

**FACTORS LEADING TO PARADIGM SHIFTS IN PETROLEUM
COMPANIES IN KENYA.**

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requirement for the degree of Master in Business Administration.**

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Declaration

This research project is my original work and has not been submitted for a degree course in this or any other University.

Signed _____

Date _____

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D61/7114/05

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

Signed _____

Date _____

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Dedication

To my parents, Arthur and Mary, Sister Jacky, Brother Herbert and my Fiancée Joan for their love, support and encouragement.

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My pursuit of the MBA degree would not have been possible without the encouragement, support and assistance of a large number of people. Space does not allow me to name them all but I am nevertheless extremely grateful to them.

I would like to thank my parents Arthur and Mary , Sister Jacky, Brother Herbert, my Fiancee Joan for their encouragement and support during the entire duration of my studies. I acknowledge my Parents for their unlimited moral and financial support throughout my education.

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I owe a great debt of gratitude to the managers in the oil companies for the sacrifice they made by taking time off their busy schedule to complete the questionnaire.

I wish to recognize Fredrick, for helping administer the questionnaires.

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Abstract

Over the last 10 years, there have been many changes in the Kenyan economy. These changes have had a considerable impact on all industries and the oil industry is no exception having been liberalized in October, 1994. This research project was a census survey to determine the factors that influence the paradigm shift in the oil industry. Specifically, the study was investigating the nature and impact of the paradigm shifts on the goals, and behaviors of oil companies in Kenya. The study emphasized on why companies behave the way they do in responding to environmental influences.

The study results established that the industry had encountered paradigm shifts such as, competitive pricing, differentiation, mergers, acquisitions and exit. The factors that influence these paradigm shifts are pressure for change, government actions and restructuring, technology and culture factors. The study also established that the companies do this for survival, growth, profitability and public image.

Last but not least, the study established it is important for companies to adopt paradigm shifts if they are to survive in the market. The turbulent nature of the environment most of these oil companies operate necessitate them to adopt shifts in their strategies to be able to compete effectively with other companies.

Finally, I recommended further research on paradigm shifts to be done .This will provide reference of knowledge to enable companies to remain more competitive in the market. , I recommend further study on what roles these Paradigm shifts will play in future and how oil companies can adopt specific departments in their companies to deal with these as this concept is becoming more and more evident in today's environment.

CHAPTER ONE: - INTRODUCTION

1.1 Background

For an organization to operate effectively there has to be a generally accepted set of assumptions; In effect it represents collective experience without which people would have to reinvent their world for different circumstances that they face The Paradigm allows the experience gathered over years to be applied to a given situation to make sense of it, to conceive of a likely course of action and the likelihood of success of that course of action. (Scholes & Johnson 1999).

1.1.1 Paradigm shift

Paradigm shift is defined as a dramatic change in methodology or practice. It often refers to a major change in thinking and planning, which ultimately changes the way projects are implemented. For example, accessing applications and data from the Web instead of from local servers is a paradigm shift.

Kuhn T (1962) also defines it as a change in a model or pattern that has been nearly universally accepted. For example, a change in consumer buying habits from buying airline tickets through travel agents to buying them over the Internet would be a paradigm shift.

Paradigm shift is the term first used by [Thomas Kuhn](#) ([1962](#)) in his book [The Structure of Scientific Revolutions](#) to describe a change in basic assumptions within the ruling [theory](#) of [science](#). It has since become widely applied to many other realms of human experience as well even though Kuhn himself restricted the use of the term to the hard sciences. According to Kuhn, "A paradigm is what members of a scientific community, and they alone, share." (The Essential Tension, 1997). Unlike scientists , Kuhn held, "a student in the humanities has constantly before him a number of competing and incommensurable solutions to these problems, solutions that he must ultimately examine for himself." . However, once a paradigm shift is complete, is not allowed the luxury, for example, of positing the possibility that [miasma](#) causes the flu or that [ether](#) carries light in the same way that a critic in the Humanities can

choose to adopt a 19th century theory of poetics, for instance, or select Marxism as an explanation of economic behavior. Thus, paradigms, in the sense that Kuhn used them, do not exist in Humanities or social sciences. Nonetheless, the term has been adopted since the 1960s and applied in non-scientific contexts.

The term "paradigm shift" has found uses in other contexts, representing the notion of a major change in a certain thought-pattern — a radical change in personal beliefs, complex systems or organizations, replacing the former way of thinking or organizing with a radically different way of thinking or organizing:

The word paradigm is frequently employed to meet the set of assumptions held relatively in common and taken for granted in an organization (Scholes and Johnson 1999). Because they are taken for granted, they are unlikely to be talked about as problematic. They are also likely to be evolving gradually rather than change rapidly.

The relationship between the paradigm and organizational strategy needs to be made clear. Environmental forces and organizational capabilities do not in themselves create strategy; people create strategy. The forces at work in the environment, and the organization's capabilities in coping with these, are made sense in terms of the experiences of managers and the collective assumptions within the paradigm. However, environmental forces and organizational capabilities while having this indirect influence on strategy formulation, nonetheless impact on organizational performances more directly.

According to Scholes and Johnson (1999), the taken for grantedness in organizations or industries is, then one of the major problems in trying to develop innovative strategies in organizations. The influence of the Paradigm is in essence conservative. Innovation is likely to mean questioning, even challenging, basic assumptions, which can be uncomfortable for those who attempt it and threatening for those who do not welcome it.

1.1.2 Factors that lead to paradigm shifts

The influence of the paradigm and ‘the way we do things around here’ is likely to have important implications for the development of strategy in organizations. Some of the factors cited by Bennet (1999) leading or influencing paradigm shifts are:-

Pressure for Change: - Managers in Oil companies have recently been faced with pressure to change and adapt to the needs of the environment. Managers typically try to minimize his extent to which they are faced with ambiguity and uncertainty, by looking for that which is familiar.

