CHALLENGES FACED BY OIL MARKETERS IN KENYA IN THE
IMPLEMENTATION OF ELECTRONIC PAYMENT SYSTEMS AS A STRATEGY
TO ENHANCE PERFORMANCE

MARGARET NYAKERU KAGU

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENT FOR THE AWARD OF MASTER OF BUSINESS
ADMINISTRATION DEGREE, SCHOOL OF BUSINESS, UNIVERSITY OF
NAIROBI

NOVEMBER 2014
DECLARATION

This research project is my original work and has not been submitted for examination in any other University.

Signed ___________________________  Date: ________________
MARGARET NYAKERU KAGU
D61/60265/2013

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

Signed ___________________________  Date: ________________
DR. J. M. MUNYOKI, PHD.
SENIOR LECTURER DEPARTMENT OF BUSINESS ADMINISTRATION
SCHOOL OF BUSINESS
UNIVERSITY OF NAIROBI
ACKNOWLEDGEMENTS

The study would not have been successful had it not been for the valuable support, assistance and guidance of various nature from several colleagues and my family members. I would like to express my heartfelt appreciation and gratitude to all of them in general. I however feel obliged to mention a few names to acknowledge their special contribution.

Special appreciation goes to my supervisor, Dr. J. M. Munyoki, whose insightful comments and guidance facilitated the realization of this work. His invaluable critique opened my mind to the various aspects of academic writing.

I am also grateful to Jane Kagu and Maurice Oyuyo for the emotional support. You kept checking on me and how far I had gone with the work, thank you for being the constant reminder that I needed to continue being focused on this project.

I would also like to express my sincere gratitude to all the respondents who played a key role in ensuring that I got detailed information from their organization. Their cooperation has made this work a success.
DEDICATION

To the Almighty God through whom all things are possible.

To my grandmother, a woman who valued education more than anyone I have ever met.

To my mum and my sister the two people whom I know I can always count on.
# TABLE OF CONTENTS

DECLARATION ............................................................................................................................... i

ACKNOWLEDGEMENTS ............................................................................................................... ii

DEDICATION ................................................................................................................................ iii

ABSTRACT .................................................................................................................................... vii

CHAPTER ONE: INTRODUCTION ................................................................................................. 1

1.1 Background of the study ......................................................................................................... 1

   1.1.1 Concept of strategy and strategy implementation ............................................................... 2

   1.1.2 Challenges of strategy implementation ............................................................................... 4

   1.1.3 Electronic payment system as a strategy ........................................................................... 5

   1.1.4 Organizational performance .............................................................................................. 7

   1.1.5 The Kenya oil industry ....................................................................................................... 8

   1.1.6 Oil marketers in Kenya ..................................................................................................... 9

1.2 Research problem .................................................................................................................... 10

1.3 Research objective ................................................................................................................ 12

1.4 Value of the study .................................................................................................................. 13

CHAPTER TWO: LITERATURE REVIEW ..................................................................................... 14

2.1 Introduction ............................................................................................................................ 14

2.2 Theoretical foundation .......................................................................................................... 14

2.3 Strategic management and challenges of implementation ..................................................... 16

2.4 Organizational performance measurements ........................................................................... 18

CHAPTER THREE: RESEARCH METHODOLOGY .................................................................. 19

3.1 Introduction ............................................................................................................................ 19

3.2 Research Design .................................................................................................................. 19

3.3 Population of the study ......................................................................................................... 19

3.4 Data Collection .................................................................................................................... 19

3.5 Data Analysis ....................................................................................................................... 20
CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction .................................................................................................................. 21
4.2 Company information .................................................................................................... 21
4.3 Electronic payment systems ......................................................................................... 23
4.4 Implementation strategy ............................................................................................... 23
4.5 Discussion ..................................................................................................................... 25

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction .................................................................................................................. 29
5.2 Summary ....................................................................................................................... 29
5.3 Conclusion .................................................................................................................... 30
5.4 Limitations of the study ............................................................................................... 31
5.5 Suggestions for further research .................................................................................. 31
5.6 Recommendations ....................................................................................................... 31
5.7 Implementation of the study ....................................................................................... 32

