DECLARATION

I declare this Research Project is my original work and has not been presented for any academic award in any university.

Candidate
Signed…………………. Date……………..

Okwiri John Paul Onyango
D61/75649/2009

This Research Paper has been submitted for examination with my approval as the University supervisor.

Signed……………………… Date………………

Mr. Tom Kongere
Lecturer
School of Business
Department of Management Science
University of Nairobi.
ACKNOWLEDGEMENT

Thanks to the Almighty God for with Him, everything is possible.

I acknowledge the encouragement, guidance, constant follow-ups and suggestions from my supervisor, Mr. Tom Kongere. It is for his tireless and critical efforts; and by setting time for me from his busy schedule that this research paper has been successful. It was an enjoyable period during the research work to be with him as a supervisor.

Special thanks are due to my brothers and sisters, all my lecturers, my friends and all who have contributed in one way or another for the success of this research paper. I appreciate your professional advice, moral support and encouragement that you accorded me. I also appreciate the participating respondents from the oil marketing companies in Kenya. I would like to thank them all as I will not be able to mention all of them by name, their contributions will always be in my memory.

To all, May God bless the work of your hands.
DEDICATION

This research paper is dedicated to my parents; Nicholas and Margaret Okwiri, my brothers and Sisters and to my friends for their encouragement, advice and support that they have accorded me during my studies.

I specifically thank my brothers; Fred, Ben and Sister Rose for their financial and emotional support.
ABSTRACT

The objective of the study was to establish the role of ethics in supply chain management of oil marketing companies in Kenya and how ethics can be used to improve the supply chain process. The study considered all the fifty one oil marketing companies who pass their products through Kenya Pipeline system. A sample size of 500 respondents were selected using stratified random sampling for the supply chain practitioners in these companies. Primary data was collected from 434 respondents through a survey by use of research administered questionnaires and subjected to rigorous data processing and analysis using Statistical Packages for Social Sciences (SPSS).

Business practices, relativism and idealism were identified as independent variables while ethical measures as dependent variable. The findings revealed that there is positive association between business practices, relativism and ethical measures. However, the research revealed that there is an insignificant negative association between idealism and ethical measures. It was noted that relativism (Beta = 0.731) is more influential at explaining ethical behaviour than business practices.

The study recommends that ethical behaviour concepts like honesty, integrity, probity, diligence, fairness, confidentiality, trust and respect should be encouraged, monitored and evaluated. It recommends that supply chain organizations and managers should institute ethics principles, moral standards, ethics training, ethics culture, code of ethics for their supply chain practitioners to establish integrity in the supply chain process.

The study suggest that organizations should focus training not only on informing employees about compliance with regulations, but also on encouraging employees to
behave in a way that is conducive to a strong ethical culture. The findings were also
instructive in pointing out how organizations can tailor their ethics training to different
levels of employees.

Further research is recommended that will consider other variables other than business
practices, relativism and idealism. The research recommended that longitudinal study
should be carried out to find out the role of ethics over long period of time.
# TABLE OF CONTENTS

DECLARATION………………………………………………………………………………..i  
ACKNOWLEDGEMENT .................................................................ii  
DEDICATION ...........................................................................iii  
ABSRACT .............................................................................iv  
LIST OF ABBREVIATIONS ..........................................................vii

**CHAPTER ONE: INTRODUCTION ..............................................1**  
1.1 Background of the study .........................................................1  
   1.1.1 The Oil Marketing Industry in Kenya .......................................5  
1.2 Statement of the problem .......................................................6  
1.3 Study Objective .................................................................8  
1.4 Value of the Study .............................................................8

**CHAPTER TWO: LITERATURE REVIEW .................................10**  
2.1 Introduction .......................................................................10  
2.2 Supply Chain Management in Oil Marketing Industry .................10  
2.3 Ethics in Supply Chain Management .......................................13  
2.4 Role of Ethics in Supply Chain Management ..............................18  
2.5 Summary ..........................................................................22

**CHAPTER THREE: RESEARCH METHODOLOGY .......................24**  
3.1 Introduction .......................................................................24  
3.2 Research design ..............................................................24  
3.3 Population ........................................................................24  
3.4 Sample Design ..................................................................25  
3.5 Data Collection Methods .....................................................25  
   3.5.1 Validity and Reliability of research Instrument ....................25  
3.6 Data Analysis and Presentation .............................................26
CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSIONS

4.1 Introduction

4.2 Descriptive Statistics

4.2.1 Response Outcome

4.2.2 Level of education

4.2.3 Gender

4.2.4 Age of respondents

4.2.5 Variables

4.3 General Findings

4.3.1 Business Practices

4.3.2 Relativism

4.3.3 Idealism

4.4 Factor Analysis and Discussions of the Findings

4.4.1 Correlation Matrix

4.4.1.1 Business Practices and ethical Measures

4.4.1.2 Relativism and Ethical Measures

4.4.1.3 Idealism and ethical Measures

4.4.2 Regression Model

4.5 Summary

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

5.2 Summary

5.3 Conclusions

5.4 Limitations of the Study

5.5 Recommendations for Policy

5.6 Areas for Further Research

REFERENCES

APPENDIX I

APPENDIX II
LIST OF ABBREVIATIONS

CIPS – Certified Institute of Purchasing and Supply
CFA – Collateral Financing Agreement
EDI – Electronic Data Interchange
EFT – Electronic Funds Transfer
ERP – Enterprise Resource Planning
ERC – Energy Regulatory Commission
IODs – Independent Oil Dealers
KPC – Kenya Pipeline Corporation
KRA – Kenya Revenue Authority
KPRL – Kenya Petroleum Refinery Limited
KIPPPRA – Kenya Institute of Public Policy Research Analysis
KISM – Kenya Institute of Purchasing and Supplies
LOCs – Local Oil Companies
MOCs – Multinational Oil companies
OTS – Open Tender System
PIEA – Petroleum Institute of East Africa
PPOA – Public Procurement Oversight
PPRA – Public Procurement Regulatory Authority
PwC – PricewaterhouseCoopers
SCM – Supply Chain management
SPSS – Statistical Packages for Social Sciences
CHAPTER ONE INTRODUCTION

1.1 Background of the Study

Ethics is a well-established arena that has received both attention and support from large and small organizations. According to Queensland Purchasing, Department of Public Works Crime and Misconduct Commission (2006) ethics are the moral principles that guide officials in all aspects of their work. Ethical behavior involves the concepts of honesty, integrity, probity, diligence, fairness, trust and respect. It also includes avoiding conflicts of interest, and abuse of an individual’s position or office.

Roberts (2003) observed that professional ethics are separate from personal ethics or common morality. Personal ethics is an individual’s own morality that guides his or her own conduct. Common morality is a set of commitments that guide the conduct of cultures or societies. He further observed that professional ethics are designed to set moral standards beyond those set by law, the market, and common morality. Ethical responsibility involves more than leading a decent, honest and truthful life or making wise choices. Our moral obligations must include a willingness to engage others in the difficult work of defining what the crucial choices are that confront technological society and how to confront them intelligently (Winner, 1990).

Ethics is not similar to laws and regulations. Supply chain management (SCM) ethics, like professional ethics in any function, are created to oversee the conduct of SCM practitioners. The law is not self-motivating and does not achieve self-compliance. World Bank (2003) reported that to be effective any law require individual responsibility and
personal motivation - basically the human rejoinder to ethical standards and ideals. Key to public interest is promoting the growth of ethical ideology and ethical conduct of procurement and supply chain practitioners. Anderson and Orsagh (2004) made a distinction between legal and ethical compliance mechanisms showing that legal mechanism had clearly proved to be inadequate as it lacked moral firepower to restore confidence and the ability to build trust. Arjoon and Gopaul (2003) introduced the concepts of freedom of indifference and freedom for excellence which provided a theoretical basis for explaining why legal compliance mechanisms are insufficient in dealing with fraudulent practices and may not be addressing the real and fundamental issues that inspire ethical behaviour.