Lack of Fit with the environment is another factor that leads to organizations wanting to shift their current Paradigms.

Environmental uncertainty increases the more that environmental conditions are dynamic or the more they are complex. Recent studies have shown that there has been tremendous uncertainty in the Oil industry in terms of Pricing, Shifting of Crude Oil Prices, Dynamism in the Oil market, Competition etc. This has made most oil companies to adjust to the environment by either withdrawing its presence (an example is ExxonMobil) which sold off its Kenyan operations to Libya Oil.

Other examples of environmental influences are:-

Government action and restructuring

A significant feature of Kenya’s oil industry had a relatively high level of government’s direct participation, and a correspondingly low level of private sector involvement.

The Restrictive Trade Practices, Monopolies and Price Control Act (CAP 504, Laws of Kenya) need to be reviewed to enable the Monopolies Commission to curb uncompetitive trade practices in the petroleum sector. There is need to institutionalise functions of the free market to promote standards and effective regulation in the petroleum industry.(Petroleum Institute of Kenya Journal 2005)

Technology

The high costs of research and development contribute a lot to most oil companies adopting strategies that enable them to staying the market. The high costs of investing petroleum storage refining and storage equipments have caused some players to have more strategic advantage than others. Bennet (1999)

Labour Market

Kleiner (1996) claimed that to foster a corporate culture that embraces change, you have to hire the right people; heretics, heroes, outlaws, and visionaries. The conservative bureaucrat that made such a good middle manager in yesterday's hierarchical organizations is of little use today. A decade earlier Peters and Austin (1985) had stressed the importance of nurturing champions and heroes. They said we have a tendency to dismiss new ideas, so to overcome this, we should support those few people in the organization that have the courage to put their career and reputation on the line for an unproven idea.

The Cultural Web:

Trying to understand the culture of an organization is very important but it is not straightforward. The Cultural web according to (Scholes & Johnson 1999) is a representation of the taken for granted assumptions, or paradigm, of an organization and the physical manifestations of organizational culture.

A strategy and the values of an organization may be written down, but the underlying assumptions which make up the paradigm are usually evident only in the day-to-day conversation or discussions of people, or may be so taken for granted that they can be observed only in what people actually do. To understand the taken for grantedness may then mean being very being very sensitive to what is signified by the more physical manifestations of culture evident in an organization.

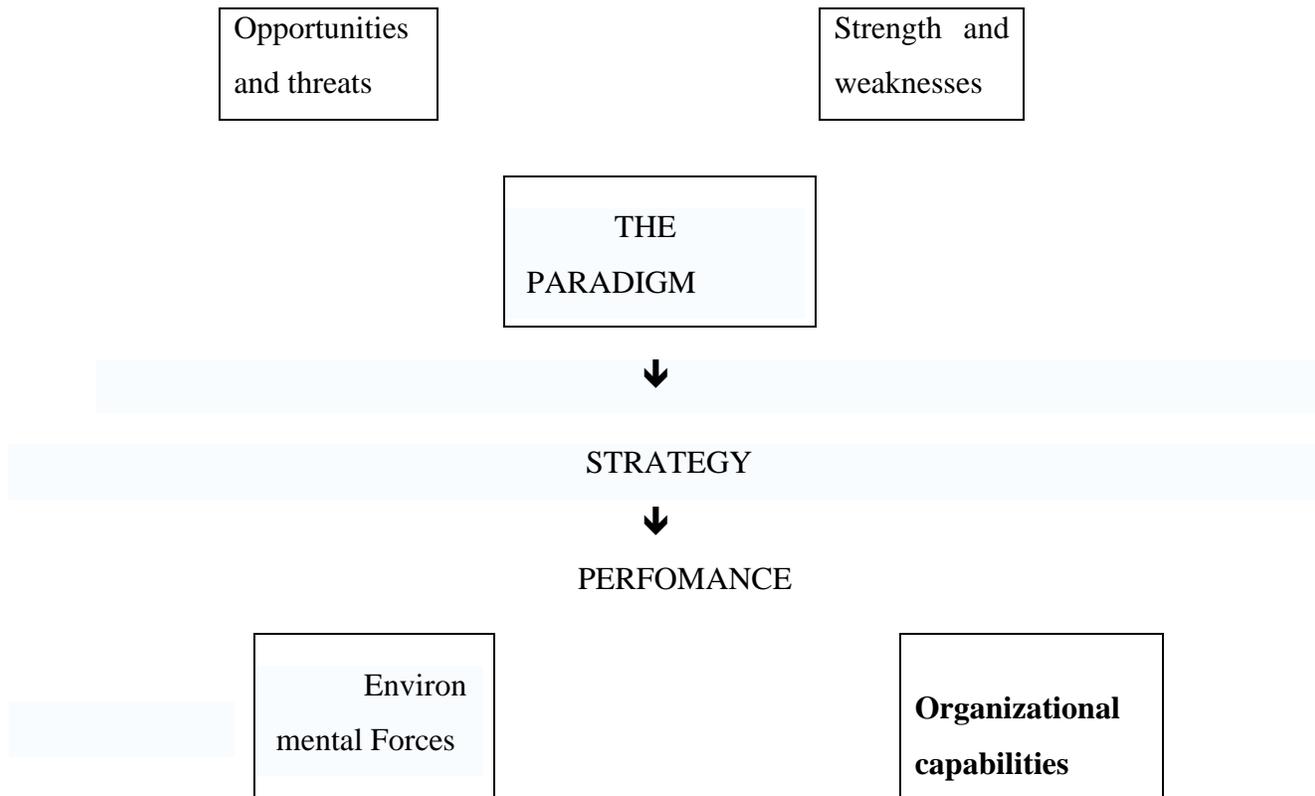
The other elements of the Cultural Web include the following:-

(i) The Routine ways that members of the organization behave towards each other outside the organization, make up the way we do things around here.