REFERENCES .................................................................................................................... 33

APPENDICES ...................................................................................................................... i

Appendix 1: Letter of Introduction ................................................................................... i
Appendix 2: Questionnaire ................................................................................................. ii
Appendix 3: Overall Market Share January - March 2014 ................................................. vii
LIST OF TABLES

4. 1: Company ownership ........................................................................................................22
4. 2: Number of outlets ........................................................................................................22
4. 3: Different electronic payment systems ...........................................................................23
4. 4: Mode of advertisement ................................................................................................24
4. 5: Reasons for electronic payment system implementation ..............................................25
ABSTRACT

Competitive strategy concerns what a firm is doing in order to gain sustainable competitive advantage. This study was conducted with an aim of investigating the challenges faced by oil marketing companies in the implementation of electronic payment systems. Primary data was used in the study and was collected through questionnaires administered through a combination of drop and pick and electronically transmission to all oil marketers operating retail outlets as listed in Petroleum institute of East Africa insight publication of 2nd Quarter 2014. The study explored organization’s structure, the different electronic payment systems available to these companies, their implementation strategies and implementation challenges. A response rate of 71.4% was achieved. The results showed that 50% of companies that have implemented electronic payment systems are foreign owned but locally incorporated implying that this mode of payment is a foreign idea that is slowly catching on with local companies. Of these companies 66.7% have more than 40 retail outlets and managers say that the number of outlets greatly influence the acceptability of their electronic payment options. Customers prefer to settle for a company’s offer if it offers convenience and they would not have to go out of their way to access products and services. Of the various electronic payment modes the branded fuel cards were found to be the most commonly used electronic payment mode followed by bank ATM cards, credit and debit cards. Mobile money transfer came in last as it is still a new phenomenon in the oil industry with the first collaboration being two years ago between Total Kenya and Airtel. Thou being the first telecommunication company to partner with an oil company to offer payment platform Airtel came in second to Safaricom as the preferred collaboration partner. This was attributed to Safaricom’s large customer base and tariff flexibility. On implementation strategies, 66.7% of the companies employed differentiation strategy while introducing their electronic payment systems. They incorporated some features that made their offer stand out from the rest of the marketer. The main reasons for the implementation of electronic payment systems were seen to be technological advancements and need to differentiate the companies offer from completion. On communication to popularize the platforms, radio was in the lead as the preferred mode of communication, many would attribute this to the costs of such advisement and coverage. Implementation of the electronic payment systems was found to be greatly affected by the high cost of maintenance for machines used in the payments and the frequency of machine breakdown. Most of the attendants operating the machines are semi-illiterate and therefore they lack the skills to operate the machines effectively. The study therefore recommends frequent trainings to be conducted on site in order to equip these attendants and hence lower the cost of operating these systems. The study also recommends sensitization of all business lines on the value of these systems as value addition tools for the company. The researcher recommends further research to be undertaken on the customer’s perception of electronic payment systems in the oil industry. A further research should also be undertaken on reasons for lower adoption of electronic payment systems in Kenyan oil industry as evident from the data obtained less than 50% of oil marketers have electronic payment platforms.
CHAPTER ONE: INTRODUCTION

1.1 Background of the study

Hofer and Schendel (1979) describe strategy as the ability to match an organization to its environment, it involves planning and organizing resources for their most efficient and effective use. In today’s dynamic markets, companies must implement strategies that will enable them to adapt to the changes in the environment (Ansoff, 1987). Strategy implementation involves efficient use of various resources to accomplish the objective of the strategy (Higgins & Julian, 1986). The implementation process is concerned with design of systems to achieve the best integration of people, structures, processes, and resources in order to achieve organizational goals. One area of change that has necessitated rethinking of strategies is the developments in information technology (IT). These developments have brought about introduction of strategic information systems; which can be applied to businesses in such a way that they have an impact on the organization’s products and business operations (Wiseman, 1988). Information systems are some of the resources that companies can exploit to gain an edge; on this front, most companies are implementing electronic payment system.