Moreover, there has been an increase in unethical practices leading to increase in corruption in SCM. Transparency International (2006) reported that state corporations emerged with the second worst ranking after the Kenya police with a score of 31.5 up from a score of 12.7 which placed them 19th in 2004. The corporations registered deterioration in all six indicators. The report concluded that, this could have been a reflection of opportunities created by increased activity in the sector notably procurement and recruitment.

A supply chain includes all activities in delivering customer demands and requests. These activities are related with the flow and transformation of goods from the raw materials stage, to the final consumer as well as information and financial flows. There exist four stages in a supply chain: the supply network, the internal supply chain (the manufacturing plants), distribution systems, and end users. Material flow, service flow, information flow and funds flow are the four flows that move up and down the stages. Linking the supply
network and manufacturing plant is the e-procurement, e-distribution links the manufacturing plant and the distribution network, and e-commerce links the distribution network with the final consumers (Chopra and Meindl, 2001).

(CIPS) Certified Institute of Purchasing and Supply (2011) recognizes SCM as being a business process which is still evolving but has been in existence for many years. CIPS states that SCM has undergone many changes recently; for example in the 1980s it was recognized that holding stock was an inefficient use of resources. With SCM, buyers, suppliers and internal customers could work together to ensure delivery of quality goods and services at acceptable costs.

Most companies have turned to supply chain management function to achieve competitive edge. (OECD) Organization for Economic Co-operation and Development (2005) observed that advanced countries have not offered developing countries best practices to turn to when examining options for designing effective and ethical supply chain management systems. This may have been as a result of a similar struggle for ethical performance within advanced economies. Callahan (1998) stated that measuring the ethical standards of supply chain management (SCM) professionals is no easy task because the required data is difficult to collect and analyze. Breen et al (2004) observed that most SCM practitioners had little or no formal training on ethics either when studying or once qualified. He also stated that very little debate was going on among such SCM practitioners about ethics or how to identify and resolve moral problems generally.

State regulation, also known as traditional regulation, has had challenges focused on implementation. Companies normally express their core ethical values and responsibilities via an ethics policy. Trepte (2004) stated that a code of ethics is
responsible for setting out a road map through which the company wishes to carry on with its operations, including making commitments to stakeholders and ethical guidance to its staff. Subsequently, Bowles (2006) added that a specific code of ethics may cover issues not covered by laws concerning a particular function such as procurement and supply chain management.

Hull (2001) stated that the supply chain of the petroleum industry is characterized by two different main segments; the upstream and downstream supply chains. The upstream supply chain involves the sourcing and acquisition of crude oil. This is the main objective of oil companies. The upstream process involves the exploration, forecasting, production, and logistics management of delivering crude oil from far away oil wells to refineries (Gandolphe, 2002). The downstream supply chain starts at the refinery, where the crude is manufactured into the consumable products. This involves the process of forecasting, production, and the logistics management of delivering the crude oil derivatives to customers around the globe (Schwartz, 2000). Challenges and opportunities exist now in both the upstream and downstream supply chains SCM in the petroleum industry has various shortcomings, especially in the logistics area, that are not present in most other industries. As much as opportunities for cost savings in logistics still do exist, these challenges are a major consideration on the cost of petroleum products (Ikram, 2004).

1.1.2 The Oil Marketing Industry in Kenya

(KIPPRA) Kenya Institute for Public Policy Research and Analysis (2011) indicated that the oil marketing sector in Kenya has had a lot of challenges. The situation in Kenyan oil industry and its environment has been worsened by the introduction of stringent tax
regimes by the Kenya Revenue Authority (KRA). This requires upfront prepayment of 50% taxes on oil imports. 70% of the fuel sold locally is refined by the Kenya Petroleum Refineries Limited (KPRL) while 30% is imported as fully refined. The government introduced the Open Tender System (OTS), which means that all the crude oil imported is supplied by one supplier to minimize costs and level the retail prices. Oil companies are then invited to bid for the delivery and the company with the lowest bid automatically wins the tender to import the crude and have it discharged into KPRL tanks. Kenya Pipeline Company (KPC) has a challenge in oil storage across the country because they do not have enough storage capacity to cater for the regional towns. KPC is however putting up mechanisms to deal with the challenge. (Tsavo Securities Ltd, 2007).

The Electric Power Act was ratified in 1997. The government started serious fundamental structural and regulatory reforms in the energy sector after mid-1990. This was later modified into the Energy Act 2006. These legislations set the groundwork for the separation of generation from transmission and distribution in the electricity sector and the liberalization of the procurement, distribution and pricing of petroleum products in the country. The petroleum sector was governed by the Petroleum Act 1994 and the Petroleum Development Fund Act No. 4 of 1991. The Energy Act (2006) unified all laws relating to energy and created the Energy Regulatory Commission (ERC) as the sector’s regulatory agency with responsibility for technical and economic regulation of electric power, renewable energy and petroleum sector. The ratification of the Restrictive Trade Practices, Monopolies and Price Control Act of 1989 which had the objective of promoting competition and reducing direct control of prices in the Kenyan economy, preceded these reforms (ERC, 2008). There are a total of 51 oil marketers in Kenya
categorized as Multinational Oil Companies, Local Oil Companies, and Independent Oil Dealers (PIEA, 2012)

<table>
<thead>
<tr>
<th>OVERAL MARKET SHARES</th>
<th>January to June 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company</td>
<td>% Market Shares</td>
</tr>
<tr>
<td>KENOLKOBIL</td>
<td>21.3</td>
</tr>
<tr>
<td>Total Kenya</td>
<td>19.7</td>
</tr>
<tr>
<td>SHELL</td>
<td>14.4</td>
</tr>
<tr>
<td>LIBYAOIL</td>
<td>9.1</td>
</tr>
<tr>
<td>National Oil</td>
<td>4.7</td>
</tr>
<tr>
<td>GAPCO</td>
<td>4.7</td>
</tr>
<tr>
<td>Others</td>
<td>26.1</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

*Source: PIEA 2012*

1.2 **Statement of the Problem**

The main objective of companies’ existence is to earn profits for their shareholders. But this should not be on the expense of its employee’s health, consumers concerns, environmental destruction or damage to societal values. In the last two decades, ethics has attracted public scrutiny because of its importance to the economic health of corporations and society as a whole. The Triton scandal, Anglo Leasing, Goldenberg, CMC Motors, WorldCom, Anderson, Merill Lynch, Enron, Martha Stewart, Global Crossing, Qwest Communications, Tyco International, Adelphia Communications, computer Associates, Parmalat, Putman, Boeing, Rite Aid and Xerox are headlines in the past years that have portrayed a sad story of corporate ethics (or lack thereof)
(Harshbarger and Holden, 2004). Jacobs (2004) observed that in these corporations it seems as if the checks and balances that should protect shareholder interests were pushed to one side, driven by a perception of the need to move fast in the pursuit of the profit objective.

Several studies have been conducted on corporate governance which is the system by which business corporations are directed and controlled (Dandino, 2004). Arjoon, (2005) discussed corporate governance from an ethical perspective concluding that the focus of virtues in governance is to establish a series of practical responses which depend on the consistent application of core values and principles as well as commitment to ethical business practice. Mugerwa (2006) conducted a research on governance structures, ethical behaviour and supply chain performance of essential medicines in Eastern Uganda. She concluded that governance structures were better predictors of supply chain performance of essential medicines compared to ethical behaviour and transaction costs.

Kimani et al (2005) in their paper presented at the 5th BEN- Africa Conference in Kasane, Botswana titled the Confluence of Corporate governance and business ethics in Kenya, observed that although ethics may be part of corporate culture, an organization cannot itself be ethical or unethical: it is the people within it who are ethical or unethical and so it is the people who must be targeted.