(ii) The rituals of organizational life are the special events through which the organization emphasizes what is particularly important and reinforces ‘the way we do things around here’. Examples include training programmes, interview panels, promotion and assessment procedures etc.

Organizational structure is likely to reflect power structures and again, delineate important relationships and emphasize what is important in the organization.

Diagram 1: The role of the paradigm in strategy formulation



Source: Scholes K& Johnson G (1999) Exploring Corporate Strategy Prentice Hall Publishers

According to Scholes and Johnson (1999), Environmental forces and organizational capabilities do not in themselves create strategy; people create strategy. The forces at work in the environment, and the organization's capabilities in coping with these, are made sense of in terms of the experience of managers and the collective assumptions within the paradigm. All these factors according to the diagram above revolve around the paradigm of an organization influencing the company to adopt strategies and adjust to these factors hence influencing performance.

1.1.3 Recent developments as a result of paradigm shifts in Kenya

Since October 1994 when the oil industry was deregulated, the mandate to import 30% of the country's crude oil requirements ceased and NOCK has since converted to become one of the competitors in the industry.

National Oil has purchased thirteen retail service stations from Shell bringing to forty one the total number of outlets currently under the National Brand. Shell were required by the Minister for Finance to dispose of 10% of their retail network to a third party as a condition for acquiring the 50% assets of BP Kenya Limited. It is expected that Shell will re-brand the BP outlets to Shell soon. Shell and BP had existed for many decades as a marketing joint venture. BP is yet to dispose of their 17% shareholding at the local Mombasa refinery

Another change relates to legislation by the government in order to bring order in the industry, apart from heavily funding the exchequer.

Mobil Oil Kenya which was acquired by Tamoil will now re-brand straight to OiLibya. This follows the acquisition of the Tamoil brand by an American investor mainly in Europe. Tamoil Kenya Limited has changed to Libya Oil Kenya Limited.

National Oil of Kenya is scouting for international partners to undertake Exploration and Production work on a number of blocks in Kenya.

1.1.4 Petroleum Industry in Kenya

According to the Petroleum Institute of East Africa Journal (2005), Petroleum is Kenya's major source of commercial energy and has, over the years, accounted for about 80% of the country's commercial energy requirements. Demand for oil in Kenya is quite small due to the country's underdeveloped economy, which is heavily dependent on labour intensive and rain-fed agriculture systems.

The Petroleum Institute of East Africa Journal (2005) also states that the domestic demand for various petroleum fuels on average stands at 2.5 million tons per year, all of it imported from the Gulf region, either as crude oil for processing at the Kenya Petroleum Refineries Limited or as refined petroleum products.

Prior to liberalization in October 1994, a significant feature of Kenya's oil industry was a relatively high level of government's direct participation, and a correspondingly low level of private sector involvement. Seven marketing and distribution companies were responsible for procuring and importing their own oil. The National Oil Corporation of Kenya was mandated to supply 30% of the crude oil requirement into the country. The Kenya Petroleum Refineries Limited, Kenya Pipeline Company Limited, National Oil Corporation of Kenya and Kenya Railways Corporation represent the government's presence in the petroleum industry. The Kenya Petroleum Refineries Limited is owned on a 50:50 equity holding between the government and three shippers, namely, Shell, British Petroleum and Caltex. The Kenya Pipeline Company Limited, Kenya Railways Corporation and private transporters are involved in transportation of petroleum products from Mombasa to other parts of the country and neighbouring countries.(The Petroleum Institute of East Africa Journal 2005).

Prior to 1994, the government, in consultation with the oil marketers, set consumer prices for petroleum products in the country. However, since October 1994, the procurement, distribution and pricing of petroleum products were liberalized with a view to enhancing operational efficiency of the industry and also attracting private capital.(The Petroleum Institute of East Africa Journal 2005)

Nearly all the Independent Petroleum Dealers source their products from the multinationals. This begs the question why the discomfort with them and yet they do not pose any threat to the volumes being imported and moved by the major companies. Multinationals traditionally maximize their profits at the network or retail level. Their volumes, and by extension their market shares at this level, have steadily been eroded in favour of the independently owned stations.(The Petroleum Institute of East Africa Journal 2005)

1.1.5 Factors affecting supply and price in the petroleum industry

The Organization of Petroleum Exporting Countries (OPEC) is highly influential and dominates the determination of the barrel prices in the market. An Italian based organization (known as Platt's) monitors world oil industry activity including spot price movements and publishes them daily as the average prices for the previous day. The ruling average price of a barrel of crude oil during any month is only known at the beginning of the following month. This price is referred to as the ADNOC for the month. OPEC is the largest supplier of petroleum products to Kenya and the ADNOC is therefore a major benchmark for price determination in the industry. The crude oil prices in the world market do not always have a direct relationship with consumer prices due to other domestic variables impacting on consumer price structure. The most significant of these domestic variables is the taxes levied by the government. Other components of the pump price include sea freight, superintendence, insurance, and refinery processing fee, storage, financing costs, inland transportation, exchange rates and the investors' return on capital.

Following deregulation in 1994, the consumer expectation was that competition between new entrants and established market players would translate into a reduction in consumer prices. (petroleum Institute of Kenya Journal 2005)

The latest statistics from the Ministry of Energy as shown on table 1.1.1 indicate that Kenya Shell/BP is the current market leader followed by Kobil.

