chain performance.

Salaria (2012) investigated the state of sustainable procurement strategies in India. The study established that Indian managers are well aware of the need to develop supplier partnerships, integrate and coordinate the flow of goods from supplier to ultimate customer, and share information among supply chain partners. However, the infrastructure necessary to facilitate such seamless integration is not yet available.

2.6 Conceptual Framework

Independent variable

Dependent variable



Source: Author (2016).

To achieve the stated specific objectives and maintain consistency with the conceptual model for this study, non-directional alternative hypotheses are tested (Cooper & Schindler, 2001). The study seeks to address the research problem by testing the following hypothesis;

H₀: Sustainable procurement strategies have no significant influence on the supply chain performance of five-star hotels in Nairobi County, Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter points out the study methodology that was employed in this study. It involves provides guidelines upon which the collection, measurement and analysis of data. Particularly, the following subsections are included; research design, target population and sample, data collection and analysis.

3.2 Research Design

This study adopted a descriptive survey research design. The descriptive research design was appropriate as the study sought to describe the characteristics of five-star hotels with regard to sustainable procurement strategies, estimate the proportion of five- star hotels implementing sustainable procurement strategies and make predictions on whether sustainable procurement strategies influence the supply chain performance (Nsubuga, 2006). The descriptive research design further allowed the use of the quantitative and qualitative approaches, which will enable the researcher to collect in-depth and complementing data.

3.3. Target Population

Mugenda and Mugenda (2003) define a population as an aggregate of all that conform to given characteristics. The population of interest in the study consisted of all the five-star hotels in Nairobi County. According to Ministry of Tourism database (2016), currently there are 25 five-star hotels in Nairobi County.

A census approach was applied in the current study in which case, the sampling frame will consist of all the five-star hotels in Nairobi County. Twenty-five five star hotels will be on the roll. The study employed a census approach because of the small number of five-star hotels in Nairobi County. According to Kothari (2004) census sampling technique is applied when the target population is small and accessible. A census approach improves the how valid the collected data is by including certain information-rich cases for study (Snow & Thomas, 2013). The procurement managers of each of the five-star hotels will be selected as the correspondent in the study giving a total of 25 respondents.

3.4 Data Collection

The study used purely both primary and secondary data. Primary data was collected using a semi-structured questionnaire subdivided into three sections. Section A consisted of open-ended questions aimed at obtaining general information on the five-star hotels. Section B consisted of questions aimed at obtaining data on sustainable procurement strategies while section C consisted of questions aimed at obtaining data on the impact of sustainable procurement strategies on the supply chain performance of the five-star hotels.

The respondents in the study were the procurement managers of the five-star hotels owing to the fact that in most cases supply chain design strategy fall in the domain of procurement managers in most companies who align their strategies to the overall corporate strategy. A 5-point Likert scale was used to measure the

output of each item answered by the participants. The rationale for choosing the questionnaire as the research instruments is primarily due to its practicability, applicability to the research problem and the size of the population. It is also cost effective (Denscombe, 2008). On the other hand, secondary data on supply chain performance was obtained from the financial reports of the five-star hotels over the reference period.

3.5 Data Analysis

Kombo and Tromp (2006) note that data analysis involves examining what had been collected and making deductions and inferences. To establish the sustainable procurement strategies adopted by five star hotels in Nairobi County, descriptive statistics was used to describe (and analyse) the variables numerically. These included: simple means; standard deviations regression and correlation analysis by use of SPSS while factor analysis was applied to check on the categorization of the sustainable procurement strategies adopted by the five-star hotels.

A multivariate regression model was used to analyse the relationship between sustainable procurement and supply chain performance. Snijders and Bosker (2000) outline the rationale for multivariate regression analysis based on the following salient features. The multiple regression models were computed as follows;

Y = fx (Sustainable procurement strategies)

Where;

Y = Supply Chain Performance (Transaction cost reduction)

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND DISCUSSION

4.1 Introduction

The study sought to establish the influence of sustainable procurement strategies on supply chain performance of five star hotels in Nairobi County, Kenya. This chapter presents the research findings by focusing on; demographic characteristics of the respondents, data analysis and suggestions by the respondents based on the specific objectives of the study. Data on sustainable strategies and supply chain performance was analysed using descriptive and inferential statistics.

All the twenty five (25) questionnaires administered to the respondents were returned representing an overall response rate of 100%. This response rate was sufficient and representative and conforms to Mugenda and Mugenda (2003) stipulation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good while a response rate of 70% and over is excellent.

4.2 Demographic Information

The demographic characteristics of the respondents that were tested were; Job position and working experience.

4.2.1 Position of Respondents

Corporate strategic decisions involve managers running all the functional areas of an organization. Cognizant of the above, an inquiry was made into the job positions of the respondents. The results are presented in table 4.1.

Table 4.1 Position of Respondents

Job position	Frequency	Percent
Chief Supply chain manager	12	48.0
Logistics Manager	5	20.0
Senior Supply chain officer	3	12.0
Supply chain Assistant manager	3	12.0
Warehouse Manager	2	8.0
Total	25	100.0

Source: Researcher (2016).

From Table 4.1 is clear that most of the respondents (48%) were chief supply chain managers followed by logistics managers at 20%. Senior Supply chain officers and Supply chain Assistant managers 12% respectively and warehouse managers 8%. This implies a fair spread respondents who are directly involved in making key supply chain decisions thus were better placed and aware of the procurement strategies adopted by their firms.

4.2.2 Working Experience of Respondents

The working experience of the workforce positively correlates with successful supply chain performance given the fact that the members of an organization have significant information on a firm's overall procurement strategy. In this context, the study sought to determine the number of years the various respondents had worked in their current positions among the hotels firms. The results are shown in Table 4.2.

Table 4.2 Working experience

Number of Years	Frequency	Percent
16yrs and over.	17	68.0
6-10 yrs.	4	16.0
11 - 15 yrs.	3	12.0
1-5yrs.	1	4.0
Total	25	100.0

Source: Researcher (2016).

The findings in table 4.2 show that 68% of the respondents have over sixteen years of working experience with those with 11-15 years working experience constituting 12% of the respondents. On the other hand, only 4% of the respondents have less 5years of working experience. This clearly implies, information collected was from employees who have massive experience and familiarity with procurement strategies adopted by the respective star-rated hotels.

4.3 Sustainable Procurement Strategies

The first objective of the study was to establish the sustainable procurement strategies adopted by five star hotels in Nairobi County, Kenya. For easy analyzability the various sustainable procurement strategies were categorized into the following main streams; supplier capacity development, sustainability criteria in procurement contracts, vendor assessment, environmental product declaration, and sustainable supply chain roles. The study sought to investigate the key drivers of sustainable procurement among the star-rated hotels before examining the various sustainable procurement strategies adopted by the star-rated hotels. The results are presented in table 4.3.

Table 4.3 Drivers of Sustainable Procurement

Drivers of sustainable procurement are adopted by hotels as one of the sustainable procurement strategies used by star rated hotels to increase supply chain performance.

The respondents were asked to indicate to what extent they agree with the statement in relation to drivers of sustainable procurement in the five star hotels in Nairobi county, Kenya and they responded to various aspects under the variable on five point likert scale (5= very great extent, 4=great extent, 3=moderate extent, 2=little extent, 1= very little extent) The research findings are as in the table 4.3 where it shows the resultant mean and standard deviation.