From the above studies, it is clear that a lot of research has been done on ethics but it is notable that these studies are from a corporate governance point of view. No study has focused on the moral ethics of the personnel who implement policies. All laws and systems are as good as the people who implement them. If the employees are not ethical then this leads to various unethical practices within the organizations however good the
laws, systems and governance structures may be. This is the gap that this study seeks to address by answering the question of role of ethics in supply chain management of oil marketing companies in Kenya and how ethics can be used to improve the supply chain practice.

1.3 Objective of the Study

a) To establish the role of ethics in Supply Chain Management

b) To establish how ethics can be used to improve the Supply Chain Management process.

1.4 Value of the Study

a) Policy Makers - The outcome of this study will assist policy makers especially the Kenya Government in formulating new policies to improve the SCM process.

b) Organizations - The research outcome will enable organizations with SCM functions to understand better the role that ethics can play in steering the organization to greater heights.

c) Professional Associations - The research will also assist professional associations in the approach of guiding, training and counseling its members on issues related to ethics.

d) Regulators – The study will assist regulators like ERC and KRA to understand better why errant companies behave as they do thereby be able to influence their conduct positively leading to full compliance by companies.

e) Researchers – Researchers will be able to improve on the study further by establishing research gaps and doing further research.
f) Academicians – This study will assist scholars by providing results and statistics for their academic work and reference.
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

In Literature review this research will discuss studies conducted by other scholars on SCM and ethics, including citations on ethics in SCM. The chapter discusses studies conducted by other scholars on supply chain management in the oil industry, ethics in supply chain management, role of ethics in supply chain management and summary of the chapter.

2.2 Supply Chain Management in the Oil Marketing Industry.

The steady increase in global demand for oil and its derivatives such as petrochemicals has enabled companies providing these products to reach more customers and increase their market share and profitability. Coia (1999) and Morton (2003) observe that this boom in global demand along with the ease of international trade and inflexibility involved in the petroleum industry’s supply chain has made its management more complex and more challenging. Despite the importance of supply chain management and its growing complexity, the petroleum industry is still in the development stage of efficiently managing their supply chains. Schwartz (2000) agrees that according to Steve Welsh, a managing director of the College of Petroleum and energy Studies at the University of Oxford, the oil and Petrochemical industry’s insight into the supply chain is still in its infancy. However, even with the inflexibility and complexity involved in the industry's supply chain, there is a lot of room for improvement and cost reduction,
specifically in its logistical area. Werner Patarious, president of BASF’s petrochemical division said “Supply chain management is the backbone of a business where logistics costs can be greater than manufacturing costs (Whitefield, 2004).

By the end of 2004, worldwide demand for oil reached 70 million barrels per day and has been projected to increase at a rate of 2 percent per year over the next ten years. For example, China’s demand for energy alone was expected to grow at a rate of 4.5 percent per year for the next five years and reach four million barrels by 2010 (Alshalan, 2004). However due to recent political unrest in the Middle East, which is the largest oil producing region, sustainable oil supply has become highly unpredictable. Oil and Petrochemicals companies are forced to maintain higher safety stocks and search for alternative sources of supplies (Ikram, 2004).

Commodities such as oil, gas, and petrochemicals require specific modes of transportation such as pipelines, vessels or tankers, and railway (Morton, 2003). These commodities are produced in specific and limited regions of the world. Yet, they are demanded all over the globe since they represent an essential source of energy and raw material for a large number of other industries (Ikram, 2004). Several weeks lead time from the shipping point to the final customers’ location is very common in this type of industry. For example, it takes five weeks for the Persian Gulf’s oil to make its way to the United States and up to another three weeks for it to be processed and delivered (Schwartz, 2000).
Opening new production sites or distribution centers to dispersed customers is one way to reduce the lead time and transportation costs (Jenkins, 1998). However, the acquisition of such facilities in the oil and petrochemical industries, if feasible, is typically very costly and often results in higher inventory and operating costs (Herbert, 2004). Red Cavaney, president of the American Petroleum Institute, said “Most companies are unlikely to undertake the significant investment needed to even begin the process” (Herbert, 2004). These factors are pushing oil and petrochemical companies to either absorb the increase in costs or pass the costs on to customers who are already facing increasing prices.

Companies therefore have recognized that improved supply chain efficiencies represent a huge area for cost savings, specifically in the logistics area. Hamilton (2003) estimates cost savings to be an average of 10 and 20 of revenues. Also, companies believe that the supply chain in which they participate as customers and suppliers is what creates competition rather than individual companies (Whitefield, 2004; Lange, 2004; Morton, 2003; Bianchi, 2003; Collins, 1999; Coia, 1999).

Crude oil and natural gas are the raw materials of the petroleum industry. They are used for the production of petrochemicals and other oil derivatives (Alshalan, 2004). After the production of crude oil is complete from oil reserves located deep underground or in sea beds, crude oil undergoes a distillation process (Robert, 1995). As a result of the distillation process, various fractions of the crude oil are produced, such as fuel gas, liquefied petroleum gas (LPG), kerosene and naphtha. The output of the distillation process is then provided to refineries as feed stocks. These feed stocks are first processed through cracking operations before they are supplied to petrochemicals plants (Milmo, 2001). Once the cracking process is complete, companies are able to obtain new products
that serve as the building blocks of the petrochemical industry, such as ethylene, propylene, butadiene, benzene, toluene, and the xylenes which are then used at petrochemical plants to produce even more specialized products, such as plastics, soaps and detergents, healthcare products (such as aspirin), synthetic fibers for clothes and furniture, rubbers, paints, and insulating materials (Whitefield, 2004).

2.3 Ethics in Supply Chain Management

Every human relationship is governed by two considerations; what in fact exists, and what in fact ought to be. Every social group prescribes explicitly or implicitly, for its members, certain rules which ought to be observed by them. For instance, family prescribes that the child ought to obey his/her parents. Husbands and wives ought to be faithful to one another. School/College/University prescribes that the students should abide by the rules of the institution, and respects their teachers. The state prescribes that politicians and other officials ought to treat their positions as a public trust. These rules or codes of conduct are admitted at large by the community, and are arrived at by man in the course of living. They are concerned with right and wrong and constitute what we call ethics or morality (Iqbal, 1918).

At the time of Triton scandal, the expectation that ethical behavior can be ‘taught’ and that procurement laws had ‘failed’ was widespread. Evidence of this expectation was also seen within the US military who, following the revelations of torture at Abu Ghraib, instituted ethics training for all servicemen in Iraq (Stevens, 2008). The 2009 Triton scandal involved the unauthorized releasing of oil by KPC without informing financiers. The scandal became public in January, 2009. The release occurred in 2008 when Triton Oil Company was allowed by KPC to withdraw oil amounting to Kshs 7.6 billion or
US$98.7 million. The products were allegedly lost after KPC acted in breach of the Collateral Financing Agreement (CFA) that is the backbone of the petroleum supply chain and irregularly released products in its custody to Triton. The agreement requires KPC to issue acknowledgement letters to the financiers confirming that they are holding stocks that they could only release to the marketer upon receipt of an authorization from the financier. KPC is however accused of having failed in its fiduciary responsibilities by not implementing the Collateral Financing Agreement leading to the loss of products. Pricewaterhouse Coopers (PWC) report indicated that KPC employees in the operations and Finance departments played a key role in the fraudulent release of petroleum products to triton putting the burden of losses incurred on the shoulders of the state corporation (The East African, 2009).

Civil sector research into the question of whether ethical behavior can be taught concludes that most tertiary ethics teachers do not believe that they can teach ethical behavior (Dean and Beggs, 2000). However, Sims (2002) claims that teaching ethics “can be effective in developing students’ moral reasoning skills, ethical sensitivity and ethical behaviors”

The belief that a code of ethics is sufficient to control ethical behavior is widely held. Stevens (2008), in a review of eight studies concludes that “codes can be effective instruments for shaping ethical behavior and guiding employee decision making”. This viewpoint, however, that codes are effective documents in their own rights can be disputed. For instance, in contrast to Stevens’ finding, Kaptein and Schwartz (2008) examined 79 empirical studies into code effectiveness and conclude that “the results are clearly mixed” Helin and Sandstrom (2007), analyzed 38 empirical studies, drawing
similar conclusions: that studies present a mixed image of the effectiveness of corporate codes of ethics. These results are determined by interviews of users on the effectiveness of codes, and tend to conclude that there is uncertainty about whether codes lead to more ethical behavior.