Table 1.1.1 Market share

KENYA OIL INDUSTRY SALES MARKET SHARE – 2006

COMPANY	2 Market share
Shell/BP	19.61
Kobil	17.68
Total Kenya	17.12
Chevron	14.24
Mobil Oil (Tamoil)	10.89
NOCK	4.31
Kenol	2.87
Gapco	2.78
Triton	1.95
Bakri International	1.49
Oilcom	1.33
Petrol	1.21
Metro Petroleum	1.07
Galana Oil	0.93
Dalbit Petroleum	0.67
Engen	0.67
Tecaflex	0.48
Global Petroleum	0.22
MGS International	0.18
Fossil	0.16
Hass Petroleum	0.07
Total	100

Source: Secondary Data – Ministry of Energy.

1.2 Statement of the problem

Pascale, R A and Spinnelli S, (1990) wrote that relentless change requires that businesses continuously reinvent themselves. His famous maxim is “Nothing fails like success” by which he means that what was a strength yesterday becomes the root of weakness today, We tend to depend on what worked yesterday and refuse to let go of what worked so well for us in the past. Prevailing strategies become self-confirming. In order to avoid this trap, businesses must stimulate a spirit of inquiry and healthy debate. They must encourage a creative process of self renewal based on constructive conflict.

Recent developments have shown that oil firms have had to shift their strategies in order to survive in the market. The ability to sense changes in the environment is important because perceived changes in environmental influences signal the possible need for adopting a paradigm shift.

‘In the oil industry, managers see the scope of strategic choice as severely limited. Senior managers argue that they have to manage strategy for a commodity in a market dominated by raw material prices and availability, and that all they can do is keep costs down, learn to be as good as possible at forecasting changes in the environment and respond as rapidly as possible to such changes’ Scholes K& Johnson G (1999)

Total Kenya Annual Report (2000) reported that the increase of the participants in the Oil Industry and the environment presented a challenge to the industry as a whole. It said that when successful companies face big changes in their environment, they often fail to respond effectively.

There has been tremendous paradigm shifts in Kenya’s petroleum industry with companies adjusting themselves and adopting either stay or pull out strategies.(The Petroleum Institute of East Africa Journal 2005) .

Recent studies by Munywoki 2001, showed that based on multinationals huge holdings of oil and gas reserves and new strategic initiatives in international oil and gas trade and investment, national oil companies are rapidly strengthening their influence over world oil and gas markets to such an extent that no discussion on the future of the world energy outlook is meaningful without reference to their future goals, strategies, and behavior. The goals, strategies and behaviors of national oil companies have changed over time and understanding this

transformation is important to understanding the future organization and operation of the energy industry.

The Paradigm shift is a concept which the press has regularly discussed (Bennett, 1999: Stewart, 1999: Bidoli, 1999), but it has not been extensively researched as a holistic concept. Certain sectors of industry have examined aspects of the strategic responses (Rockart, 1998), but this research is limited to their specific area of interest.

According to Muriithi (1998), oil companies are in the process of reevaluating and changing business strategies, with substantial consequences for international oil and gas markets. It is a time of great change inside the leadership of these national oil companies, and goals and priorities will be different than those of the Western international majors, with potentially serious consequences for market stability and oil geopolitics. The interplay between emerging national oil companies, major oil producing countries and Western consumer countries will have a large impact on the question of energy security and stability of oil markets, raising many questions.

Previous studies by Muriithi (1998) and Munywoki (2001) in this area concentrated much on the strategic response to the petroleum industrial changes hence neglected the paradigm shifts and what has lead to these responses.

The purpose of this study is to determine the strategic factors that lead to paradigm shifts in the Oil Industry and how these affects the success or failure of Players (Oil Companies) in this industry.

1.3 Objective of the study

The objectives of the study are therefore the following:-

- (i) To determine the factors that have led to paradigm shifts in the petroleum industry in Kenya.
- (ii) To determine the paradigm shifts that have taken place in the petroleum industry in Kenya.

1.4 Importance of the study

This study is of interest and value to the following people and institutions:-

1. **Petroleum companies:-** help the management to understand the factors that influence paradigm shifts in the industry hence able to improve their strategic responses to change, with the view of improving their competitive edge
2. **Management consultants:** - provide them with a rich source of relevant information regarding the nature of paradigm shifts in Kenya. Such consultant will then be in a better position of giving more authoritative advice to their clients.
3. **Academicians:** - Provide them with a basis for the purpose of further future research.
4. **Industries:** - Be used by other industries in Kenya facing similar situations.
5. **Marketers:-** Provide them with information concerning the general state of the industry relating to changes and shifts taking place

3 1.5 Limitations of the study

The results of the study were drawn from nineteen (19) respondents out of the intended population of Twenty-Three (23). Four respondents deliberately did not fill in all parts of the questionnaire claiming that the information sought was sensitive and more so at this time when the Government is planning to implement new regulations in the Oil industry. Other respondents failed to respond citing contravention of company policy on Information protection policy. The time frame and finances were also limitations to this study.

CHAPTER TWO: - LITERATURE REVIEW

2.1 Introduction

Christensen (1997) took the position that great companies can fail precisely because they do everything right since the capabilities of the organization also defined its disabilities. Christensen's thesis is that outstanding companies lose their market leadership when confronted with disruptive technology. He called the approach to discovering the emerging markets for disruptive technologies agnostic marketing, i.e., marketing under the implicit assumption that no one - not the company, not the customers - can know how or in what quantities a disruptive product can or will be used before they have experience using it.

According to (Scholes and Johnson 1999), one danger facing most oil companies is that managers may not look beyond the industry in thinking through strategies for the future. They become victims of industry '*groupthink*' and do not see the lessons which can be learnt from outside their own industry. They in essence have developed organizational paradigms.