Table 4.3

Driver of Sustainable Procurement	N	Mean	Std. Deviation
The hotel has adopted sustainable procurement strategies to respond to increased activism from NGOs and social media	25	4.7200	.54160
The hotel has adopted sustainable procurement strategies in line with the corporate of promoting environmental responsibility	25	4.6000	.70711
The hotel has adopted sustainable procurement strategies to minimize disposal costs for disposal hazardous materials	25	4.0400	.84063
The hotel has adopted sustainable procurement strategies to respond to investors' pressure	25	3.9600	.53852
The hotel has adopted sustainable procurement strategies as a proactive measure while anticipating resources scarcity / depletion	25	3.9600	1.42829
The hotel has adopted sustainable procurement strategies as a strategy to utilize new market opportunities	25	3.9200	.90921
The hotel has adopted sustainable procurement strategies to avoid supply chain disruption (i.e. suppliers not anticipating new environmental regulations, strikes)	25	3.5600	.96090
The hotel has adopted sustainable procurement strategies as a result of the Influence of its key suppliers	25	3.5600	1.15758
The hotel has adopted sustainable procurement strategies to avoid risk to brand/image associated with bad social/environmental strategies of suppliers	25	3.4800	1.19443
The hotel has adopted sustainable procurement strategies to maintaining or present an environmental or socially responsible image	25	3.4800	1.32665
The hotel has adopted sustainable procurement strategies to comply to new regulations	25	3.4400	1.04403
The hotel has adopted sustainable procurement strategies to influence and advance suppliers in developing environmentally friendly goods	25	3.3200	1.67631
The hotel has adopted sustainable procurement strategies to reduce costs of services/products procured (i.e. maximize reuse, limit usage)	25	3.1600	1.14310
The hotel has adopted sustainable procurement strategies to enjoy the economies of scale arising from the low cost of environmentally friendly materials and goods	25	2.9600	1.48549
The hotel has adopted sustainable procurement strategies as a competitive strategy	25	2.5600	1.44568
The hotel has adopted sustainable procurement strategies to meet your clients expectations	25	2.4400	.82057

Source: Researcher (2016).

To a very large extent (mean ≥ 4.6 , with significant standard deviation ≥ 0.5), the hotel has adopted sustainable procurement strategies to respond to increased

activism from NGO's and social media, it has adopted sustainable procurement strategies in line with the corporate of performing environmental responsibility. This means that sustainable procurement strategies are to a very great extent with a mean (3.5). The findings are in line with Jonas and Tom (2012) where the study identified drivers of procurement. This implies that the five star hotels in Nairobi County are mindful of implementation of sustainable strategies in supply chain.

To a great extent ($3.1 \leq \text{mean} \leq 4.0$ to a significance of standard deviation ≥ 1.0), the hotel has adopted sustainable procurement strategies to minimize disposal costs for disposal hazardous material, it has adopted sustainable procurement strategies as a proactive measure while anticipating resources scarcity, depletion, it has adopted sustainable procurement strategies as a strategy to utilize market opportunities, it has adopted sustainable procurement strategies to avoid supply chain disruption that is (suppliers not anticipating new environmental regulation , strikes), has adopted sustainable procurement strategies as a result of influence of its key suppliers, it has adopted sustainable procurement strategies to avoid risk to brand /image associated with bad social environmental strategies of suppliers, it has adopted sustainable procurement strategies to maintain present environmental or socially responsible image, it has adopted sustainable procurement strategies to comply to new regulations, it has adopted sustainable strategies to influence and advance suppliers in developing environmentally friendly goods ,it has adopted sustainable procurement strategies to reduce cost of services, products procured that is (maximizing reuse limit uses).

To a moderate extent, ($2.4 \leq \text{mean} \leq 2.9$) with significant standard deviation of >1.0), the hotel has adopted sustainable procurement strategies to enjoy the economies of scale arising from the low cost of environmentally friendly materials and goods, it has adopted sustainable procurement strategies as a competitive strategy, the hotel has adopted sustainable procurement strategies to meet the clients expectations.

This finding is in line with Jonas and Tom (2014) study where they identified driver of sustainable procurement .This implies that the five star hotels in Nairobi County, Kenya is mindful of implementation of drivers of procurement in supply chain strategies .

4.3.1 Supplier Capacity Development

Supplier capacity development are policies that are important that staffs especially those in procurement to be oriented to the policy and sustainable purchasing tools to build capacity awareness of new approach.

The respondents were asked to indicate to what extend they agree with the statement in relation to supplier capacity development in the five star hotels and the responded to various aspects under the variants on five point likert scale (5 =very great extent, 4= great extent, 3= moderate extent, 2= little extent and 1= very little extent). The research findings are as in the table below:

Table 4.4 Supplier Capacity Development

Supplier Capacity development	N	Mean	Std. Deviation
The hotel conducts orientation to all its employees on the procurement policy	25	4.4400	.76811
The hotel's sustainable procurement policies are supported by clear lines of accountability	25	4.3600	.86023
The hotel staffs, especially those with procurement authority, are oriented to the policy and sustainable purchasing g tools	25	4.2400	1.09087
The hotel has put in place mechanisms to promote supply chain sustainability in order to adapt to external pressures	25	4.1600	1.17898
The hotel has invested in building capacity through training on sustainable purchasing tools	25	3.8400	.74610
The hotel communicates a consistent message designed for the needs of various internal and external audiences	25	3.8400	1.34412
The hotel procurement manager endeavors to inform and develop their suppliers and contractors	25	3.5600	1.15758
The hotel has identified sustainable issues on procurement and freely discusses them with all its stakeholders	25	3.5200	1.15902
The hotel has put in place mechanisms to enhance its ability to react to external pressures and identify their own solutions to problems that arise	25	3.4800	1.29486
The hotel engages the market early in the process to maximize the opportunities for more sustainable and innovative solutions	25	3.4000	1.29099
Mean of Weighted Means		3.884	

Source: Researcher (2016).

To a very large extent the (mean \geq 4.1), with significant standard deviation \geq 0.5).The hotel conducts orientation to all its employees on procurement policy, its sustainable procurement policies are supported by clear lines of accountability, hotel staffs especially those with procurement authority are oriented to the policy and sustainable purchasing tools, it has put in place mechanisms to promote supply chain sustainability in order to adopt to external pressures. This implies capacity development is to a very great extent with mean (3.5). The findings are in line Fortune (2011), where the study identified capacity development strategies.

This means that five star hotels are mindful of implementation of capacity development strategies.

To a large extent ($3.4 \leq \text{mean} \leq 4.0$), with significant standard deviation >1.0 , the hotel has invested in building capacity through training on sustainable purchasing tools, it communicates a consistent message designed for the needs of various internal and external audiences, its procurement managers endeavors to inform and develop their suppliers and contractors, it has identified sustainable issues on procurement and freely discusses them with all its stake holders, it has put in place mechanisms to ensure its ability to react to external pressures and identify their own solutions to problems that arise, it engages the market early in the process to maximize the opportunities for more sustainable and innovative solution.

This means that the five star hotels have put supplier capacity development to a great extent with an overall mean of (3.884).

The findings are in line with Fortune (2011) where the study identified supplier capacity development. This implies that the five star hotels in Nairobi County are mindful in implementation or adapting supplier capacity development.

4.3.2 Sustainability Criteria in Procurement Contracts

Sustainability criteria in contract procurement contracts strategy is aimed at promoting effective procurement and should be read with common rules.

The respondents were asked to rate their levels of agreement in relation to various statements in relation to sustainable criteria in procurement contracts in five star hotels and they responded to various aspects under the variable of a five point likert scale (5= very great extent, 4=great extent, 3=moderate extent , 2=little extent,1= very little extent)

The mean was computed and ranked below:

Table 4.5 Sustainability Criteria in Procurement Contracts

Sustainability Criteria in Procurement contracts	(N)	Mean	Std. Deviation
The hotel endeavors to share information across the supply chain to ensure procurement rules are complied to foster sustainable supply chain strategies	25	4.6800	.55678
The hotels has put in place mechanisms to ensure that procurement skills are developed, shared and used effectively	25	4.4800	.50990
The hotel ensures that procurement activities are undertaken consistently to a high standard, efficiently and economically	25	4.0400	.93452
The hotel endeavors to explore creative and innovative solutions to improve our contribution to sustainable development through procurement	25	3.9200	.99666
The hotel undertakes continuous improvement in quality and cost-effectiveness of service provision to facilitate sustainability in its procurement functions	25	3.8800	1.39403
The hotel has established sustainability criteria in procurement contracts to promote supply chain sustainability	25	3.7600	1.05198
The hotel's procurement choices reflect each partners' corporate objectives in the supply chain	25	3.4400	1.29357
The hotels has established a clear strategic direction and ensure the importance of efficient procurement	25	3.4000	1.29099
The hotel has established a consistent and transparent procurement approach in its quest to enhance sustainability in its supply chain processes	25	3.2000	1.41421
The hotel's current legislation and good strategies are applied to all procurement and contracts management activities	25	3.2000	1.44338
Mean of Weighted Means		3.8	

Source: Researcher (2016)

To a very large extent (mean ≥ 4.4) with significant standard deviation ≥ 0.5). The hotel endeavors to share information across the supply chain strategies, it has put in place mechanisms to ensure that procurement skills are developed shared and used effectively. This means that sustainability criteria in procurement contracts strategies to a very great extent with overall mean (3.8). The findings are in line with Carbon and Moatt (2011) where the study identified sustainability criteria in contract strategy as one of procurement strategies. This means that the five star hotels were mindful about the sustainability criteria in contract strategies.