Another problem is that codes are widely perceived as window dressing (McKendall et al., 2002; Brytting, 1997; Emmelhanze and Adams, 1999; van Tulder and Kolk, 2001; Pagnattaro and Pierce, 2007; Weaver et al., 1999; Jovanovic and Wood, 2007; Collen, 2002; Stansbury and Barry, 2007). Research into the codes used by Australian companies, for instance, in comparison with international codes, finds that most corporate codes are directed towards internal, rather than external issues and are designed to stop wrongdoing by staff that is detrimental to the organization (Wood, 2000). In short, codes designed to stop theft or misuse of organization’s assets, or to reduce the incidences of interpersonal or intergroup conflict are more intended to benefit the company than to stop the company’s wrongs (Wines, 2007). These multiple and at times dubious use of codes can be examined on the Illinois Institute of Technology’s (2008) website with an online collection of over 850 codes of ethics of professional societies, corporations, government and academic institutions gathered over twenty years. The website describes codes as “controversial documents”.

The process of developing a code is crucial to the sense of ownership and observance of the code by staff. Higher levels of staff ownership and contribution toward a code provide a more effective code. This issue is repeatedly acknowledged in a code studies (Kaptein and Wempe, 1998; Stevens, 2008; Trevino and Weaver, 2003; Seshadri et al.,
A good code reflects the moral dilemmas that employees experience, and provide assistance in their resolution (Kaptein and Wempe, 1998).

There are strong supporting arguments behind the assertion that most effective way to stop wrongdoing in any organization is to create a more open, stress free method of exposing wrongdoing in the workplace. Any wrongdoing in an organization is usually known to several people, any one whom could bring the problems into the open (Whistleblowing Ethics Australia, 2008). The motivation for exposing wrongdoing has several interconnected sources. One is that it is engendered by the people’s preference to work in an ethical organization. Maclagan (1998) for instance, in a treatise on the application of Piaget and Kohlberg to ethical reasoning stated his belief that most people in the organization are essentially well intentioned. Other support for employees' preferences to work ethically can be found in Valentine and Fleischman (2004) in a survey of over 300 business professionals, they reach the conclusion that people subject to formal ethical training have positive perceptions of their company’s ethical position, as well as higher job satisfaction. Delany and Sockell (1992) had earlier obtained similar results from over 1000 respondents. There is also strong support in the evolutionary biology literature to the effect that we are intrinsically cooperative, and to some extent, altruistic (Ridley, 1997; Winston, 2002; Levy, 2004; Joyce, 2006).

Employees however, are subject to the prevailing culture and thought processes within the organization. Adams (2008) points out the problem of groupthink in an issue of journal of the Australian Institute of Company Directors – a phenomenon where people tend to think the same on issues where diversity of thought needs to be encouraged. The term, first developed by social psychologist Irving Janis, included a tendency not to
question moral issues. Bringing unethical actions into public view is likely to bring retribution on the person who revealed the unethical or illegal action. Jubb (1999) gives many instances of whistleblowers victimized for revealing wrongdoing. Micali and Near (1992) two of the more respected researchers in this field, have also pointed out the difficulties whistleblowers face (Alford, 2001). ‘Career suicide’ was the term that the news media reported a senior officer in the Australian Wheat Board used when questioned why nobody in the organization spoke openly against the bribes paid to the Saddam Hussein regime (Sydney Morning herald, 2006). These statements in various forms also explain why so few have spoken out in the spate of scandals that erupted in the state of NSW in 2007 and 2008 – the Wollongong Council and real estate developer bribes, the cover ups in several hospitals, the minister accused of paedophilia; whose electoral secretary was the only person to speak out and who was immediately dismissed.

To minimize retribution, governments in the industrialized world have established legislation designed to protect people who reveal wrongdoing (Whistleblowing Ethics Australia, 2008). If the organization (or industry association, professional body, etc) is to develop a code of ethics, and manage that code, or operate an internal whistle blowing system, and decide sanctions for ethical transgressions, then it needs to assign people for these activities within the organization (Trevino and Weaver, 2003). Advocating change in ethical practices will need communication skills and a persuasive ability of a high order. It involves creating an understanding of oneself, one’s ethical values and moral courage. Advocating for ethical change requires courage, confidence and a high degree of personal skill (Weber, 2007).
2.4 Role of Ethics in Supply Chain Management

Value for money is the core principle underpinning public procurement, incorporating ethical behavior and the ethical use of resources. The application of the highest ethical standards will help ensure the best achievable procurement outcome. It entails more than just getting price – ethics are important when considering value for money (Mlinga, 2004). Costs can be divided into administration costs (creating and implementing standards), compliance costs (fulfilling those standards), and social costs (the externalities) (Parker and Kirkpatrick, 2002). It may attract lower administrative costs because, with fewer stakeholders and use of ‘insider knowledge’, the information and transaction costs of formulating, interpreting, monitoring and enforcing standards should be lower (Ogus, 2001).

Ethical behavior and good probity practices enhance the procuring entities reputation in the market place. This increases business confidence in procurement processes, and is likely to maximize the number of suitable responses for future tenders. Equally important ethical behavior on the part of the contractors or tenderers increases their chances of completing the assignment successfully and therefore the possibility of winning more tenders in the future (Public Procurement Regulations, 2005).

Procurement must be conducted with probity in mind to enable purchasers and suppliers to deal with each other on the basis of mutual trust and respect. Adopting an ethical, transparent approach enables business to be conducted fairly, reasonably and with integrity. Ethical behavior also enables procurement to be conducted in a manner that allows all participating suppliers to compete as equally as possible. The procurement
process rules must be clear, open, well understood and applied equally to all parties to the process (Public Procurement Regulations, 2005).

Ethics often brings several stakeholders in the global supply chain together, creating informal institutional structures through which a dialogue can be established. This dialogue, and the mutual trust that it helps create, stands in contrast to the adversarial relationships that often existed previously (Blowfield and Jones, 1999). Breaking down these barriers can bring several benefits because regulatory systems based on trust and dialogue seems to outperform those based on confrontation (Minogue, 2001). Flows of information and knowledge can be improved, thus reducing costs, because far more data is shared in situations of trust. Trust also enables the system to be more flexible – it can learn and adapt more readily than system based on more formal organizational boundaries, and it can draw on resources whenever they reside within the system (Lewis, 2000).

Masaka (2008) points out that the precise nature of CSR is elusive with conflicting interpretations by stakeholders. Van Beurden and Gossling (2008) in an exploration of the connections between CSR in companies and financial performance, develop a definition which relates it to codes of ethical behavior. The concept in effect, examines the ethical impact of the corporation’s decisions on its various stakeholders – owners, staff, suppliers, customers, the public at large, and finally future generations. In the same way that codes of ethics are questioned, there are mixed views on the practice of CSR. Some liken it to window dressing, somewhat akin to the way codes of ethics are at times regarded. Others argue that the implementation of CSR will have a beneficial effect on the bottom line. The reasoning behind this argument is that employees, customers,
suppliers and the public trust an ethical company and such increased levels of trusts yield lower transaction and compliance costs.

The results of empirical studies on these issues have produced mixed results. Schmidt and Rynes (2003) in their one-meta study examining the relationship between ethical and financial performance show a positive correlation. The authors suggest that “corporate virtue in form of social responsibility and, to a lesser extent, environmental responsibility is likely to pay off….“ The van Burden and Gosling’s study (2008) examines 34 research projects that attempted to relate CSR to Corporate Financial Performance and found that 23 of the studies found a positive relationship, nine found no significant correlation, and two found a negative correlation. Their conclusion was that; “There is indeed clear empirical evidence for a positive correlation between corporate social and financial performance.”