2.2 Concept of Paradigm Shift

Paradigm shift is the term first used by Kuhn (1962) to describe a change in basic assumptions within the ruling theory of science. It is in contrast to his idea of normal science. The term "paradigm shift" has found uses in contexts, representing the notion of a major change in a certain thought-pattern — a radical change in personal beliefs, complex systems or organizations, replacing the former way of thinking or organizing with a radically different way of thinking or organizing:

One of the more common applications of the terms *paradigm* and *paradigm shift* is to mean "traditional way of thinking" vs. "new way of thinking." Some New Age thinkers seem to think that paradigms can be created by individuals or groups who consciously set out to create them. They seem to mean by 'paradigm' nothing more than "a set of personal beliefs. Peters and Austin (1985).

Scholes and Johnson (1999) states that the word paradigm is frequently employed to meet the set of assumptions held relatively in common and taken for granted in an organization.

Because they are taken for granted, they are unlikely to be talked about as problematic. They are also likely to be evolved gradually rather than change rapidly.

Scholes and Johnson (1999) quotes, 'The relationship between the paradigm and organizational strategy need to be made clear.' Environmental forces and organizational capabilities do not in themselves create strategy; people create strategy. The forces at work in the environment, and the organization's capabilities in coping with these, are made sense in terms of the experiences of managers and the collective assumptions within the paradigm. However, environmental forces and organizational capabilities while having this indirect influence on strategy formulation, nonetheless impact on organizational performances more directly.

Pascale and Spinnelli S, (1990) states that agents of change are driving a new paradigm shift today. The signs are all around us. For example, the introduction of the personal computer and the internet have impacted both personal and business environments, and is a catalyst for a Paradigm Shift. We are shifting from a mechanistic, manufacturing, industrial society to an organic, service based, information centered society, and increases in technology will continue to impact globally. Change is inevitable. It's the only true constant.

'There has been a paradigm shift in the energy world whereby oil producers are no longer inclined to rapidly exhaust their resource for the sake of accelerating the misuse of a precious and finite commodity. This sentiment prevails inside and outside of OPEC countries but has yet to be appreciated among the major energy consuming countries of the world' Pascale and Spinnelli S, (1990)

The concept has been developed in economics by Pascale and Spinnelli S, (1990) in the identification of new techno-economic paradigms as changes in technological systems that have a major influence on the behaviour of the entire economy. This concept is linked to Schumpeter's idea of "creative gales of destruction". Examples include the move to mass production, and the introduction of microelectronics

Probably the most serious misapplication of Kuhn's (1962) conception is the notion that everything that makes up a paradigm is relative and subjective, and therefore purely personal with no connection or test in reality. Some of those who think that creationism and evolution are competing paradigms or theories make this mistake. It may be true that all theories and

beliefs are "subjective" to some extent, but this does not mean that they are all equally useful or probable, or even of the same type. The fact that *red* and all colors are "subjective" has not prevented the development of interior decorating, painting, clothing design, etc. Nobody hesitates to buy a red car on the grounds that red and all colors are purely subjective. Most of us can still tell the difference between red and blue even if we know that neither really exists except in our minds or in the subjective interaction of our senses with objects under certain conditions. And most of us know that there is no comparison and no competition between understanding red in terms of wavelength of light and understanding red as a symbol for love or passion or the belief that all things red are infused with divine love and worthy of veneration.

2.2.1 The Changing 'Management Attempts to Paradigm'.

The Learning Organization

According to Scholes and Johnson (1999) the *learning organization*, is one capable of benefiting from the variety of knowledge, experience and skills of individuals through a culture which encourages mutual questioning and challenge around a shared purpose or vision

Chaos Theorists who wrote about management argue that the organizational world appears to be so turbulent and chaotic that it is not possible to predict what will happen or when, so traditional approaches to strategic management are simply not appropriate. There is no point in formalized planning approaches with predetermined fixed objectives and analysis that may take weeks or months to work through. The idea that top managers can formulate strategies implemented by others becomes redundant because top managers are less in touch with such a complex and turbulent world than those in the organization.

Managers have therefore been forced to adopt the Learning organization concept. Rather than regarding experience as something which is fixed and a constraint on development, managers need to develop organizations in which they continually challenge such experiences from the world around them and from the different experiences of their colleagues.

Against this background, it is not surprising that Taylor's "scientific management" movement of the early 1900s held that the scientific observation of people at work would reveal the

single best way to do any task: or that Henri Fayol's "administrative management principles" elevated the study of management from the shop-floor to the total organization: or that Max Weber's concept of bureaucracy provided a structure to organize specialized functions and to standardize procedures to achieve maximum efficiency. It is true these concepts were subsequently tempered with behavioral approaches and systems theories but, nevertheless, what stands out above all else, is the enduring effect these early theorists have on management thinking right up to the present.

The techniques, concepts and structures articulated by people such as Taylor, Fayol and Weber are proving less effective in today's increasingly connected/ wired world. Organizations find that traditional management methods and structures - which were devised in an era, characterized by "closed equilibrium system" thinking, and when businesses were stable, competitors few, customers loyal, and financial results predictable - fail to adequately deal with the realities of a complexity-based view of the world in a new era defined by D'Aveni (1994) as one of "discontinuous change and hyper-competition".

In short, these authors believe that the current/ traditional perspectives on management are inadequate to cope with a hypercompetitive and fast changing environment, and that these traditional approaches are better suited to slower and less aggressive competition, characterized by long periods of stability between disruptions. New methods and management systems are demanded by the complex, rapidly evolving business environment of today. As economies and organizations become increasingly complex, as the environment changes more rapidly, and as acceptable response times diminish, the old management structures are simply failing to satisfy. Additionally, because of the technologically induced changes to work practices, new leadership and management challenges are constantly emerging.