To a large extent ($3.2 \leq \text{mean} \leq 4.0$) with significant standard deviation >1.0), the hotels ensure that procurement activities are undertaken consistently to high standard efficiently and economically, it endeavors to explore creative and innovative solutions to improve their contribution to sustainable development through procurement, it undertakes continuous improvement in quality and cost effectiveness of service provision to facilitate sustainability in procurement functions, it has established sustainability criteria in procurement contracts to promote supply chain sustainability, its procurement choices reflect each partner's corporate objectives in the supply chain, the hotels have established a clear strategic direction and ensure the importance of efficient procurement, it has established consistent and transparent procurement approach in its quest to enhance sustainability in its supply chain process, the hotels' current legislation and good strategies are applied to all procurement contract management activities.

This means that the five star hotels sustainability criteria procurement contracts are to a large extent with an overall mean of 3.8.

The findings are in line with Carbone and Moatt (2011) where the study identified sustainability criteria in procurement contract as one of the sustainable procurement strategy. This implies that the five star hotels were mindful of the supply chain strategy.

4.3.3 Vendor Assessment

Vendor assessment in procurement strategy used in five star hotels in Nairobi, Kenya, the respondents were asked to rate their levels of agreement with various statements in relation to vendor assessment in five star hotels and responded to various aspects under the variable of a five point likert scale (5= very great extent, 4=great extent, 3=moderate extent, 2=little extent, 1= very little extent).

The mean was computed and ranked as below:

Table 4.6 Vendor Assessment

Vendor Assessment	N	Mean	Std. Deviation
The hotel has established vendor assessment mechanisms that enables it evaluate supplier's environmental and social qualities	25	4.4000	.91287
The hotel lays emphasis on creating positive social impact and diminishing negative environmental impact	25	4.4400	.76811
The hotel has put in place mechanism facilitating the assessment of suppliers	25	4.2400	1.09087
The hotel has extending supplier evaluation to ensure that also the whole supply chain meets sustainability requirements	25	4.1600	1.17898
The hotel has integrated supplier evaluation methods, codes of conduct and collaborative activities to enhance sustainability along the supply	25	3.8400	.74610
In collaboration the company is in direct contact with the suppliers and provides them education	25	3.5600	1.15758
The hotel is increasingly integrating supplier evaluation methods	25	3.5200	1.15902
The hotel endeavors to create positive social impact and diminishing negative environmental impact are nowadays receiving greater attention	25	3.4800	1.29486
The hotel makes surprise visits to suppliers while applying scorecards to ensure they adhere to sustainable procurement strategies	25	3.4800	1.32665
The hotel partakes in providing its suppliers with education, assistance, training or other supporting activities	25	3.4000	1.29099
Mean of Weighted Means		3.852	

Source: Researcher (2016).

To a large extent (mean ≥ 4.1 with significant standard deviation ≥ 0.5), the hotel has established vendor assessment mechanisms that enables evaluate suppliers environmental and social qualities, it has laid emphasis on creating positive social impact and diminishing negative environmental impact, it has put in place mechanisms facilitating assessment of suppliers, it has supplier evaluation to ensure that the whole supply chain meets sustainability requirements. This implies

that vendor assessment to a very great extent with an overall mean (3.582). Finding is in line with Aimenez and Tanzwa (2012) where the findings were to a very large extent, it showed that the five stars were mindful of vendor assessment as supply chain strategies.

To a large extent $3.4 \leq \text{mean} < 4.0$) with significant standard deviation >1.0) the hotel has integrated supplier evaluation to ensure that also the whole supplier evaluation meets codes of conduct and collaborative activities to enhance sustainability along supply chain, the hotel collaboration, is in direct contact with suppliers and provides them education, it is increasingly integrating supplier evaluation methods, it endeavors to create positive social impact and diminishing negative environmental impact are nowadays receiving greater attention ,it makes surprise visits to suppliers while applying scorecards to ensure they adhere to sustainable procurement strategies it partakes in providing its suppliers with education, assistance ,training and other supporting activities .

This means that the five star vendor assessments are to a great extent with a mean of (3.852).

The findings are in line with Aimenez and Tanzwa (2012), where the hotel vendor assessment is to a large extent, meaning that the five star hotels are mindful of supply chain strategies.

4.3.4 Environmental Product Declaration

This is one of the standardised ways of quantifying the environmental impact of a product or system.

Table 4.7 Environmental Products Declaration

Environmental Product Declaration	N	Mean	Std. Deviation
The hotel endeavors to educate consumers about the product and its environmental impact	25	4.7200	.54160
The hotels uses data that is objective, neutral and transparent with regards to sustainable procurement	25	4.0800	1.15181
The Hotel's declarations include information on the environmental impact of raw material acquisition	25	4.0400	.84063
The hotel has put in place mechanisms of quantifying the environmental impact of a product or system	25	3.9600	.53852
The hotel clearly portrays the content of materials and chemical substances, emissions to air, soil and water and waste generation	25	3.9600	1.42829
The hotel has put in place systems to measure the environmental impact of its products' and inputs across the product lifespan	25	3.9200	.99666
The Hotels ensures that customers can more easily compare products based on their environmental attributes	25	3.8800	1.39403
The hotel has put in place adequate structures to ensure that all its inputs and outputs have environmental declaration marks	25	3.8400	1.34412
The hotel undertakes continuous improvement of its environmental attributes	25	3.7200	1.02144
The hotel shares and disseminates information on the environmental impact of raw material acquisition to key suppliers and stakeholders		3.4000	1.63299
Mean of Weighted Means		3.952	

To a very large extent mean ≥ 4.7 , with significant standard ≥ 0.5 , the hotel endeavours to educate consumers about the product and its environmental impact.

This means that the sustainable procurement strategies to a very great extent with the overall mean 3.952. These findings are in line to Chan (2003), where the study

identified environmental product declaration as one of the procurement strategies. This means that the five star hotels have environmental concern.

To a large extent ($3.4 \leq \text{mean} \leq 4.0$) with significant standard deviation >1.0), the hotel uses data that is objective neutral and transparent with regard to its sustainable procurement, its declaration include information on environmental impact of raw materials acquisition, it has put in place mechanisms of quantifying the environmental impact of a product or system, it clearly portrays the content of materials and chemicals substances, emissions to air, soil, water and waste generation it has put in place systems to measure the environmental impact of its products and inputs across the product lifespan, it ensures that customers can more easily compare products based on their environmental attributes, it undertakes continuous improvement of its environmental impact of raw materials acquisition to key suppliers and stake holders.

This means that the environmental product declaration is to a large extent with an overall mean of (3.952). The findings are in line with Chan (2003) where the study identified environmental product declaration as one of the sustainable procurement strategies. This implies that the five star hotels are mindful about the environmental concerns.

4.4.5 Sustainable Supply chain Roles

Sustainable supply chain roles are the procurement techniques that deliver objective policy.

Table 4.8 Sustainable supply Chain Roles

Supply chain Roles	N	Mean	Std. Deviation
The hotel stresses on cleaner production approaches by ensuring that procurement managers are involved in the early stages of product development and product design	25	4.6000	.70711
The hotel lays emphasis on intra-organizational communication aimed at enlarging the sphere of responsibility of their supply chain managers with regards to sustainable procurement strategies	25	4.4800	.50990
The hotel partakes in developing well-functioning relationships with suppliers.	25	4.4000	.91287
The hotels uses procurement techniques to deliver the outcomes required by the buying organizations	25	4.1600	1.17898
The hotel focuses on sustainable suppliers rather than supply capacity	25	3.9200	.99666
The hotels require suppliers to introduce environmental policy and obtain environmental management	25	3.9200	1.11505
The hotel takes advantage of Improvements in buyer-supplier relationships leading to better production practices and lowering supply risks	25	3.4800	1.32665
The hotel has established mechanisms to ensure sustainability of manufacturing processes	25	3.4400	1.29357
The hotel has developed a process-based supply (Influencing consideration of environmental concerns within Supplier company).	25	3.4000	1.29099
The hotel has established an environmental purchasing policy that aims to reduce the environmental impact of its inputs and products	25	2.9600	1.48549
Mean of Weighted Means		3.876	

Source: Researcher (2016).