Interest on a company’s resources as a foundation for its strategy holds that firms are a collection of productive resources whose disposal over time is guided by an administrative decision. According to Barney (1991), a company’s resources include all the credits, organizational characteristics, processes, aptitudes, information, and knowledge controlled by the company and enabling it to conceive and implement strategies to improve its effectiveness. Leveraging on these resources and the core competencies that a company possesses can generate a sustained competitive advantage that, in turn, translates into better performances. Dierickx and Cool (1979) argue that if the resources of a company are unevenly distributed between the members of an industry, then the company can implement competitive strategies that other companies will
be unable either to conceive or to implement. For firms without unique resources, they focus attention on the ability to renew their resources in line with changes in its environment (dynamic capabilities).

Oil marketers are part of the oil industry’s value chain that is broadly described as the downstream segment of the oil business. They act as a link between the consumers, merchants, oil companies and the economy (retailing). According to a Microsoft report, the retail segment of oil marketing faces a lot of changes and managers need to have the ability to implement IT investments. The need to make such investment is to leverage on new technologies in order to leapfrog their competition (Barney, 1991). Munuve (2003) says that some Kenyan oil marketing companies (OMCs) are integrating IT into their payment systems. This has resulted into the emergence of electronic payment platforms like the fuel card and mobile telephony collaboration. Used well, electronic payment systems can be a source of competitive advantage for these companies; its implementation however requires a lot of effort.

1.1.1 Concept of strategy and strategy implementation

There is no single universally accepted definition of strategy, according to Johnson and Scholes (1999); strategy is the direction and scope of an organization over a long term. It achieves advantage for the organization through its allocation of resources within changing environment to meet the needs of the market and fulfil stakeholders’ expectation. Pearce and Robinson (2000) define it as a company’s ‘game plan’. They further say that by strategy; managers refer to their future oriented plans for interacting with the competitive environment in order to achieve company objectives. Mintzberg (1985) gives another definition; it is a plan, ploy, pattern, position, and perspective. He further affirms that strategy defines the organizational purpose, goals, priorities, objectives, and deals with the organizational competitive. In all these definition, it is clear that strategy has to do with the future of the organization.
Strategy-making process can be conscious and analytical, involving assessments of market structure, competitive strengths and weaknesses, the nature of customer needs, and the drivers of market growth (Aaker, 2001). In such a case, it is formulated in a manner similar to a project; with discrete beginning and end, here strategy seems to be the product of an organized and rigorous planning process. At times, it can be as a resultant of day-to-day prioritization decisions in the absence of intentions. In practice, rarely is the strategy clear at the outset, there are several variables involved. As organizations dive deeper into undefined waters it is crucial that managers understand the processes by which strategies are shaped, in order to guide their companies effectively (Mintzberg & Waters, 1985).

The implementation process involves allocating resources to the work of realizing the chosen strategies. According to Ansoff (1987), the implementation process covers the entire managerial activities like motivation, management appraisal, and control processes that are necessary to put strategy into motion. Higgins (1986) points out that almost all the management functions are in some degree applied in the implementation process. He states that no strategy, no matter how brilliantly formulated, will succeed if it cannot be implemented.

Mintzberg (1985) modelled the relationship between strategy formulation, strategy implementation, and organizational performance, it showed that organizations begin strategy formulation by carefully specifying their mission, goals, and objectives, and then engage in SWOT analysis to choose appropriate strategies (deliberate strategy). At times however, organizations may begin implementing strategies before they clearly articulate mission, goals, or objectives. In this case, strategy implementation actually precedes strategy formulation; this is referred to as emergent strategies. Implementation of emergent strategies involves the allocation of resources even though an organization has not explicitly chosen its strategies. Most organizations make use of both deliberate and emergent strategies. However, whether deliberate or emergent a strategy has to be implemented for it to have effect on organization's performance.
Pierce and Robinson (2007) say that, to effectively implement a strategy, the mechanisms such as organizational structure, information systems, leadership styles, budgeting, rewards, and control systems are essential.