One of the impacts that technology - as defined by Deakins; D (1996), - has had on society, especially technology that allows people to communicate across intra- organizational and inter-organizational boundaries, is the creation of what Noble (1996) calls the "**boundary less organization** in a borderless global marketplace". According to Deakins; D (1996), the boundary less organization "seeks to eliminate the chain of command, have limitless spans of control, and replace departments with empowered teams". In such an organizational structure, vertical boundaries are removed to flatten the hierarchy, and horizontal boundaries are

removed in order both to replace functional departments with cross-functional teams and to organize activities around processes. When fully operational, boundary less organizations remove the barrier of geographic distance from external constituencies. Such organizations are thus characterized by a decreased dependence on a command-and-control style of leadership: a breakdown of hierarchies: an increasing commitment to virtual technologies: reliance on teamwork: greater flexibility: and knowledge centers that interact largely through mutual interest and electronic - rather than authority - systems.

A profound characteristic of the new management paradigm is the *virtual workplace*. Marc Wallace defines the virtual workplace as a space that is not bound by visual or physical proximity. It exists as a platform to conceive, produce, and deliver a virtual product or service. In this regard Mr. Wallace has identified three distinct approaches telecommuting, frontline and cyber link.

Anthony M Townsend (1998) adds another dimension to the discussion with the concept of the virtual team.

Townsend (1998) argues for virtual teams by stating that although modern organizations face a number of challenges in a competitive environment, the imperative to move from traditional face-to-face teams to virtual teams derives primarily from five specific factors, namely:

The increased prevalence of flat or horizontal organizational structures, the emergence of environments that require inter-organizational co-operation, changes in worker expectations of organizational participation, a continual shift from production to service/ knowledge work environments, the increasing globalization of trade and corporate activity.

CHAPTER THREE: - RESEARCH METHODOLOGY

3.1 Research Design

The research was carried out through descriptive survey method. Descriptive research attempted to collect data from members of a population. This helped the researcher to get the descriptive existing phenomena by asking individuals about their perceptions, attitudes, behaviour or values. Moreover, it explored the existing status of two or more variables at a given position time; hence most suited in analyzing the general conditions of Paradigms existing in most Oil Companies and its relation to Strategies implemented in this companies in relation to this shifting the paradigms.

3.2 Population

The research was a census study involving a survey of all the very petroleum companies within the boundaries of the city of Nairobi.

3.3 Data Collection

A structured questionnaire consisting of close ended questions complemented with open end questions where necessary was used to collect data. The questionnaire consisted of two parts, A and B. Part A contained questions in general characteristics of the oil companies while part B addressed questions on the paradigm shifts. Respondents consisted of Chief Executive Officers (CEOs), General Managers, Departmental Managers who are ordinarily involved in strategic management in the companies. These were from the different petroleum companies headquarters since it was assumed that strategic management from headquarters are implanted informally in the different companies' branches.

3.4 Data Analysis

Data analysis in this study was done using descriptive statistics. The data was presented in frequency tables and analyzed through frequency counts, percentages and arithmetic mean scores. Narrative summary of the open ended questions was made. The Statistical Package for Social Sciences (SPSS) was used to analyze responses secured from the five point likert scale.

Also simple summary statistical tools will be used. The one that will mostly be used is percentage. The percentage will be used in classification of data and in describing the relationships in proportions. The percentages, once calculated will also help to compare the distributions of the various variables in the study.

3.1 3.5 Data Presentation

The finding of this study are presented by use of charts, and tables in order to convey visual impressions of meanings or to clarify information that may be hidden within the data. A narrative summary of open-ended questions is provided. From the summary and the analyzed data presented, conclusions is drawn.

CHAPTER FOUR: - DATA ANALYSIS AND FINDINGS

4.1 Introduction

This chapter deals with the presentation and analysis of findings of the study. It presents findings of study on the factors leading to Paradigm shifts used by the Petroleum Companies in Kenya.

4.1.1 Response rate

A total of Nineteen (19) respondents out of Twenty Three (23) Petroleum companies in Kenya returned the questionnaire completed. This formed 82.7% of the targeted population. 4 respondents did not fill in the questionnaire claiming that doing so would be in contravention with company policy on information protection.

4.1.2 Characteristics of the companies

The characteristics of the oil companies studied relate to age, that is how long the company has been operating in Kenya, type of ownership, level of competition and environmental influence. Further analysis was done on current paradigms, competition, government regulations to help establish factors that lead to paradigm shifts.

4.1.3 Years of operation in Kenya

The question on how long the firm has been operating in Kenya was posed to the respondents. This was considered important as it could reveal the experience of the firm on the paradigm shifts facing the petroleum industry.

Table 4.1.1 reveals that ten marketers represented by 33.4% have been in the business for less than five years. This is comprised of one new entrant into the oil market with less than one year of operation. Three (3) marketers represented by 20% having being in business for less than ten years. Two customers represented 13.3 % having been in the market for less than two

years while 16.7 % represented 3 marketers who have been in the market for less than 50 years.

3.2 Table 4.1.1 Number of Years of Operation in Kenya

Years of Operation	Number of Marketers	
	f	%
Less than 1 year	1	16.7
1 – 5	10	33.3 %
6 – 10	3	20%
11 – 25	0	0
26 -40	2	13.3%
41 – 50	3	16.7%
50+	0	0
TOTAL	19	100

4.1.2.1 Ownership of the firm

The respondents were asked to indicate the nature of ownership of their firm.63 % of the respondents indicated that their firms is 100 % locally owned.28 % indicated that their firms are multinational.5% indicated that their firms are partially locally owned, multinational ally owned. 4% did not respond to this question. This is clearly indicated in the table 4.1.2.

Table 4.1.2 Ownership

Nature of Ownership	Frequency	Relative Frequency
Local	11	63%
Multinational	6	28%
Local/Multinational	2	5 %
None	1	4%
TOTAL	19	100 %

4.1.2.2 Environment Influence

All the respondents indicated that they have experienced major changes in the industry. However 61% indicated that the current environment is conducive for the business.39 % indicated that the current environment is adverse to their business performance.