To a very large extent mean(≥ 4.1) with significant standard deviation ≥ 0.5), the hotel stresses on cleaner production approaches by ensuring that procurement managers are involved in the early stages of product development and product design, it lays emphasis on intra-organisational communication aimed at enlarging the sphere of responsibility of their supply chain managers with regards to suitable procurement strategies ,it partakes in developing well-functioning relationships with suppliers techniques to deliver the outcomes required by buying

organisations. This means that supplier roles are to a very great extent with a mean of 3.876. The findings are in line with Awaysheh and Klassen (2010) where the study identified sustainable supply chain roles as one of the sustainable procurement strategies. This implies that the five star hotels in Nairobi County are mindful of sustainable supply chain strategies.

To a large extent ($2.9 \leq \text{mean} \leq 3.9$) with significant standard deviation (>1.0), hotel focuses on sustainable supplier rather than supply capacity, requires suppliers to introduce environmental policy and obtain environmental policy and obtain environmental management, it undertakes advantage of improvements in buyer supplier relationships leading to the better production strategies and lowering supply risks, it has established mechanisms to ensure sustainability of manufacturing processes, it has developed a process based supply (influencing consideration of environmental concern within supplier firm), it has established an environmental purchasing policy that aims to reduce environmental impact of its inputs and products. This means that sustainable supply roles to a large extent overall mean (3.92).

The findings are in line with Awaysheh and Klassen (2010) where the study identified sustainable supply chain roles as one of the sustainable procurement strategies. This implies that the five star hotels in Nairobi county are mindful of sustainable supply.

Table 4.9 Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	13.717	27.433	27.433	13.717	27.433	27.433	9.879	19.758	19.758
2	10.758	21.516	48.949	10.758	21.516	48.949	8.088	16.175	35.933
3	7.158	14.317	63.266	7.158	14.317	63.266	6.785	13.571	49.504
4	4.199	8.399	71.665	4.199	8.399	71.665	6.520	13.040	62.544
5	3.533	7.065	78.730	3.533	7.065	78.730	5.020	10.040	72.584
6	2.297	4.594	83.324	2.297	4.594	83.324	4.617	9.233	81.817
7	1.630	3.260	86.584	1.630	3.260	86.584	2.383	4.767	86.584
8	1.447	2.893	89.477						
9	1.165	2.330	91.807						
10	1.046	2.092	93.898						
11	.851	1.702	95.600						
12	.515	1.030	96.629						
13	.407	.814	97.444						
14	.365	.731	98.175						
15	.280	.560	98.735						
16	.195	.390	99.124						
17	.129	.258	99.383						
18	.114	.227	99.610						
19	.071	.142	99.751						
20	.065	.129	99.881						
21	.034	.068	99.949						
22	.016	.032	99.981						
23	.010	.019	100.000						
24	.000	.000	100.000						
25	1.111E-15	2.222E-15	100.000						
26	8.858E-16	1.772E-15	100.000						
27	5.361E-16	1.072E-15	100.000						
28	4.169E-16	8.338E-16	100.000						
29	3.327E-16	6.653E-16	100.000						
30	2.238E-16	4.477E-16	100.000						
31	1.218E-16	2.435E-16	100.000						
34	4.554E-17	9.108E-17	100.000						
35	3.184E-17	6.369E-17	100.000						
36	2.192E-17	4.383E-17	100.000						
37	7.171E-18	1.434E-17	100.000						
38	-	-1.615E-17	100.000						
49	8.075E-18	-1.141E-15	100.000						
50	5.703E-16	-2.582E-15	100.000						
	1.291E-15								

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	13.717	27.433	27.433	13.717	27.433	27.433	9.879	19.758	19.758
2	10.758	21.516	48.949	10.758	21.516	48.949	8.088	16.175	35.933
3	7.158	14.317	63.266	7.158	14.317	63.266	6.785	13.571	49.504
4	4.199	8.399	71.665	4.199	8.399	71.665	6.520	13.040	62.544
5	3.533	7.065	78.730	3.533	7.065	78.730	5.020	10.040	72.584
6	2.297	4.594	83.324	2.297	4.594	83.324	4.617	9.233	81.817
7	1.630	3.260	86.584	1.630	3.260	86.584	2.383	4.767	86.584
8	1.447	2.893	89.477						
9	1.165	2.330	91.807						
10	1.046	2.092	93.898						
11	.851	1.702	95.600						
12	.515	1.030	96.629						
13	.407	.814	97.444						
14	.365	.731	98.175						
15	.280	.560	98.735						
16	.195	.390	99.124						
17	.129	.258	99.383						
18	.114	.227	99.610						
19	.071	.142	99.751						
20	.065	.129	99.881						
21	.034	.068	99.949						
22	.016	.032	99.981						
23	.010	.019	100.000						
24	.000	.000	100.000						
25	1.111E-15	2.222E-15	100.000						
26	8.858E-16	1.772E-15	100.000						
27	5.361E-16	1.072E-15	100.000						
28	4.169E-16	8.338E-16	100.000						
29	3.327E-16	6.653E-16	100.000						
30	2.238E-16	4.477E-16	100.000						
31	1.218E-16	2.435E-16	100.000						
34	4.554E-17	9.108E-17	100.000						
35	3.184E-17	6.369E-17	100.000						
36	2.192E-17	4.383E-17	100.000						
37	7.171E-18	1.434E-17	100.000						
38	-	-1.615E-17	100.000						
49	8.075E-18	-	100.000						
49	-	-1.141E-15	100.000						
50	5.703E-16	-	100.000						
50	-	-2.582E-15	100.000						
	1.291E-15								

Extraction Method: Principal Component Analysis.
Source: Researcher (2016).

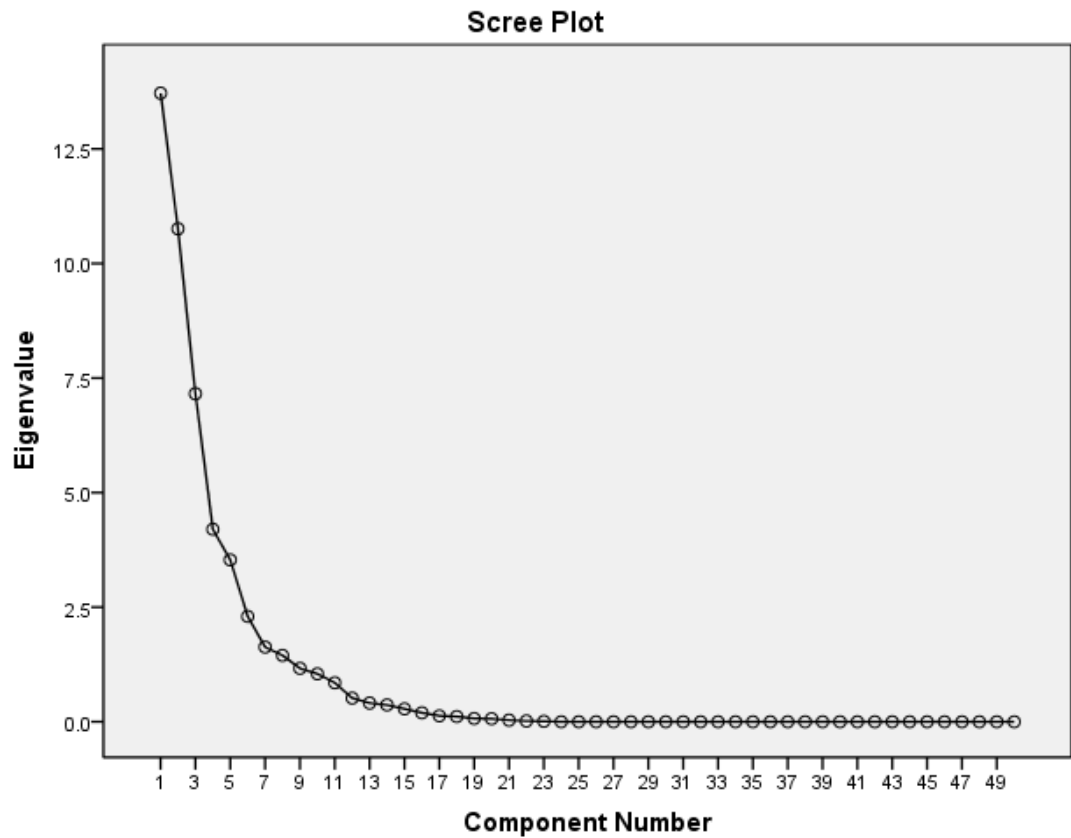


Figure 4.1 Scree Plot

The results in Table 4.9 indicate that, seven sustainable procurement strategies account for up to 86.58% of the total standard variances implying that the seven sustainable procurement strategies have the greatest impact on supply chain performance of the five star hotels in Nairobi.