1.1.2 Challenges of strategy implementation

Strategy and structure of an organization must be aligned, however in practice at times business units’ strategy may not correspond to parts of the organizations structure especially for large corporations. Business units may have a place in the market and their management can plan and execute strategies independent of other units of the company, such organization structure may pose a great challenge to effective strategy implementation. Therefore, at any time strategy and structure need to be matched and supportive of each other. Alfred Chandler (1960) stated that ‘structure follows strategy’, meaning that a long-term perspective and formulated strategy provides a company structure, focus, alignment and direction. Strategic planners must attempt to cut through the culture of diversified corporation and to plan in relation to the various competitive environments by identifying the strategies for them.

Implementing strategy involves change, which in turn involves uncertainty and risk; therefore, motivating individuals to make changes might be very difficult. In conducting strategic planning, teams involved in the process develop a strong understanding of the reasons behind the chosen strategy and the need for change in order to achieve partner goals. However, parties that are not involved in the process may struggle to identify with the goals and strategies. These individuals may not see a need for change, and without understanding the background and rationale for the chosen strategy, they may never buy-in to strategic plan and, as a result, will passively or actively interfere with the implementation process (Zook & Allen, 2001).
Another problem is the area of evaluation, management reports are not sensitive enough to monitor the implementation strategies, thus leaving the strategic manager not fully aware of how they are performing. Hence, may result in ineffective control mechanisms that may sabotage the strategy. Evaluation is important in strategy implementation; Drucker (1995) contend that you cannot manage what you cannot measure. Evaluation helps manager determine where they are at with regards to strategy and thus plan on what needs to be done to get to their objective.

According to Beer and Russell (2000) lack of communication is another common pitfall that companies fall into when it comes to strategy implementation. They often only address strategy implementation annually, this causes management, and employees to get caught up in the day-to-day operations, and neglect the long-term goals. Regular communication of strategy allows it to remain on top of mind, it also allows for deeper understanding. Communication also creates enthusiasm among employees; lack of this communication relegates strategy to a top management affair.

1.1.3 Electronic payment system as a strategy

Electronic payment systems are based on smart card technology, the smart card contains a microprocessor, a miniature computer that can store monetary value, held in digital form for immediate exchange in payment transactions (Bright, 1988). The concept of applying smart card technology for electronic payment (e-payment) began in 1990. For some time now, banks have dominated the electronic payment platform, with development of the internet and electronic commerce (e-commerce), the demand for electronic payment system has grown considerably (Bernkopf, 1996). They have changed the competitive landscape in the sense that there are not only used by banks but also other actors in the retail segments who need to gain competitive edge.
According to Cobb (2004), electronic payment systems apart from their convenience and safety have a significant number of benefits for organizations. She argues that introducing an efficient electronic payment system can enable companies track individuals spending and facilitate the design of marketing strategies for different category of customers. According to Bernkopf (1996), the competition in the electronic payment platform at present represents the situation where competitors develop payment innovations not only to adapt to changes in innovation but also to gain an edge. From a USAID survey on payment systems carried out in Kenya, the competitors in the mobile telephony market have become a competitive threat in the electronic payment platform due to the convenience they offer customers. Many retailers are currently collaborating with these mobile operators to offer wider electronic payment options. For the future, a convergence of card payments and mobile telephony is predicted (Funk, 2007), analysts allude to the possibility of the innovation experiencing exponential growth in the 21st century.

With the rapid expansion and exponential growth in the technology field, the need for electronic payment platforms has grown exponentially. According to (Cobb, 2004), in today’s world, many people across the globe make payments electronically rather than in person or cash. The vending adage, “no cash, no purchase” has been replaced by “no cash, no problem” (Attoh, 2008). Over the past decade, Africa and indeed the world has experienced major innovations in payment systems. With many organizations gaining from transactional cost reduction, improved customer service, increased operational efficiencies, and enhanced compliance to organizational policies and procedures. Larger, multibillion-dollar companies are finding that e-payment solutions are improving their performance and efficiency (Attoh, 2008).