There is evidence of ethics delivering on social and environmental goals of SCM, examples include the following: reductions in child labour in Central American garment manufacture (Sajhau, 1998), workers being reinstated and allowed to unionize in garment factories in Central America (Jeffcott and Yanz, 2000), reductions in the number of child labourers employed to make carpets in India (Sharma et al, 2000), improvements in environmental management in electronics factories in Thailand (Foran, 2001), improvements in health and safety conditions in footwear factories in South-East Asia (Jenkins, 2001) and reductions in water and air pollution emissions from factories in Asia and Central America (Khanna, 2001).
In addition, pressures from socially-responsible investments initiatives have been shown to affect multinationals’ decision on product pricing for Africa, and on debt-forgiveness in South America (Slavin, 2002, Bowers, 2003). In a very general sense, ethics has helped give a higher profile to social and environmental development, and helped citizens in the North understand the consequences of their actions in the South. It has also catalyzed an integration of debates on social, environment and economic development showing the indivisibility of issues that have been separated in the past (Pearson and Seyfang, 2001).

If the theme of positive externalities is institution-forming, then the theme of negative externalities is displacement. The analogy is that of squeezing the balloon: bearing down on a problem in one area will only cause it to emerge somewhere else (Sajhau, 1998). Some of the children squeezed out of carpet-making in certain core locations in India re-emerged elsewhere, either in physical locations outside the core, or in other jobs such as beedi making or weaving (Sharma et al, 2000). Southern jobs can also be lost due to ethics practice if producers centralize or automate or squeeze sub-contractors in order to reduce their compliance costs (Collinson, 2001, Jenkins, 2001). In other situations, it is production – rather than labour – that could move as contracts and capital flows to locations that are more loosely regulated (Burns and Blowfield, 1999).

The final negative externality is institutional, with worries that ethics will undermine other regulations and institutions. In particular, it could weaken both unions and governments if it promotes the idea that regulation can take place perfectly well without those institutions (Ogus, 2001). This parallel concerns – with some limited supporting
evidence – that any window-dressing by multinationals is not just a marketing ploy to sell products, but also an effort to pre-empt formal regulation by the state (Curtis, 2001).

2.5 Summary

In summary; the image portrayed by role of ethics in SCM to date is of the glass half-full or half-empty. Multinationals and some advocates of ethics in SCM have tended to take the former view, focusing on what ethics has covered and achieved. However, many academic commentators have taken the latter view, tending more towards the critical than the supportive. Whether there is any overlap is hard to say, but there is also a sense that those coming from the right of the political spectrum have been more optimistic about ethics in SCM, whereas those from the left are more skeptical. The division may relate to comparison between theory and practice (OCA 2000, Perry & Singh 2001).

“Ethical performance” is not a topic restricted to abstract academic musing. In a continent beset by burgeoning corruption, bloated bureaucracies, declining standards of public morality, and little consensus on the “common good”, the ethical standards and moral impact of Supply Chain practitioners in all sectors of society is of paramount importance. In terms of development and social cohesion, arguably the awareness of the public to matters of ethics is vitally important. SCM ethics, as a sub-set of (and arguably a higher level version of) ethics generally, is also potentially a valuable means of supporting key developmental goals such as good governance, security, peace, democracy, and effective development.
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The main purpose of the study was to establish the role of ethics in supply chain management of oil marketing companies in Kenya and how ethics can be used to improve the supply chain process. This chapter aimed to address the research design, population of the study, sample design, data collection, presentation and techniques that was used in analyzing data from the field.

3.2 Research Design

The type of research design used was a census survey because the study intended to identify the role of ethics in supply chain management of oil marketing companies in Kenya. Primary data was collected to establish the role of ethics in supply chain management.

3.3 Population of the Study

The population of the study covered supply chain management employees in every oil marketing companies in Kenya. These organizations were listed as customers of (KPC) Kenya Pipeline Company (See Appendix I). KPC (2012) provide a list of fifty one (51) companies as its customers.
3.4 Sample Design

All the 51 oil marketing companies listed by KPC were considered for the survey. Given that this study relied on perceptions and opinions of respondents in regards to ethics, the study sampled 10 supply chain management employees in each organization bringing the total number of questionnaires distributed to 500.

3.5 Data Collection

This research used questionnaires to collect data. The questionnaires were distributed and later collected from the respondents after completion. Written questionnaires were administered directly to respondents’ to determine their perception and opinions on ethics and its roles in supply chain practice. Closed and open-ended questions enabled the respondents to express their views. Follow up by use of e-mails and telephone calls as well as personal visits were applicable to establish authenticity of data collected.

3.5.1 Validity and Reliability of Research Instrument

Validity of the instrument was measured using the Content Validity Index. Reliability of the instrument was tested using the Durbin Watson statistics. According to Watson (1986) a model lies between 1 and 3. Adjusted R square indicated that 84.2% of the factors affecting ethics were explained in the model and that a Durbin Watson statistic of 2.226 lied between 1 and 3. This implied that the study model was good
3.6 Data Analysis and Presentation

The collected data was presented in form of tables and bar graphs where appropriate. Tables helped in visual display and to show the obtained data. A bar graph was used to ensure data presentation in an easy to read format. Descriptive statistics were used in the analysis through calculation of mean and percentages to measure and compare the results. The coefficients of constants were obtained after applying advanced MS Excel and Statistical Packages for Social Sciences.

3.7 Measurement of Variables

Scales from previous studies developed by Muncy and Vintell (1992) was adopted and used to establish the role of ethics in supply chain management. Business practices, relativism and idealism were identified as independent variables while ethical measures as dependent variables A 5 point Linkert scales ranging from 5-strongly disagree to 1-strongly agree was used.
CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

The chapter comprises of analysis, presentation and interpretation of the findings of the study whose objective was to establish the role of ethics in Supply Chain Management and how ethics can be used to improve the SCM process. The study has concentrated on various aspects of role ethics in supply chain. Dully filled questionnaires were processed and the chapter details the presentation of the findings in bar graphs and tables in terms of mean, frequency, proportions, maximum, minimum and percentages. The chapter is divided into four sections namely descriptive statistics, general findings, factor analysis and summary.

4.2 Descriptive Statistics

Respondents were asked to fill demographic features that included level of education, length of existence of their organizations, gender and their age bracket. Discussion of the same is detailed below.

4.2.1 Response Outcome

The questionnaires distributed to the respondents were 510. Out of these, 434 questionnaires were dully filled and submitted representing 85% of the response rate. Table 4.1 presents the sample used and distribution of the response across the various levels of management.
Table 4.1 Response Outcome

<table>
<thead>
<tr>
<th>Level of Management</th>
<th>Sample</th>
<th>Response Received</th>
<th>Percentage of Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Management</td>
<td>385</td>
<td>327</td>
<td>85%</td>
</tr>
<tr>
<td>Middle Management</td>
<td>70</td>
<td>63</td>
<td>90%</td>
</tr>
<tr>
<td>Lower Management</td>
<td>55</td>
<td>44</td>
<td>80%</td>
</tr>
<tr>
<td>Total</td>
<td>510</td>
<td>434</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data

From table 4.1, 85%, 90% and 80% of top, middle and lower management respectively responded to the questionnaires. This indicates that top and middle management valued the study and thus implemented ethical policies and guidelines in their organization.

4.2.2 Level of Education

It was considered as important since the research sort to find out the role of ethics in supply chain management and to what extent is the level of education of the respondents. Table 4.2 shows data collected on the level of education.