As indicated in Appendix IV (Rotated Component Matrix) these sustainable procurement strategies include: The hotel’s partaking in developing well-functioning relationships with suppliers; The hotel’s endeavor to create positive social impact and diminishing negative environmental impact are nowadays

receiving greater attention; The hotel has put in place mechanisms to promote supply chain sustainability in order to adapt to external pressures; The hotel has identified sustainable issues on procurement and freely discusses them with all its stakeholders; The hotels uses data that is objective, neutral and transparent with regards to sustainable procurement; The hotel has put in place systems to measure the environmental impact of its products' and inputs across the product lifespan; and The hotel conducts orientation to all its employees on the procurement policy.

According to Table 4.9, the hotel's partaking in developing well-functioning relationships with suppliers is having the greatest influence on the procurement performance of the star-rated hotels in Nairobi since it accounts for up to 19.758% of the variation in procurement performance followed by the hotel's endeavor to create positive social impact and diminishing negative environmental impact are nowadays receiving greater attention (at 16.175%). The hotel's establishment of mechanisms to promote supply chain sustainability in order to adapt to external pressures; the hotel's identification of sustainable issues on procurement and freely discusses them with all its stakeholders; and The hotel's utilization of data that is objective, neutral and transparent with regards to sustainable procurement follow at 13.571%,13.040%, and 10.040% respectively. On the other hand, the hotel's establishment of systems to measure the environmental impact of its products' and inputs across the product lifespan; and the hotel conducts orientation to all its employees on the procurement policy account for the least

variation in the procurement performance of the five star hotels at 9.23% and 4.767%.

4.5 Sustainable Supply Chain and Supply Chain Performance

Sustainable procurement strategy as a framework that firms utilizes to meet its need for goods and services in a way that achieves value for money and generates benefits not only to the organization, but also to society and the economy, while minimizing damage to the environment. The second objective of the study was to establish the influence of sustainable procurement strategies on supply chain performance of five star hotels in Nairobi County, Kenya. A multiple regression model was used to establish the relationship between sustainable procurement strategies (predictor variables) and supply chain performance (dependent variable). Using SPSS version 21 packages, the resulting regression coefficients have been used to interpret the direction and magnitude of the relationship. The beta coefficients show the responsiveness of the dependent variable as a result of unit change in each of the independent variables (sustainable procurement strategies). The error term ε captures the variations that cannot be explained by the model. Supply chain performance (dependent variable) was measured by Transaction Cost reduction. The Regression Model is presented in Table 4.10.

Table 4.10 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.708 ^a	.852	.296	1.14499	.852	2.441	7	17	.001	1.991

a. Predictors: (Constant), The hotel partakes in developing well-functioning relationships with suppliers , The hotel endeavors to create positive social impact and diminishing negative environmental impact are nowadays receiving greater attention, The hotel has put in place mechanisms to promote supply chain sustainability in order to adapt to external pressures, The hotel has identified sustainable issues on procurement and freely discusses them with all its stakeholders , The hotels uses data that is objective, neutral and transparent with regards to sustainable procurement, The hotel has put in place systems to measure the environmental impact of its products’ and inputs across the product lifespan, The hotel conducts orientation to all its employees on the procurement policy

b. Dependent Variable: Supply Chain Performance (Transaction Cost Reduction)

From Table 4.10 the Coefficient of Multiple Determination (R^2 Square) is 0.852 implying that that the regression line is of “*High goodness of fit*” explaining up to 85.2% of the variation in supply chain performance. 14.8% of the variation could be due to other predictors not in the model.

Table 4.11 ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	22.401	7	3.200	2.441	.001 ^a
	Residual	22.287	17	1.311		
	Total	44.688	24			

a. Predictors: (Constant), The hotel partakes in developing well-functioning relationships with suppliers. , The hotel endeavors to create positive social impact and diminishing negative environmental impact are nowadays receiving greater attention, The hotel has put in place mechanisms to promote supply chain sustainability in order to adapt to external pressures, The hotel has identified sustainable issues on procurement and freely discusses them with all its stakeholders , The hotels uses data that is objective, neutral and transparent with regards to sustainable procurement, The hotel has put in place systems to measure the environmental impact of its products’ and inputs across the product lifespan, The hotel conducts orientation to all its employees on the procurement policy

b. Dependent Variable: Supply Chain Performance (Transaction Cost Reduction)

Source: Researcher (2016).

Table 4.8 indicates that the F static is 2.441 with a p-value of 0.001. This implies that the impact of supplier selection strategies on procurement performance is significant since the p-value is less than 0.05.

Table 4.12 Sustainable Procurement Strategies – Model coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
1 (Constant)	.570	2.604		.219	.829	-4.924	6.064
The hotel endeavors to create positive social impact and diminishing negative environmental impact are nowadays receiving greater attention	.762	.236	.723	3.229	.001	.264	1.259
The hotel has put in place mechanisms to promote supply chain sustainability in order to adapt to external pressures	.440	.211	.380	2.088	.001	.005	.885
The hotel has identified sustainable issues on procurement and freely discusses them with all its stakeholders	-.110	.226	-.094	-.488	.003	-.587	.366
The hotel conducts orientation to all its employees on the procurement policy	.950	.419	.535	2.269	.001	1.834	.067
The hotel has put in place systems to measure the environmental impact of its products' and inputs across the product lifespan	.549	.260	.109	.572	.002	.399	.696
The hotels uses data that is objective, neutral and transparent with regards to sustainable procurement	.335	.215	.283	1.562	.002	.118	.788
The hotel partakes in developing well-functioning relationships with suppliers.	.810	.299	.054	.269	.003	.711	.550

Source: Researcher (2016).

As per the SPSS generated model coefficients in Table 4.12, the Equation $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \beta_7X_7$ becomes;

$$Y = 0.57 + 0.762(\pm.211)X_1 + 0.440 (\pm.211)X_2 + -0.110(\pm.226)X_3 + 0.950 (\pm.419)X_4 + 0.549 (\pm2.60)X_5 + 0.335 (\pm.215)X_6 + 0.81 (\pm2.99)X_7$$

Where;

Y = Supply Chain performance (Transaction cost reduction)

β_0 = Constant

$\beta_1, \beta_2, \beta_3, \beta_4,$ = Coefficients of determination

X_1 = The hotel endeavors to create positive social impact and diminishing negative

Environmental impacts are nowadays receiving greater attention

X_2 = The hotel has put in place mechanisms to promote supply chain sustainability in order to adapt to external pressures

X_3 = The hotel has identified sustainable issues on procurement and freely discusses them with all its stakeholders

X_4 = The hotel conducts orientation to all its employees on the procurement policy

X_5 = The hotel has put in place systems to measure the environmental impact of its products' and inputs across the product lifespan

X_6 = The hotels uses data that is objective, neutral and transparent with regards to sustainable procurement

X₇= The hotel partakes in developing well-functioning relationships with suppliers

According to the regression equation established above, taking all the independent variables at zero, the level of supply chain performance of the five star hotels in Nairobi will be 0.570. The data findings analyzed also shows that holding all other independent variables constant, a unit increase in the hotel's endeavors to create positive social impact and diminishing negative environmental impact are nowadays receiving greater attention will lead to a 0.762 increase in the procurement performance of the supply chain performance of the five star hotels in Nairobi.