Out of the respondents who indicated that the environment is conducive for their business performance, 29 % attributed this to technology, whereas 22% attributed to the economic factors, 18% attributed this to the liberalization of the industry, 14 % attribute this to the political and legal factors.22 % indicated that all the four factors i.e. Technology, economic factors, liberalization and political/legal factors contribute to the conducive environment.5 % did not respond to this question.

Table 4.1.3 Factors that contribute to a conducive environment

Factors	Frequency	Relative Frequency
Technology	6	29 %
Economic Factors	5	22 %
Liberalization	4	18 %
Political/Legal	4	14 %
Total	19	100 %

4.1.2.4 Level of Competition

This section rates the level of competition as seen by the respondents and how they are handling it. Table 4.1.3 Indicates that 83.3% of the respondents state that there is fairly stiff competition while 16.7% state that competition is stiff. This is an indication that these oil companies face stiff competition among themselves.

Table 4.1.3 Intensity of Competition

Scale	frequency	Relative Frequency	Ranking
Stiff	1	16.7	2
Fairly stiff	5	83.3	1
Not stiff	0	0	-
Not sure	0	0	-
Total	6	100	

SECTION B

Section B of the questionnaire required the respondents to respond on factors that influence paradigm shifts. This was in relation to the objectives of the study.

4.2 Understanding paradigm shifts

The respondents were required to indicate whether they understand the term paradigm shift. This was important as it determined the validity of their response to the questions that followed. All the respondents indicated that they understand the meaning of the term paradigm shifts.

4.3 Nature of Paradigm Shifts

The respondents were requested to indicate the nature of paradigm shifts their firms had adapted in the past. The results are shown in Table 4.2.1 below.

Table 4.2.1 Nature of paradigm shifts

Nature of Paradigm shifts	Frequency	Relative Frequency
Competitive Pricing	7	47 %
Differentiation	5	21 %
Mergers	2	5 %
Acquisitions	3	7 %
Synergy	0	0 %
Exit	2	3 %
Total	19	100

According to Table 4.2.1 Competitive Pricing scored the highest, with 47 % of the respondents indicating that they adopt this paradigm shift. 21 % indicated that they differentiate their product. 7 % have engaged themselves with acquisitions while 5% in mergers. 3% adapt exit policies. None of the respondents indicated that their firms apply synergy strategy.

4.4 Factors influencing paradigm shifts

The respondents were required to indicate the factors that influence the paradigm shifts. The response to this is shown in table 4.2.2 below. 58% of the respondents indicated that all the factors listed influence paradigm shifts. However 10 % indicated that only demand and supply affects their paradigm shifts, while 16 % indicated that the paradigm shifts they experience are influenced by technology. 18 % indicated government regulations ,11 % indicated culture ,while 6 % indicated Pressure for change as factors that influence paradigm shifts. None of the respondents indicated financial decisions as a factor.

Table 4.2.2 Factors influencing paradigm shifts

Factors	f	%
Demand and supply	2	10
Technology	3	16
Government regulations	4	18
Cultural effects	2	11
Financial Decisions	0	0
Pressure for change	1	6
All	11	58

Local firms that responded to this question indicated that they are highly influenced by competition due to the operations of Multinational companies.

4.5 Companies performance in relation to the environment

The respondents were required to indicate on whether there has been changes in their firms performance in relation to their response to the environment. 63 % indicated that there has been changes in their firms' performance, while the others declared that they had not experienced any change in their firms' performance. Out of the respondents who indicated that they had experienced changes in their performance due to the changes in the environment, 70 % indicated that there had been an improvement in their performance, while the others indicated that their firms' performance has declined due to the response in the environment.

Table 4.2.3 Companies Performance

Changes in the firms performance	Frequency	Relative frequency	
Change	Improvement	8	70%
	No Improvement	4	30%
No change		7	37%

4.6 Response to Paradigm Shifts

The respondents were required to indicate on how their firms responded to paradigm shifts.

Table 4.2.4 states different ways that the firms handled shifts in their current Paradigms. 30% of the respondents said that they handled Environmental factors through ensuring that they posted competitive pricing, another 50% ensured product availability at all times to compete effectively. Others factors stated were: Investing in technology, changing their culture, Adopting policies to required government laid conditions, good customer care, enlarging networks by introducing their products to other towns, penetrate rural markets, promotions and advertising.

Table 4.2.4 Response to Paradigm Shifts

Factors	frequency	Relative Frequency
Adopting a Learning Organization Model	3	11%
Competitive pricing	6	40%
Invest in technology	4	25%
Mergers and Acquisitions	2	9%
Adopting Boundaryless Organization	3	13%
Exit strategy	1	2%
Total	19	100

4.7 Importance of adopting Paradigm Shifts in the Industry

The respondents were asked to mention their key goals in adopting paradigm shifts. The goals mentioned were: survival in the industry, growth so as to gain market share, maximizing market share, profitability and market differentiation.

Table 4.2.5 Importance of adopting Paradigm Shifts

Factors	Mean score	Rating	Ranking
Survival in the industry	1	Very important	1
Growth (gain market share)	2	Fairly important	2
Maximizing market share	2	Fairly important	2
Profitability	1	Very important	1
Market differentiation	1	Very important	1

Table 4.2.5 shows that the respondents' rate of survival in the industry, profitability and market differentiation are seen as very important goals as they work out their competitive strategies. Growth (to gain market share) and to maximize their market share are seen as fairly important strategic goals.

CHAPTER 5:- CONCLUSION

5.1 Introduction

In this chapter, the findings of the study are summarized, discussed and conclusions drawn. The chapter also highlights recommendations and areas thought necessary for further research, limitations of the study and recommendations for policy and practice.