Table 4.2 Level of Education

<table>
<thead>
<tr>
<th>Education</th>
<th>Frequency</th>
<th>Percentage (%)</th>
<th>Cumulative Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Graduate</td>
<td>96</td>
<td>22%</td>
<td>22%</td>
</tr>
<tr>
<td>Graduate Degree</td>
<td>289</td>
<td>67%</td>
<td>89%</td>
</tr>
<tr>
<td>Diploma</td>
<td>49</td>
<td>11%</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>434</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data

From table 4.2, 22%, 67% and 11% of the respondents had post graduate degree, graduate degree and diploma respectively. No respondent had secondary, primary and no education as the highest level of education. It is clear that education affects ethics in business practices. Majority of the respondents had a graduate degree which indicates
that they possess necessary skills required to execute their duties. Training is critical since it enables managers to possess necessary knowledge required, adhere to code of ethics and their behavior is improved.

4.2.3 Gender

The research was gender sensitive and questionnaires were distributed on a ratio of 1:1 which implies equal distribution to both sexes. According to table 4.3, equal presentation was considered as critical factor.

Table 4.3 Gender

<table>
<thead>
<tr>
<th>Sex</th>
<th>Frequency</th>
<th>Percentage (%)</th>
<th>Cumulative Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>255</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Female</td>
<td>255</td>
<td>50%</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>510</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data

4.2.4 Age of the Respondents

Respondents were asked to give details pertaining to their age bracket and graph 4.1 details the findings on the same.

Graph 4.1 Age of the Respondents Distribution

Source: Primary Data
According to graph 4.1, majority of the respondents were aged between 31 – 40 years representing 48% as compared to 9%, 25% and 17% who were aged between 20 – 30 years, 41 – 50 years and above 50 years respectively. This explains the age distribution of management team in the oil marketing companies.

4.2.5 Variables

Business practices, relativism and idealism were identified as independent variables while ethical measures as dependent variable. Table 4.4 shows data relating to mean variables.

**Table 4.4 Variables**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Practices</td>
<td>1</td>
<td>5</td>
<td>2.90</td>
</tr>
<tr>
<td>Relativism</td>
<td>1</td>
<td>5</td>
<td>3.52</td>
</tr>
<tr>
<td>Idealism</td>
<td>1</td>
<td>5</td>
<td>4.89</td>
</tr>
<tr>
<td>Ethical Measures</td>
<td>1</td>
<td>5</td>
<td>3.70</td>
</tr>
</tbody>
</table>

*Source: Primary Data*

From table 4.4, the respondents revealed that they are not sure on business practices (Mean = 2.90). On relativism, they agreed (Mean = 3.52) and strongly agreed on idealism (Mean = 4.89) in relation to ethical practices in business. For ethical measures put in place, the respondents agreed that ethical measures are essential in order for management team to adhere to.
4.3 General Findings

Section II of the questionnaire required respondents to give feedback on business practices, relativism and idealism. Data on the same are presented in tables 4.5, 4.6 and 4.7 and discussion of the same after each table. Ranking of strongly agreed (5 Point Score) was used to identify important factors in the respective aspects of business practices, relativism and idealism.

4.3.1 Business Practices

Perception of respondents pertaining to business practices is presented in table 4.5 below.

**Table 4.5 Perception on Business Practices**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>I do not pass blame for errors to an innocent co-worker</td>
<td>100%</td>
<td>1</td>
</tr>
<tr>
<td>I do not authorize subordinates to violate the organization’s policies and guidelines</td>
<td>89%</td>
<td>2</td>
</tr>
<tr>
<td>I do not divulge confidential information to parties external to the organization.</td>
<td>67%</td>
<td>3</td>
</tr>
<tr>
<td>I take the necessary time to do a job.</td>
<td>56%</td>
<td>4</td>
</tr>
<tr>
<td>I do not falsify internal time/quality/quantity reports for the organization.</td>
<td>56%</td>
<td>4</td>
</tr>
<tr>
<td>I do not claim credit for peers’ work</td>
<td>44%</td>
<td>5</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>68%</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data

From table 4.5, all the respondents strongly agreed that they do not pass blames for errors to an innocent co-worker. 89% of the management team strongly agreed that they do not authorize subordinates to violate the organization’s policies and guidelines while 11% do
not agree on the same issue. 67% of the respondents strongly agreed that they do not divulge confidential information to parties external to the organization while 33% disagreed on the same issue. 56% of the outcome took the necessary time to do a job, 56% of the respondents had not falsified internal time/quality reports for the organization and 44% didn’t claim credit for peers’ work. 12.5% of the respondents strongly agree that they reported co-worker’s violation of the organization’ policies and guidelines, 75%, 50% and 12.5% agreed, not sure and strongly disagreed respectively on the same issue.

4.3.2 Relativism

Perception of respondents pertaining to relativism is tabulated in table 4.6 below.

<table>
<thead>
<tr>
<th>Table 4.6 Perception on Relativism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statement</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Ethics code improves an organization’s ethical culture and employee’s behavior.</td>
</tr>
<tr>
<td>My organization has a written ethics code</td>
</tr>
<tr>
<td>Formal ethics training improves behavior of an employee</td>
</tr>
<tr>
<td>Ethics training is more useful in helping junior employees feel prepared to handle situations that invite misconduct than it is for senior employees.</td>
</tr>
<tr>
<td>Employees need to see their superiors and peers demonstrate ethical behavior in the work they do and decisions they make every day.</td>
</tr>
<tr>
<td>Average</td>
</tr>
</tbody>
</table>

Source: Primary Data

According to table 4.6, all 100% of the respondents strongly agreed that ethics code
improves organization’s ethical culture and employee’s behavior. 95% of the respondents said that their organization had a written code of ethics and 90% of them viewed formal ethical training improves behavior of an employee. 90% of the response received indicated that ethical training was more useful in helping junior employees feel prepared to handle situations that invite misconduct than it is for senior employees while 10% only just agreed. 85% of the respondents considered, strongly agreed that employees need to see their superiors and peers demonstrate ethical behavior in the work they do and decisions they make every day.

4.3.3 Idealism

Perception of respondents pertaining to idealism is presented in table 4.7 below.

Table 4.7 Perception on Idealism

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>An organization should make certain that its actions never intentionally harm another even to a small degree.</td>
<td>95%</td>
<td>1</td>
</tr>
<tr>
<td>One should never psychologically or physically harm another person</td>
<td>84%</td>
<td>2</td>
</tr>
<tr>
<td>The dignity and welfare of the people should be the most important concern in any organization.</td>
<td>82%</td>
<td>3</td>
</tr>
<tr>
<td>If an action could harm an innocent other, then it should not be done.</td>
<td>70%</td>
<td>4</td>
</tr>
<tr>
<td>One should not perform an action which might in any way threaten the dignity and welfare of another individual.</td>
<td>64%</td>
<td>5</td>
</tr>
<tr>
<td>Average</td>
<td>79%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data

From table 4.7, 95% of the respondents indicated that an organization should make
certain that its actions never intentionally harm another even to a small degree while 5% only just agreed. 84% showed that one should never psychologically or physically harm another person and 82% of the respondents considered strongly agreed that dignity and welfare of the people should be the most important concern in any organization. 70% of the respondents strongly agreed that if an action could harm an innocent other, then it should not be done, 20% agreed while 10% were not sure on the same issue. 64% of the employees considered, strongly agreed that one should not perform an action which might in any way threaten the dignity and welfare of another individual, 30% agreed, 5% were not sure and 5% disagreed on the same idea.

4.4 Factor Analysis and Discussions of the Research Findings

Factor analysis was carried out to determine the variability among the variables considered and interpretation of the data collected on ethics. The varimax rotation and principal component analysis methods were utilized.

4.4.1 Correlation Matrix

Pearson’s product – moment correlation coefficient was employed to establish the association between the variables as tabulated in table 4.8 and explanations further provided after the table.