The regression line also indicates that, a unit increase in a unit increase in the hotel's establishment of mechanisms to promote supply chain sustainability in order to adapt to external pressures will lead to a 0.44 increase in the procurement performance of the supply chain performance of the five star hotels in Nairobi. On the other hand a unit increases in the hotel's identification sustainable issues on procurement and freely discusses them with all its stakeholders will lead to a -0.110 decline in the procurement performance of the supply chain performance of the five star hotels in Nairobi. Keeping all other variables constant, a unit increase in the orientation to all its employees on the procurement policy will lead to a 0.95 increase in the procurement performance of the supply chain performance of the five star hotels in Nairobi.

Equally, holding all other variable constant, a unit increase in the establishment of systems to measure the environmental impact of its products' and inputs across the product lifespan will lead to a 0.549 increase in the procurement performance of the supply chain performance of the five star hotels in Nairobi. Keeping all other variables constant, a unit increases the hotels use of data that is objective, neutral and transparent with regards to sustainable procurement will lead to a 0.335 increase in the procurement performance of the supply chain performance of the five star hotels in Nairobi. Finally, a unit increase in the hotel's endeavor to developing well-functioning relationships with suppliers will lead to a 0.81 increase in the procurement performance of the supply chain performance of the five star hotels in Nairobi. In conclusion, all the coefficients have p-values less than the critical value of $\alpha = 0.05$, hence all are statistically significant predictors. The relatively small t-values could be due to multicollinearity.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The study sought to investigate the influence of sustainable procurement strategies on supply chain performance of five star hotels in Nairobi County. This chapter presents; the summary of the findings, conclusions and recommendations of the study.

5.2 Summary of the Findings

According to the findings the hotel's adoption of sustainable procurement strategies to respond to increased activism from NGOs and social media and the hotel's adoption of sustainable procurement strategies in line with the corporate of promoting environmental responsibility are the two main factors that have driven the hotels to adopt sustainable procurement strategies. The first objective of the study was to establish the sustainable procurement strategies adopted by five star hotels in Nairobi County. The study revealed that Supplier Capacity development has affected the supply chain performance of the hotels to a large extent. From the findings the hotel's orientation to all its employees on the procurement policy is the most significant strategy affecting the procurement performance of star-rated hotels to a great extent.

On the other hand, the study revealed that Sustainability Criteria in Procurement contracts influences the supply chain performance of the hotels to a great extent with the hotel's endeavor to share information across the supply chain to ensure procurement rules are complied to foster sustainable supply chain strategies is the most influential sustainability criteria in procurement contracts. According to the study, vendor assessment has affected the supply chain performance of the five star hotels to a great extent in which case;

According to the results, the hotel's establishment of vendor assessment mechanisms that enables it evaluate supplier's environmental and social qualities; the fact that the hotel has put in place mechanism facilitating the assessment of suppliers; and the hotel's extension of supplier evaluation to ensure that also the entire supply chain meets sustainability needs are the most influential vendor assessment strategies adopted by the five star hotels in Nairobi.

The study findings revealed that Environmental Product Declaration influences the supply chain performance of the hotels to a great extent with the hotel's endeavor to enlighten about critical determinants affecting the supply chain performance of the five star hotels to a very large extent. On sustainable supply chain roles, the hotel's emphasis on cleaner production approaches by ensuring that procurement managers are involved in the early stages of product development and product design has the most significant effect on the supply chain performance of the five star hotels.

The second objective of the study was to determine relationship between sustainable procurement strategies and the supply chain performance of five star hotels in Nairobi. The findings of the regression analysis indicate that sustainable procurement strategies have had significant influence on the supply chain performance of five star hotels in Nairobi during the period under study as supported by the high Coefficient of Multiple Determination (R^2) and p-value less than the alpha level.

5.3 Conclusion

The outcome of the study establishes a near perfect positive relationship between sustainable procurement strategies and supply chain performance. Supplier capacity development, sustainability criteria in procurement contracts, vendor assessment, environmental products declaration, and sustainable supply chain roles are the main categories of sustainable procurement strategies that have affected the supply chain performance of five star hotels in Nairobi to a large extent. The need to respond to increased activism from NGOs and social media and the hotel's adoption of sustainable procurement strategies in line with the corporate of promoting environmental responsibility are the key sustainable procurement strategies among the five star hotels in Nairobi.

5.4 Recommendations

The study unravelled the positive relationship between sustainable procurement strategies and supply chain performance underscoring the need for local firms to

implement these strategies to enhance their dynamic capability through supply chain performance. This is further supported by the fact that the study revealed a number of key sustainable supply chain drivers which could be making the supply chain performance of local firms less competitive.

At policy level, there is need for the national and county governments to foster sustainable supply chain strategies given the critical role that sustainable procurement strategies can play in sustainable development. There is need for government and other key stakeholders keen on cleaner production systems should focus on creating impetus to encourage procurement agencies both public and private to adopt sustainable procurement strategies to build their core competencies.

5.5 Limitations of the Study

The study sought to establish the relationship sustainable procurement strategies and supply chain performance. It is evident that a study of this nature should include a comprise of more number of firms. However time and material resources did not make this feasible and for this reason the study concentrated on five star hotels in Nairobi County.

Due to the sensitivity of procurement matters, some of the respondents were non-committal posing major challenge in the field during the data collection costing the researcher since he had to do a lot of data editing after field work. Despite

these challenges the validity of the findings emanating from this study cannot be compromised.

5.6 Suggestions for Further Research

Studies involving confirmatory factor analysis will need to be carried out to further test the model so established and to confirm the findings of the study. Further studies can be conducted to test and confirm the factor loadings in different hotels so as to establish the validity and strength of the model. In the same context, there is need for further research to focus on the critical success factors in the adoption of best strategies in sustainable procurement.

The fact that the degree to which various sustainable procurement strategies affect the supply chain performance varies from one hotel to the other calls for further research efforts to identify optimal sustainable procurement strategies and on the possibility of setting benchmarks. The need for further research into this aspect of supply chain strategies is further compounded by the facts that sustainable supply strategies.

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APPENDICES

APPENDIX I: INTRODUCTION LETTER



**UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS
MBA PROGRAMME**

Telephone: 020-2059162
Telegrams: "Varsity", Nairobi
Telex: 22095 Varsity

P.O. Box 30197
Nairobi, Kenya

18th July, 2016
DATE.....

TO WHOM IT MAY CONCERN

The bearer of this letter **Josephine Murutu**


Registration No..... **D61/71024/2014**

is a bona fide continuing student in the Master of Business Administration (MBA) degree program in this University.

He/she is required to submit as part of his/her coursework assessment a research project report on a management problem. We would like the students to do their projects on real problems affecting firms in Kenya. We would, therefore, appreciate your assistance to enable him/her collect data in your organization.

The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organizations on request.

Thank you.


**PATRICK NYABUTO
MBA ADMINISTRATOR
SCHOOL OF BUSINESS**



APPENDIX II: THE QUESTIONNAIRE

SECTION A: GENERAL INFORMATION

- 1) Name of your hotel(Optional)
- 2) What is your position in the hotel?
- Chief Supply Chain Management Officer []
 - Senior Supply Chain Management Officer []
 - Supply Chain Management Assistant []
 - Warehouse manager []
 - Logistics manager []
 - Supply chain manager []
- 3) For how long has your hotel been in existence?
- 1-5 years []
 - 6-10 years []
 - 11-15 years []
 - 16 years and above []
- 4) For how long have you been working with this hotel?
- 1-5 years []
 - 6-10 years []
 - 11-15 years []
 - 16 years and above []

**SECTION B: SUSTAINABLE PROCUREMENT STRATEGIES
COMMONLY USED BY FIVE-STAR HOTELS**

- 5) Does your organization apply sustainable procurement strategies in its operations

Yes No

Please tick where appropriate

- 6) Please indicate the Drivers of Sustainable Procurement Strategies in your hotel? Please indicate on a Scale of 1 – 5 where: 5= Very Great Extent; 4= Great Extent; 3= Moderately Extent; 2= Small Extent, and 1= Very Small Extent.