In light of all these developments in electronic payment, oil marketers have used this innovation to position themselves. According to Munuve (2003) in Kenya, OMCs use branded fuel cards to promote customer loyalty by offering discount to customer thus ensuring repeat purchase. With the Energy Regulatory Commission (ERC) controlling retail price, OMCs find it difficult to
position themselves as they offer homogeneous product. Although the fuel cards are also similar across the industry, used strategically they can boost these companies market share. Kenol Kobil is a good example of a company that has used its electronic payment platform strategically, in 2012 the company offered customers discounts of between Ksh.2 and Ksh.5 per litre on fuel bought through K-Card (Kinyanjui, 2013). This saw its market share rise from 18.3% in 2011 to 25% in 2012, the pricing strategy at retail level significantly helped the company push volumes and thus increase market share.

1.1.4 Organizational performance

According to Richard et al. (2009) organizational performance encompasses three specific areas of firm outcomes: the financial performance (profits, return on assets, return on investment); the product market performance (sales and market share); and shareholder return (total shareholder return, economic value added). It is an analysis of a company's performance as compared to its goals and objectives, discussions on organizational performance dominate strategic management literature, as this is one type of organization’s effectiveness indicator (Cameron & Whetten, 1983). It is not a one-dimensional theoretical construct nor is it likely to be characterized by a single measure. The multi-dimensionality of performance is recognized and discussed in the management literature, as managers ought to be keen to all the aspects and not just financial (Venkatraman & Ramanujam, 1986).

Empirically there lacks consistency in the measurement of organizational performance as it is firm specific. The strategic choice a firm makes dictates which performance measures will reflect the underlying performance hypothesis (Steers, 1975). Understanding how different independent variables link to a dependent variable is important as assuming varied dimensions lead to misdirected or biased measurement. Not only does the appropriate measure of performance vary with situation, but the measurement structure of indicators that capture that aspect change also.
Electronic payment systems fall in the innovation and efficiency aspect of performance whose measures are placed in the wider domain of organizational effectiveness (Cameron & Whetten, 1983); other management researchers have however taken these same variables as their dependent performance measure. With the implementation of balanced scorecards, the scope of performance has widened. Although primarily used for internal management and control, a balanced scorecard measures financial performance, customer outcomes, innovation and internal processes (Kaplan & Norton, 1996). The balanced scorecard is closely tailored to each individual firm and thus allows managers to have an all rounded view of their performance (Schneiderman, 1999).

1.1.5 The Kenya oil industry

The Kenyan oil industry is divided into two segments; the upstream and downstream. The upstream comprises of companies that are in the exploration business. This segment generated a lot of interest among stakeholders with the discovery of commercially viable reservoirs in Ngamia 1 in Turkana on 2012 (Reuters). A report by Deloitte and Touche stated that the East African region had been a sleepy backwater for the upstream industry. The discovery of significant quantities of oil in Uganda in 2006 however ushered in a bonanza; with onshore oil discoveries in Uganda followed by discoveries in Kenya and gas discovery in Tanzania, more hydrocarbons have been discovered in East Africa in the last 2 years than anywhere else in the World. Now every potential hydrocarbon basin across East Africa is now the subject of intensive interest.

The other segment; the downstream which is concerned with the distribution and marketing of the petroleum product can trace its history back to 1903 in the colonial era. During this era, the main import was kerosene, which was shipped in drums. The Royal Dutch Shell was the first to deal in downstream business in Kenya (Wikipedia), the company set up depot in Shimanzi Mombasa in 1930s. In the early 60s, more players came into the market with Exxon Mobil,
Total, Chevron, and BP joining in. In these early years the industry was dominated by multinationals.