5.2 Summary, discussions and conclusions

The study had two objectives: to determine Factors Leading to Paradigm shifts in Petroleum companies in Kenya; and the impact of these paradigm shifts on the operations of the companies. Based on the study, the nineteen respondents had similar attributes in terms of factors that have led to them adopting paradigm shifts in terms of competitive strategies used and competitive challenges experienced. The study sought to establish the type of Oil Companies and for how long they had operated in Kenya. It established that the marketers were both multinationals and local companies. The multinational companies represented 66.7% while the local companies represented 33.3% of the total marketers and that most of them has operated for more than thirty (30) years in Kenya with one new entrant as old as less than one (1) year old.

The factors identified as influencing paradigm shifts in order of importance were, Environmental factors like competition, Government regulations, Technological Factors, financial barriers and cultural aspects. When asked the state of competition, 83.3% of the respondents indicated that it was fairly stiff while 16.7% indicated that it was stiff. The study sought to establish how they were handling competition. This introduced the various competitive strategies adopted by the different marketers to cope with the competition.

In adopting these paradigm shifts strategies, respondents were asked to state their strategic goals. Survival in the industry, profitability, market differentiation, growth to gain market

share and maximizing market share were identified as very important goals they were pursuing as they operated in the industry.

In as much as a number of similarities were noted in terms of strategies adopted to counter competition, similar challenges were noted. These included huge financial investment requirement, cut throat competition, price wars, brand loyalty, late payment from customers, substitute products, electricity and wood energy, high cost of Petrol, hard economic conditions, poor infrastructure and uncertainty of product availability from The Kenya Petroleum Company hence stock outs. The stock out issue was addressed through importation although this was through competitive bidding by the multinational companies as individuals or through joint cargoes. This is a challenge to small players who cannot afford this kind of arrangement due to the huge financial requirements.

5.3 Recommendations for further research

Based on the results of the study which have solved my principle objective i.e. Factors that lead to paradigm shifts in Petroleum companies in Kenya, the results indicated paradigm shifts being adopted and influencing the future strategies of oil companies, I recommend further study on what roles these Paradigm shifts will play in future and how oil companies can adopt specific departments in their companies to deal with these as this concept is becoming more and more evident in today's environment.

5.4 Recommendation for policy and practice

The Government must create an enabling environment to enable these oil companies to compete effectively and sustain supplies in order to meet the rising demand in this market.

To the oil companies' respondents that I studied, I find it necessary for them to know that my study was very objectively carried out. The findings indicate shifts in strategies with indications of more to come given the recent Government policies introduced to encourage more competition. For potential investors, it still looks a challenge due to the heavy initial investment requirement but there is market potential given the Government intervention.

Appendix 1: Letter of Introduction

September 2007

Dear Respondent.

RE: MBA RESEARCH PROJECT

This questionnaire is designed to gather information on the strategic factors that lead to Paradigm Shifts/Effects in Oil Companies in Kenya. This study is being carried out for a management project paper as a requirement in partial fulfillment of the degree of Master in Business Administration, University of Nairobi.

Your responses will be treated in strict confidence and in no instance will your name be mentioned in the report.

Your cooperation will be highly appreciated.

Yours Faithfully,

Mathaga Abel M.

Appendix 2: Questionnaire

This questionnaire is divided into three sections: A, B and C

Kindly answer all the questions in each section.

Your answers will remain anonymous and strictly confidential.

Section A

1. How many years have you been operating in the Kenyan Market?

2. Please indicate the nature of ownership of your outlet.

Local Multinational

Other _____ (Please specify)

3. How would you describe the nature of competition in the industry

(a) Very Intense. ()

(b) Fairly Intense ()

(c) Negligible ()

4. Have you experienced a major change in the industry?

Explain _____

5. Is the current environment conducive for business?

Explain.....

6. If yes, what do you think has led to this?

Technology ()

Economic factors ()

Liberalization ()

Political Legal Factors ()

Others(Please

specify).....

.....

STRATEGIC PARADIGM SHIFTS (B)

1. Do you understand the term Paradigm Shift?

Yes..... No.....

2. Has there been a change in the company's performance in response to changes in the environment? Yes () No ()

3. Indicate some of the difficulties that you encounter in Operating your company in reference to the environmental factors

(a).....

(b).....

4. Please state factors that could have led to your firm adopting a paradigm shift?

(a).....

(b).....

(c).....

5. Among the following recent paradigm which ones has your company adopted?

(a) Differentiation of Products ()

(b) Competitive Pricing ()

(c) Diversification ()

(d) Mergers ()

(e) Acquisitions ()

(f) Exit ()

(g) Others (Please indicate).....

.....
.....

6. Indicate the reason why your firm has responded the way it does in (5) above.

Survival ()

Growth ()

Profitability ()

Public Image ()

Others (Please Indicate).....

7. Please state what changes in regard to the shifts in the environment have been adopted by your company

.....
.....

8. How important are the following goals in your business? Please rate them in order of their importance using the following scale:

1. Very important

2. Fairly important

3. Not sure

4. Not important

5. Not important at all.

6.

Survival in the industry	
Growth (gain market share)	
Maximize market share	
Profitability	
Market differentiation	

Other (please specify)

.....

9. Has your company experienced any paradigm shift recently?
 Explain.....

10. How has your company reacted to these paradigm shifts?

11. Do you think adapting to the environment is important? Yes () No ()

12. What in your experience is the most serious challenge in implementing strategic paradigm shifts in your organization?

13. What would you say are the main factors leading to paradigm shifts in your Firm?

14. Have Paradigm shifts improved/decreased the level of performance in your Company?
 State

Thank you for your cooperation.

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