No	Drivers of Sustainable Procurement	(1)	(2)	(3)	(4)	(5)
i.	The hotel has adopted sustainable procurement strategies to comply to new regulations					
ii.	The hotel has adopted sustainable procurement strategies to reduce costs of services/products procured (i.e. maximize reuse, limit usage)					
iii.	The hotel has adopted sustainable procurement strategies to avoid risk to brand/image associated with bad social/environmental practices of suppliers					
iv.	The hotel has adopted sustainable procurement strategies to avoid supply chain disruption (i.e. suppliers not anticipating new environmental regulations, strikes)					
v.	The hotel has adopted sustainable procurement strategies to influence and advance suppliers in developing					

	environmentally friendly goods					
vi.	The hotel has adopted sustainable procurement strategies to meet your clients expectations					
vii.	The hotel has adopted sustainable procurement strategies as a competitive strategy					
viii.	The hotel has adopted sustainable procurement strategies to respond to increased activism from NGOs and social media					
ix.	The hotel has adopted sustainable procurement strategies to respond to investors' pressure					
x.	The hotel has adopted sustainable procurement strategies to minimize disposal costs for disposal hazardous materials					
xi.	The hotel has adopted sustainable procurement strategies as a proactive measure while anticipating resources scarcity / depletion					
xii.	The hotel has adopted sustainable procurement strategies to enjoy the economies of scale arising from the low cost of environmentally friendly materials and goods					
xiii.	The hotel has adopted sustainable procurement strategies in line with the corporate of promoting environmental					

	responsibility					
xiv.	The hotel has adopted sustainable procurement strategies as a strategy to utilize new market opportunities					
xv.	The hotel has adopted sustainable procurement strategies as a result of the Influence of its key suppliers					
xvi.	The hotel has adopted sustainable procurement strategies to maintaining or present an environmental or socially responsible image					

7) To what extent has your hotel adopted the following sustainable procurement strategies? Please indicate on a Scale of 1 – 5 where: 5 = Very Great Extent; 4 = Great Extent; 3 = Moderate Extent; 2 = Small Extent; 1= To A very Small Extent;

No	SUSTAINABLE PROCUREMENT STRATEGIES	(1)	(2)	(3)	(4)	(5)
	1. Supplier Capacity Development					
i.	The hotel has put in place mechanisms to promote supply chain sustainability in order to adapt to external pressures					
ii.	The hotel conducts orientation to all its employees on the procurement policy					
iii.	The hotel has invested in building capacity through training on sustainable purchasing tools					
iv.	The hotel has identified sustainable issues on procurement and freely discusses them with all its stakeholders					
v.	The hotel has put in place mechanisms to enhance its ability to react to external pressures and identify their own solutions to problems that arise					
vi.	The hotel staffs, especially those with procurement authority, are oriented to the policy and sustainable purchasing tools					
vii.	The hotel procurement manager endeavors to inform and develop their suppliers and contractors					
viii.	The hotel engages the market early in the process to maximize the opportunities for more sustainable and innovative solutions					
ix.	The hotel communicates a consistent message designed for the needs of various internal and external audiences					
x.	The hotel's sustainable procurement policies are supported by clear lines of accountability					

	2. Sustainability Criteria in Procurement Contracts	(1)	(2)	(3)	(4)	(5)
i.	The hotel has established sustainability criteria in procurement contracts to promote supply chain sustainability					
ii.	The hotel undertakes continuous improvement in quality and cost-effectiveness of service provision to facilitate sustainability in its procurement functions					
iii.	The hotel has established a consistent and transparent procurement approach in its quest to enhance sustainability in its supply chain processes					
iv.	The hotel endeavors to share information across the supply chain to ensure procurement rules are complied to foster sustainable supply chain strategies					
v.	The hotel ensures that procurement activities are undertaken consistently to a high standard, efficiently and economically					
vi.	The hotel's procurement choices reflect each partners' corporate objectives in the supply chain					
vii.	The hotels has established a clear strategic direction and ensure the importance of efficient procurement					
viii.	The hotel's current legislation and good practices is applied to all procurement and contract management activity					
ix.	The hotels has put in place mechanisms to ensure that procurement skills are developed, shared and					

	used effectively					
x.	The hotel endeavors to explore creative and innovative solutions to improve our contribution to sustainable development through procurement					
	3. Vendor Assessment	(1)	(2)	(3)	(4)	(5)
i.	The hotel has established vendor assessment mechanisms that enables it evaluate supplier's environmental and social qualities					
ii.	The hotel makes surprise visits to suppliers while applying scorecards to ensure they adhere to sustainable procurement strategies					
iii.	The hotel has extending supplier evaluation to ensure that also the whole supply chain meets sustainability requirements					
iv.	The hotel lays emphasis on creating positive social impact and diminishing negative environmental impact					
v.	The hotel has integrated supplier evaluation methods, codes of conduct and collaborative activities to enhance sustainability along the supply					
vi.	The hotel is increasingly integrating supplier evaluation methods					
vii.	The hotel endeavors to create positive social impact and diminishing negative environmental impact are nowadays receiving greater attention					
viii.	The hotel has put in place mechanism facilitating the assessment of suppliers					

ix.	In collaboration the company is in direct contact with the suppliers and provides them education					
x.	The hotel partakes in providing its suppliers with education, assistance, training or other supporting activities					
	4. Environmental Product Declaration	(1)	(2)	(3)	(4)	(5)
i.	The hotel has put in place adequate structures to ensure that all its inputs and outputs have environmental declaration marks					
ii.	The hotel has put in place systems to measure the environmental impact of its products' and inputs across the product lifespan					
iii.	The hotel shares and disseminates information on the environmental impact of raw material acquisition to key suppliers and stakeholders					
iv.	The hotel undertakes continuous improvement of its environmental attributes					
v.	The Hotels ensures that customers can more easily compare products based on their environmental attributes					
vi.	The hotels uses data that is objective, neutral and transparent with regards to sustainable procurement					
vii.	The hotel endeavors to educate consumers about the product and its environmental impact					
viii.	The hotel has put in place mechanisms of quantifying the environmental impact of a product					

	or system					
ix.	The Hotel's declarations include information on the environmental impact of raw material acquisition					
x.	The hotel clearly portrays the content of materials and chemical substances, emissions to air, soil and water and waste generation					
	5. Sustainable Supply chain Roles	(1)	(2)	(3)	(4)	(5)
i.	The hotel has established an environmental purchasing policy that aims to reduce the environmental impact of its inputs and products					
ii.	The hotel stresses on cleaner production approaches by ensuring that procurement managers are involved in the early stages of product development and product design					
iii.	The hotel lays emphasis on intra-organizational communication aimed at enlarging the sphere of responsibility of their supply chain managers with regards to sustainable procurement strategies					
iv.	The hotel focuses on sustainable suppliers rather than supply capacity					
v.	The hotel partakes in developing well-functioning relationships with suppliers.					
vi.	The hotel takes advantage of Improvements in buyer-supplier relationships leading to better production practices and lowering supply risks					

vii.	The hotels uses procurement techniques to deliver the outcomes required by the buying organizations					
viii.	The hotels require suppliers to introduce environmental policy and obtain environmental management Standards (official accreditation like ISO 140001 or EMAS, or internally developed systems).					
ix.	The hotel has established mechanisms to ensure sustainability of manufacturing processes					
x.	The hotel has developed a process-based supply (Influencing consideration of environmental concerns within Supplier company).					

SECTION C: SUPPLY CHAIN PERFORMANCE

8. Please provide us with the following information regarding the Supply Chain performance of your Hotel for the last five years.

	A. Measures of Supply chain Performance	2011	2012	2013	2014	2015
	Resource utilization					
i	Transaction Cost reduction					
ii	Reduction in cycle time					
iv	Line items on back Order to total line items					
v	Average cycle time to targeted average cycle time					
v	Rejects early or late delivery to total number of items delivered					
vi	Stock variance to total stock value					
vii	Total expenditure of the department to total budget of the department					

Thank you very much for your valuable time.