In 1994 however, with the liberalization of the industry many new local marketers and retailers established shop in all forms, both sophisticated and crude. The industry was thrown into disarray, and there were many duty exempt products being dumped in the market, as well as product adulteration (Munyua & Ragui, 2013). According to Wachira (2007), the bigger players began to panic, and would trade at high risk and low margins only to stay in the market. This resulted in the mass exit of these multinationals in the early 2000. Other factors cited by international companies for their exit include; increased competition and official price caps. These companies shifted focus to the more lucrative exploration and production activities. Shell was the latest multinational company to exit Kenya, following in the footsteps of five international majors that had left the country in the past decade over dwindling margins. They include Caltex (Chevron), Beyond Petroleum plc (BP), Mobil, Agip and Esso (Kinyanjui, 2013).

1.1.6 Oil marketers in Kenya

The oil marketing companies fall in the larger Kenyan oil industry, they comprise of companies that are involved in the import and export of petroleum products. The export business is done to neighbouring countries like Uganda, Rwanda, Burundi, DRC and South Sudan as these countries are landlocked and have no way to access crude that comes from the Middle East via sea. According to PIEA insight magazine, there are currently over 35 oil marketing companies in the country. The market is however dominated by six companies, Total Kenya is the leader controlling 16.7 per cent, Vivo Engery trading as Kenya Shell 13.6 per cent KenolKobil controls 11.6 per cent, Hashi Energy 6.1 per cent, Gulf Energy 5.9 per cent and Libya Oil at 4.9 per cent. Other players include Gapco Oil Company, Hass, National Oil Corporation of Kenya (NOCK), Engen, Mogas, Galana Oil Company, and other small marketers.
The market is divided into the commercial, retail and export business. The major companies operate in all three segments while the small players choose either one or two areas of operation. Commercial business involves selling of bulk fuel to either resellers or companies for their industrial use, the export business involves selling of fuel across the country’s territorial bounders, and retail business involves selling fuel to the end user at service stations. Out of the over, 35 marketers only 14 have retail networks across the country, others with retail outlets are independent individual. The retail business is where the electronic payment platform operates and this will be our area of interest in the study.

1.2 Research problem

Strategy implementation is the process of transforming strategic intentions into actions, then into acceptable results. Successful strategy implementation is as critical and difficult as the strategic choice. It requires consideration of the resources to be used, human resource requirements, structure, systems, and other variables. From a business point of view, electronic payments contain some practical advantages; cash is an expensive financial instrument (Munck, 2010). Electronic payment systems represent what could be a dramatic upgrading of the basic infrastructure of commerce and could slash transaction costs on many different layers of economic activity, potentially yielding major gains for consumers, business owners, and the macro economy at large. However, electronic payments have a long history of fraud, misuse and low reliability (Laudon & Traver, 2002). Proper infrastructure for electronic payments is another challenge (Taddesse & Kidan, 2005), computer network, reliable telecommunication network and electricity that support electronic platforms are at times not available throughout the country; this negatively affects the development of e-payments, according to (Mishra, 2008).

Electronic payment systems are common in the banking sector, this innovation is however relatively new in the oil industry in Kenya (Kasavana, 2004). A response to mend this gap has been the introduction of the electronic fuel card by the leading fuel marketing companies in the
country. This is in an effort to eliminate cash transactions at the petrol stations, provide information to customers on consumption, and facilitate monitoring of vehicle usage (Schadorf, 2012). The marketers have also collaborated with mobile phone operators to provide customers with a more convenient and easy payment platform through mobile money transfer. The companies have gone a step further in accepting major cards for payment; Visa and Master cards. Even as oil companies endeavour to make payment as convenient as possible to customers, they still need to maintain their branded fuel cards. These cards present themselves as tools that they can use to promote brand loyalty through reward programs. Williams (2009), argues that businesses use loyalty cards to identify and reward customers for their loyalty. More precisely, loyalty cards enable companies to acquire knowledge and develop a better relationship with their customers. Rewarding cardholders with benefits accomplish this and encourages desired loyal buyer behaviour.