Table 4.8 Association between the Variables

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Practices - 1</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relativism - 2</td>
<td>0.642</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Idealism - 3</td>
<td>-0.210</td>
<td>0.100</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Ethical Measures - 4</td>
<td>0.741</td>
<td>0.891</td>
<td>-0.059</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Correlation is significant at the 0.01 level (2-tailed)
a) Business Practices and Ethical Measures

As indicated in table 4.8, there exist significant positive association between business practices and ethical measures. \( r = 0.741, \ p = 0.01 \). This implies that if proper business practices are put in place, then ethical behavior will improve. According to Queensland Purchasing, Department of Public Works crime and Misconduct Commission (2006) Ethical behavior involves the concepts of honesty, integrity, probity, diligence, fairness, trust and respect. It also includes avoiding conflicts of interest, and abuse of an individual’s position or office. Ethical behavior and good probity practices enhance the procuring entities reputation in the market place. This increases confidence in procurement processes, and is likely to maximize the number of suitable responses to future tenders.

b) Relativism and Ethical Measures

According to table 4.8, there exist significant positive association between relativism and ethical measures. \( r = 0.891, \ p = 0.01 \). This implies that if the organization institute proper principles, moral standards, training, codes of ethic, culture and employee behavior, then ethical behavior will be adhered to. This confirmed the claim by Sims (2002) that teaching ethics “can be effective in developing students’ moral reasoning skills, ethical sensitivity and ethical behaviours”. This result also confirmed the view by Stevens (2008) that “codes can be effective instruments for shaping ethical behavior and guiding employee decision making”. Therefore, this result offered support for arguments behind the assertion that most effective way to stop wrongdoing in any organization is to
create a more open, stress free method of exposing wrongdoing in the workplace.

c) **Idealism and Ethical Measures**

According to table 4.8, there exist insignificant negative association between idealism and ethical measures. \((r = -0.059, p = 0.01)\). This implies that when idealism aspect reduces, then ethical behavior increases. It relates to avoiding conflict of interest and abuse of office. This result helps to reiterate the theory advanced by Iqbal (1918) that every human relationship is governed by two considerations; what in fact exists, and what in fact ought to be. Every social group prescribes explicitly or implicitly, for its members, certain rules which ought to be observed by them. The result further strengthened World Bank report (2003) that to be effective in any law require individual responsibility and personal motivation – basically the human rejoinder to ethical standards and ideals. Ethics is not similar to laws and regulations. Ethics in supply chain management, like professional ethics in ant function, are created to oversee the conduct of supply chain management practitioners.

**4.4.2 Regression Model**

The stepwise method was used to generate regression model in order to explain the extent to which variables are related. Summary of the model is tabulated in table 4.9 below.
Table 4.9 Regression Model

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Standard Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>1.225</td>
<td>0.535</td>
<td>2.290</td>
<td>0.300</td>
</tr>
<tr>
<td>Business Practices</td>
<td>0.289</td>
<td>0.104</td>
<td>0.269</td>
<td>2.772</td>
</tr>
<tr>
<td>Relativism</td>
<td>0.691</td>
<td>0.092</td>
<td>0.731</td>
<td>7.498</td>
</tr>
<tr>
<td>Idealism</td>
<td>-0.165</td>
<td>0.97</td>
<td>-0.127</td>
<td>-1.696</td>
</tr>
</tbody>
</table>

Summary of the Model

R Square = 0.858
Adjusted R Square = 0.842
Durbin Watson Statistics = 2.226

Source: Primary Data

As per table 4.9, it is clear that the model is good in explanation of the role of ethics in supply chain management. Adjusted R square indicates that 84.2% of the factors affecting ethics are explained in the model and Durbin Watson statistics of 2.226 lies between 1 and 3 indicating that the model is good. It was noted that relativism (Beta = 0.731) is more influential at explaining ethical behavior than business practices (Beta = 0.269) and idealism (Beta = -0.127)

4.5 Summary

In summary, there was an 85% response rate from the respondents. Majority of the respondents had a graduate degree level of education. The questionnaires were distributed in a ratio of 1:1 to both genders of respondents. A majority of the respondents were aged
between 31 – 40 years old.

Ethics is vital in execution of business practices. It involves the moral principles that guide officials in all aspects of work. The positive relationship between business practices, relativism and ethical measures indicate that when an organization adhere to the best business practices and principles, then ethical behavior is achieved leading to improved supply chain process. The findings pointed out that an improved supply chain process can be achieved through relativism for example having a code of ethics in place, ethics training of personnel, developing organizational ethics culture, adhering to organization policies and principles. The organization will be able to attract and maintain personnel who can ensure ethics in supply chain management. Through this, competitive edge is achieved hence the organization is able to compete effectively against the others.

The negative relationship between idealism and ethical measures indicates that idealism aspect can only be measured at personal level. Individual ideas can conflict with that of the organization but it should be encouraged that management implement ethical laws and practices at personal level by encouraging individual responsibility and personal motivation- basically the human rejoinder to ethical standards and ideals.
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The objective of the study was to establish the role of ethics in supply chain management of oil marketing companies and how ethics can be used to improve the supply chain process. This chapter is a recap of the findings detailed in the previous chapters and make recommendations for further research to researchers and policy makers. The significant findings are summarized and conclusions drawn.

5.2 Summary

The study sought to establish the role of ethics in supply chain management of oil marketing companies and how ethics can be used to improve the supply chain process. Business practices, relativism and idealism were identified as independent variables while ethical measures as dependent variable. The research revealed that there exist a positive association between business practices and ethical measures. This indicated that when supply chain management personnel implement business practices in their respective organizations, then ethical behaviour will improve the supply chain process. Ethical behaviour involves the concepts of honesty, integrity, probity, diligence, fairness, trust and respect.

There exists significant positive association between relativism and ethical measures. This implies that when the organizations institute proper ethics principles, moral standards, training, codes of ethics, ethics culture and employee behaviour in their supply
chains, then, supply chain process will improve. The improvement of the supply chain will be in terms of cost reduction, good reputation of the organization, mutual trust with trading partners, improved health and safety conditions, improved financial performance and reduction in water and air pollution.

The study also revealed that, there exists an insignificant negative relationship between idealism and ethical measures. This implies that when supply chain personnel reduce idealism, then ethical behaviour improves the supply chain process. This translates to the fact that ethics in supply chain management, like in any function, should oversee the conduct of supply chain practitioners.

5.3 Conclusions

The study set out to examine the role of ethics in supply chain management of oil marketing companies in Kenya and how ethics can be used to improve the supply chain process. In particular, the study examined the role of ethics in terms of study variables; business practices, relativism and idealism towards improved supply chain process.

The study revealed that when supply chain practitioners exhibit proper business practices concepts in their day to day operations then ethics will improve the supply chain process. It was also revealed that when an organization institute moral standards, ethics principles ethics training, codes of ethics, and ethical culture to its supply chain practitioners then supply chain process is improved. The study further revealed that when supply chain practitioners avoid ills like conflict of interest and abuse of office then supply chain process is improved.
5.4 Limitations of the Study

In the course of the study, the following problems were encountered. Firstly, the questionnaires design might have limited information to be provided by the respondents thus prohibited respondents to give more information pertaining to how they view ethics. Secondly, the participants feared providing confidential information in relation to ethics in their organization. They thought that this could be used against their organization although confidentiality of information was assured to them. Thirdly, the research used primary data collected using questionnaires. This relied majorly on perceptions and opinions of the respondents hence the perception of individuals varied from one individual to another. Secondary data could be used since it is documented and test if the results will be the same.

5.5 Recommendations for policy

After considering the results of this study, recommendations are suggested that should provide more information to organizations, managers and officers involved in supply chain management to improve and maintain supply chain process and integrity.

a) The study recommends that ethical behaviour concepts like honesty, integrity, probity, diligence, fairness, confidentiality, trust and respect should be encouraged, monitored and evaluated for all the practitioners and organizations involved in the supply chain management.

b) This study recommends that supply chain organizations and managers should institute ethics principles, moral standards, ethics training, ethics culture, code of ethics for their supply chain practitioners to establish integrity in the supply chain
process.

c) The findings suggest that organizations should focus training not only on informing employees about compliance with regulations, but also on encouraging employees to behave in a way that is conducive to a strong ethical culture.

d) The findings are also instructive in pointing out how organizations can tailor their ethics training to different levels of employees. Upper management may need less emphasis on how to handle ethical dilemmas and more emphasis on how to engage in ethical behaviour, while junior employees may need instructions on how to proceed when faced with ethics challenges.