APPENDIX III: LIST OF FIVE-STAR HOTELS IN NAIROBI

ITEM	HOTEL	RATING
1	Intercontinental Hotel	Five star
2	Laico Hotel	Five star
3	Nairobi Hilton Hotel	Five star
4	The Norfolk Hotel	Five star
5	The Stanley Hotel	Five star
6	Nairobi Serena Hotel	Five star
7	Safari Park Hotel	Five star
8	Windsor Gold Hotel & Country Club.	Five star
9	Nairobi Safari Club.	Five star
10	Villa Rosa Kempinski.	Five star
11	Tribe	Five star
12	Crowne Plaza Hotel Nairobi.	Five star
13	Palacina Residence & Suites	Five star
14	The Headquarters Inn.	Five star
15	Lavington Hill House.	Five star
16	Toen lodge Upperhill	Five star
17	Nomad Palace Hotel.	Five star
18	Sovereign Suites.	Five star
19	Silvers Springs Hotel.	Five star

20	Boma inn Nairobi.	Five star
21	Fair view hotel	Five star
22	Hotel River view	Five star
23	LaMasison Royale	Five star
22	Hemmingways Nairobi	Five star
23	Sentrim 680 Hotel.	Five star

APPENDIX IV: ROTATED COMPONENT MATRIX

	Component						
	1	2	3	4	5	6	7
The hotel has put in place mechanisms to promote supply chain sustainability in order to adapt to external pressures	.049	.977	.016	.128	-.041	-.055	-.039
The hotel conducts orientation to all its employees on the procurement policy	.514	-.071	-.082	.821	.063	-.032	-.087
The hotel has invested in building capacity through training on sustainable purchasing tools	-.172	.594	-.553	-.114	.219	.426	-.047
The hotel has identified sustainable issues on procurement and freely discusses them with all its stakeholders	-.102	-.012	.944	-.215	-.103	.045	-.085
The hotel has put in place mechanisms to enhance its ability to react to external pressures and identify their own solutions to problems that arise	.939	-.106	.041	.175	-.011	.060	-.033
The hotel staffs, especially those with procurement authority, are oriented to the policy and sustainable purchasing tools	.085	.891	.156	-.116	.066	.201	-.024
The hotel procurement manager endeavors to inform and develop their suppliers and contractors	-.089	-.033	.912	-.337	-.036	.026	-.016
The hotel engages the market early in the process to maximize the opportunities for more sustainable and innovative solutions	.934	.010	-.070	.241	-.078	-.037	.129
The hotel communicates a consistent message designed for the needs of various internal and external audiences	-.260	.728	-.173	-.151	.336	.217	-.028
The hotel's sustainable procurement policies are supported by clear lines of accountability	-.008	.161	-.042	.633	-.172	.297	.084
The hotel has established sustainability criteria in procurement contracts to promote supply chain sustainability	-.119	.180	-.119	.074	.817	.130	.121
The hotel undertakes continuous improvement in quality and cost-effectiveness of service provision to facilitate sustainability in its procurement functions	.507	.020	-.097	.772	-.036	.054	.184
The hotel has established a consistent and transparent procurement approach in its quest to enhance sustainability in its supply chain processes	-.114	.403	-.445	-.283	.148	.423	-.420
The hotel endeavors to share information across the supply chain to ensure procurement rules are complied to foster sustainable supply chain practices	-.240	.287	-.044	.230	-.228	.775	-.083
The hotel ensures that procurement activities are undertaken consistently to a high standard, efficiently and economically	.392	-.063	-.272	.771	.120	.072	.103

The hotel's procurement choices reflect each partners' corporate objectives in the supply chain	-.098	.156	.849	.106	-.317	-.140	.005
The hotels has established a clear strategic direction and ensure the importance of efficient procurement	.934	.010	-.070	.241	-.078	-.037	.129
The hotel's current legislation and good practices is applied to all procurement and contract management activity	-.031	.143	-.060	-.074	.499	-.286	-.061
The hotels has put in place mechanisms to ensure that procurement skills are developed, shared and used effectively	.219	-.136	-.200	.715	.324	.333	.114
The hotel endeavors to explore creative and innovative solutions to improve our contribution to sustainable development through procurement	-.069	.038	-.187	.061	.915	-.026	.084
The hotel has established vendor assessment mechanisms that enables it evaluate supplier's environmental and social qualities	.057	-.180	-.117	.141	.384	.162	.813
The hotel makes surprise visits to suppliers while applying scorecards to ensure they adhere to sustainable procurement practices	.930	-.011	-.053	.270	-.062	-.164	.035
The hotel has extending supplier evaluation to ensure that also the whole supply chain meets sustainability requirements	.049	.977	.016	.128	-.041	-.055	-.039
The hotel lays emphasis on creating positive social impact and diminishing negative environmental impact	.514	-.071	-.082	.821	.063	-.032	-.087
The hotel has integrated supplier evaluation methods, codes of conduct and collaborative activities to enhance sustainability along the supply	-.172	.594	-.553	-.114	.219	.426	-.047
The hotel is increasingly integrating supplier evaluation methods	-.102	-.012	.944	-.215	-.103	.045	-.085
The hotel endeavors to create positive social impact and diminishing negative environmental impact are nowadays receiving greater attention	.939	-.106	.041	.175	-.011	.060	-.033
The hotel has put in place mechanism facilitating the assessment of suppliers	.085	.891	.156	-.116	.066	.201	-.024
In collaboration the company is in direct contact with the suppliers and provides them education	-.089	-.033	.912	-.337	-.036	.026	-.016
The hotel partakes in providing its suppliers with education, assistance, training or other supporting activities	.934	.010	-.070	.241	-.078	-.037	.129
The hotel has put in place adequate structures to ensure that all its inputs and outputs have environmental declaration marks	-.260	.728	-.173	-.151	.336	.217	-.028
The hotel has put in place systems to measure the environmental impact of its products' and inputs across the product lifespan	-.069	.038	-.187	.061	.915	-.026	.084

The hotel shares and disseminates information on the environmental impact of raw material acquisition to key suppliers and stakeholders	-288	.099	-.550	-.093	.065	.522	.194
The hotel undertakes continuous improvement of its environmental attributes	.406	.072	-.015	.044	-.230	-.039	.677
The Hotels ensures that customers can more easily compare products based on their environmental attributes	-.078	.873	.064	.041	-.049	.431	-.036
The hotels uses data that is objective, neutral and transparent with regards to sustainable procurement	-.088	.167	.003	.143	.105	.843	.124
The hotel endeavors to educate consumers about the product and its environmental impact	.551	.158	-.057	.683	-.208	-.006	.062
The hotel has put in place mechanisms of quantifying the environmental impact of a product or system	-.509	.110	.049	.232	-.353	.323	.093
The Hotel's declarations include information on the environmental impact of raw material acquisition	.399	.322	-.258	.099	.104	.618	.104
The hotel clearly portrays the content of materials and chemical substances, emissions to air, soil and water and waste generation	.539	-.026	-.102	.773	-.009	-.045	.110
The hotel has established an environmental purchasing policy that aims to reduce the environmental impact of its inputs and products	-.194	.544	-.409	-.144	-.030	.557	-.232
The hotel stresses on cleaner production approaches by ensuring that procurement managers are involved in the early stages of product development and product design	-.211	.322	-.048	.318	-.320	.697	.056
The hotel lays emphasis on intra-organizational communication aimed at enlarging the sphere of responsibility of their supply chain managers with regards to sustainable procurement practices	.219	-.136	-.200	.715	.324	.333	.114
The hotel focuses on sustainable suppliers rather than supply capacity	-.069	.038	-.187	.061	.915	-.026	.084
The hotel partakes in developing well-functioning relationships with suppliers.	.057	-.180	-.117	.141	.384	.162	.813
The hotel takes advantage of Improvements in buyer-supplier relationships leading to better production practices and lowering supply risks	.930	-.011	-.053	.270	-.062	-.164	.035
The hotels uses procurement techniques to deliver the outcomes required by the buying organizations	.049	.977	.016	.128	-.041	-.055	-.039
The hotels require suppliers to introduce environmental policy and obtain environmental management	-.360	-.032	-.247	-.385	.118	-.500	-.213
The hotel has established mechanisms to ensure sustainability of manufacturing processes	-.098	.156	.849	.106	-.317	-.140	.005

The hotel has developed a process-based supply (Influencing consideration of environmental concerns within Supplier company).	.934	.010	-.070	.241	-.078	-.037	.129
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Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.
 a. Rotation converged in 10 iterations.