Internationally, many studies have been conducted on electronic payments systems but they focus on the user angle more than the service provider perspective. Schandorf (2012) conducted a study on challenges and benefit of fuel cards in Ghana. The study revealed that the inconveniences that users encounter when accessing the fuel at the service stations are due to network issues as the card operates on a chip that is supported by telecom operator for data transfer. This discourages customers from continuing the use of the fuel card and rather sticks to cash since it becomes more convenient. Hogarth, Kolodinsky, and Gabor (2008) investigated the consumer payment choices: Paper, Plastics or Electrons. They found that increases in income and education elicit a positive effect on adoption of electronic payment, regardless of the technology. Zeithaml and Gilly (1987) conducted a study to determine the characteristics affecting the acceptance of retailing technologies: a comparison of elderly and non-elderly consumers in developed country. They concluded that there exists a positive relationship
between education, income, and exposure to mass communication and the adoption of electronic payment systems and the relationship was greater for younger than for older consumers.

In the Kenyan context there have been many studies on electronic payment systems, Munuve (2003) carried out a study on the perception of customers on the differentiation features of fuel cards on offer. Her findings revealed that generally, the card attributes used were similar, she concluded that the oil Companies do not use differentiation as a competitive strategy to position their fuel cards. Gikandi and Bloor (2009) investigated the determinants of the adoption and influence of electronic payment systems among retail banks in Kenya. They found that there was a drastic shift in the importance attached to electronic payment systems between years 2005 and 2009. In his study of strategies used by oil marketers to adapt to changes in environment Kinyanjui (2013), mentions the electronic payment as a means of gaining competitive advantage.

The studies discussed above have looked at electronic payments predominantly from customers’ angle. The studies have focused on factors affecting user acceptability and adoption of the electronic platforms. From the organization’s perspective, there is need to discuss how the electronic payment systems are implemented and how they can be enjoined in the organizations strategy. A knowledge gap on the challenges these companies face in the implementation of electronic payment systems. What are the challenges faced by oil marketers in the implementation of electronic payment systems?

1.3 Research objective

The objective of this study is to determine the challenges faced by oil-marketing companies face in the implementation of electronic payment systems.
1.4 Value of the study

The findings of this study benefits a number of interest groups as discussed below:

For academicians and scholars, the study enriches their knowledge of the oil industry. Apart from contributing to the body of knowledge this study will stimulate their interest analyzing further the issue of strategy and strategy implementation in the oil industry.

To the government authorities and specifically the Kenyan economy, the oil industry plays a big role in contribution to the exchequer in terms of taxation. Oil companies are among the top taxpayers and therefore the government is interested in their operations and so strategy in this industry is of interest to the government. The government would also use the findings of the study in its implementation of cashless transport sector as well.

The sales and marketing managers in the oil companies will use the research findings and recommendations to understand the factors that hinder their market penetration. The managers will gain new insights into the strategic issues that they need to address in order to position themselves more competitively in the environment in which they operate. It will also provide vital information for decision-making on the future of fuel cards. The study provides an opportunity to gather further information on the Kenyan downstream industry, its size, the drivers and constraints influencing growth of the card business. Further light will be shed on the established and emerging collaborations with mobile money transfer providers and how these collaborations will assist in market penetration.
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter reviews theoretical literature relevant to the study. Areas of review include theoretical foundation upon which electronic payment systems are based upon, strategic management and strategy implementation and organizational performance measurement.