5.6 Areas for Further Research

From the conclusion, it is clear that there are other variables of ethics in supply chain management such as setting a good example, keeping promises among others. Further research is recommended that will consider other variables other than business practices, relativism and idealism. Secondly, longitudinal study should be carried out to find out the role of ethics over long period of time. Thirdly, a similar study should be carried out in other sectors of the economy that is agriculture, commercial, financial and manufacturing industries. A similar study can also look at relationship between ethics and supply chain performance.
REFERENCES


Arjoon S. (2005) Corporate Governance: An Ethical Perspective. St Augustine, Trinidad: The University of west Indies


www.cips.org (Retrieved 2011, August)


APPENDIX I: QUESTIONNAIRE

Dear Respondent,

This questionnaire seeks to establish the **Role of Ethics in Petroleum Supply Chain Management in Kenya**. You have been selected to participate in this study because we believe you will provide the information we need. The information you provide will be used for purely academic purposes and will be treated with utmost confidentiality. **It is not necessary to indicate your name.**

Thank you for your time and cooperation.

**SECTION I: GENERAL INFORMATION**

Please tick the appropriate response for the questions below:

**Demographic Characteristics**

1. **Level of education**

<table>
<thead>
<tr>
<th>Code</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level</td>
<td>No Education</td>
<td>Primary</td>
<td>Secondary</td>
<td>Diploma</td>
<td>Graduate Degree</td>
<td>Post Graduate</td>
</tr>
<tr>
<td>Tick</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. **For how long has your organization been existence?**

<table>
<thead>
<tr>
<th>Code</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>0 – 5 yrs</td>
<td>5 – 10 yrs</td>
<td>10 – 25 yrs</td>
<td>Over 25 yrs</td>
</tr>
<tr>
<td>Tick</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. **Gender**

<table>
<thead>
<tr>
<th>Code</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Tick</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. **Age of the Respondent**

<table>
<thead>
<tr>
<th>Code</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>20 - 30 yrs</td>
<td>31 - 40 yrs</td>
<td>41 - 50 yrs</td>
<td>Above 50 yrs</td>
</tr>
<tr>
<td>Tick</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Please indicate by ticking in the appropriate box to the extent to which you agree with the statement below.

**SECTION II**

5. Do you understand what ethics is?

<table>
<thead>
<tr>
<th>Code</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

**SECTION II**

<table>
<thead>
<tr>
<th>Business Practices</th>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Not Sure (3)</th>
<th>Agree (4)</th>
<th>Strongly Agree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I call in sick in order to take day off</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I report a co-worker’s violation of the organization’s policies and guidelines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I do not divulge confidential information to parties external to the organization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I take the necessary time to do a job</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I do not take extra personal time during lunch hour, break and early departures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Falsifying time/quality/quantity reports</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. I do not authorize subordinates to violate the organization’s policies and guidelines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. I do not falsify internal time/quality/quantity reports for the organization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. I do not pass blame for errors to an innocent co-worker</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. I do not claim credit for peers’ work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>I give gifts/favors in exchange for preferential treatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>I accept gifts/favors in exchange for preferential treatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>I overstate expense accounts by more than 10% of the correct amount</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>I use the organizational services for personal use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>I remove the organisations' supplies for personal use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>I use the organization time for personal use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Relativism</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>There are no ethical principles that are so important that they should be part of any code of ethics.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>What is ethical varies from one situation and organization to another.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Moral standards should be seen as being individualistic; what one person considers being moral may be judged to be immoral by another person.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Different types of moralities cannot be compared as to “rightness”</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>What is ethical for everyone can never be resolved since what is moral or immoral is up to the individual?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Moral standards are simply personal rules which indicate how a</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7. Ethical considerations in interpersonal relations are so complex that individuals should be allowed to formulate their own individual codes.

8. Rigidly codifying an ethical position that prevents certain types of actions stand in the way of better human relations and adjustment.

9. No rule concerning lying can be formulated; whether a lie is permissible or not permissible totally depends upon the situation.

10. Whether a lie is judged to be moral or immoral depends upon the circumstances surrounding the action.

### Idealism

1. An organization should make certain that its actions never intentionally harm another even to a small degree.

2. Risks to another should never be tolerated, irrespective of how small the risks might be.

3. The existence of potential harm to others is always wrong, irrespective of the benefits to be gained.

4. One should never psychologically or physically harm another person.

5. One should not perform an action which might in any way threaten the dignity and welfare of another individual.

6. If an action could harm an innocent other, then it should not be done.
7. Deciding whether or not to perform an act by balancing the positive consequences of the act against the negative consequences of the act is immoral.

8. The dignity and welfare of the people should be the most important concern in any organization.

9. It is never necessary to sacrifice the welfare of others.

10. Moral actions are those which closely match ideals of the most “perfect” action.

**SECTION III: MEASURES**

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Not Sure (3)</th>
<th>Agree (4)</th>
<th>Strongly Agree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I have observed any type of ethical misconduct in the organization</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>I have observed any specific types of ethical misconduct in the organization</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I have ever reported any type of misconduct to management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>I am satisfied with management’s response to reports of misconduct</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>I am satisfied with my organization</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>I am exposed to situations that can result in ethical misconduct</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>I am adequately prepared to respond appropriately to situations that can result in ethical misconduct</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>I am under pressure to compromise ethics standards or the law</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The End. Thank you!
## APPENDIX II

### LIST OF OIL MARKETERS IN KENYA

#### OVERAL MARKET SHARES

**January to September 2011**

<table>
<thead>
<tr>
<th>Company</th>
<th>% Market Shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>KENOLKOBIL</td>
<td>21.3</td>
</tr>
<tr>
<td>Total Kenya</td>
<td>19.7</td>
</tr>
<tr>
<td>SHELL</td>
<td>14.4</td>
</tr>
<tr>
<td>LIBYAOIL</td>
<td>9.1</td>
</tr>
<tr>
<td>National Oil</td>
<td>4.7</td>
</tr>
<tr>
<td>GAPCO</td>
<td>4.7</td>
</tr>
<tr>
<td>Gulf Energy</td>
<td>3.4</td>
</tr>
<tr>
<td>Hass Petroleum</td>
<td>3.3</td>
</tr>
<tr>
<td>BAKRI</td>
<td>2.1</td>
</tr>
<tr>
<td>FOSSIL</td>
<td>2.1</td>
</tr>
<tr>
<td>Galana Oil</td>
<td>1.5</td>
</tr>
<tr>
<td>Addax Kenya</td>
<td>1.4</td>
</tr>
<tr>
<td>Hashi Energy</td>
<td>1.2</td>
</tr>
<tr>
<td>ENGEN</td>
<td>1.1</td>
</tr>
<tr>
<td>BANODA</td>
<td>0.9</td>
</tr>
<tr>
<td>MGS</td>
<td>0.9</td>
</tr>
<tr>
<td>ROYAL</td>
<td>0.8</td>
</tr>
<tr>
<td>ALBA</td>
<td>0.7</td>
</tr>
<tr>
<td>TROJAN</td>
<td>0.5</td>
</tr>
<tr>
<td>OILCOM</td>
<td>0.5</td>
</tr>
<tr>
<td>RIVAPET</td>
<td>0.5</td>
</tr>
<tr>
<td>JADE</td>
<td>0.5</td>
</tr>
<tr>
<td>AINUSHAMSI</td>
<td>0.5</td>
</tr>
<tr>
<td>Others</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

*Source: PIEA 2012*