2.2 Theoretical foundation

Germinated in searching for the origin of competitive advantage (Teece & Pisano, 1994), the concept of dynamic capabilities has progressively flourished in other areas of investigation of the firm. It has stimulated explanations of the different fortune established and new entrant firms exhibit in front of the technological advancements that shake their industries (Henderson, 1993). Dynamic capabilities seem to have become foundation of literature on technological changes as there appears to be a link between the advent of new technological paradigms to the evolution of the firm knowledge base. The theory helps in explaining the shifting character of the environment and also emphasizes the key role of strategic management in appropriately adapting, integrating, and reconfiguring internal and external organizational skills, resources, and functional competencies toward changing environment’ (Teece & Pisano, 1994)

The theory assumes that firms with greater dynamic capabilities will outperform firms with smaller dynamic capabilities. The aim of the theory is to understand how firms use dynamic capabilities to create and sustain a competitive advantage over other firms by responding to and creating environmental changes (Teece, 2007). Whereas organizational capabilities have to do with efficient exploitation of existing resources, dynamic capabilities refer to efficient exploration and implementation of new opportunities. Dynamic capability is the capacity of an organization to purposefully create, extend, and modify its resource base. The resource base of an organization includes its physical, human, and organizational assets (Eisenhardt & Martin,
2000). These capabilities are learned and stable patterns of behaviour through which a firm systematically generates and modifies its way of doing things, so that it can become more effective (Teece, Pisano & Shuenm, 1997).

The firm’s uses its sensing capabilities to identify opportunities, once they are identified; the firm invests in these opportunities to improve its organizational capabilities. Then it recombines or reconfigures its organizational capabilities into new capabilities that better fit its environment. These new capabilities can help a firm create new paths, positions, and asset bases, which can lead to a sustained competitive advantage for the firm relative to other.

To gain a deeper understanding of how resources and capabilities can be a source of competitive advantage, we use the resource-based view of the firm to provide a model that systematically aids in identifying core competencies. Similar to the dynamic capacity theory, resource-based view (RBV) is an approach to achieving competitive advantage that argues that organizations should look inside the company to find the sources of competitive advantage instead of looking at competitive environment for it (Barney, 1991). A resource is anything that could be defined as those tangible and intangible assets which are tied semi permanently to the firm (Caves, 1980). Examples of resources are brand names, in-house knowledge of technology, employment of skilled personnel and trade contacts. A technological lead may allow the firm higher returns, and thus enable it to keep better people in a more stimulating setting so that the organization can develop and calibrate more advanced ideas than others calibrate.

The ability to create value is not based as much upon physical or financial resources of an organization as on a set of intangible knowledge based capabilities. According to the RBV competitive success can be by the capability of organisations to develop new knowledge-based assets that create core competencies (Pemberton & Stonehouse, 2000).
2.3 Strategic management and challenges of implementation

The marketplace has developed because of factors such as explosive growth in economies, rapid expansion in merchandise trade, cost cutting, and improvement of product quality by firms seeking competitive advantage, and a revolution in communication technology. According to Rutan (1999), all implementation aspects during the planning phase are fundamental for execution as there is no time to do that during execution. It is critical that everyone on the team understands and agrees upon the details of the plan. Management must make the commitment to stay focused on the agreed upon plans and should only make significant changes to the plan after careful consideration on the overall implications and consequences of the change. The organization should maintain a balance between ongoing business activities and working on new strategic initiatives.

Problems with implementation often occur when companies concentrate on new strategy development and in the process forget their main line of business that underlie within previously formulated business strategies. Nickols (2000) discussed four cases of strategy execution as flawed strategy & flawed execution, sound strategy & flawed execution, flawed strategy & sound execution, and sound strategy & sound execution. Only when the strategy and the execution are sound does the organization have good chance for success, barring aside environmental and competitive influences. Further, he contends that executing the wrong strategy is one of the major problems leading to unsuccessful implementation of strategies.

Delisi (2001) examined obstacles of strategy execution he found that four of the factors that hamper strategy execution include ineffective senior management, top-down or laissez-faire senior management style, unclear strategies, conflicting priorities, and poor coordination across functional boundaries. Other potential reasons for the failures in strategy execution included, lack of knowledge of strategy and the strategy process, people not being measured or rewarded for executing the plan and lack of reinforcers, such as culture, structure, processes, IT systems,
management systems and human resource systems. Hrebiniak (2005) recognized the difficulty of strategy execution and the reward from doing that correctly. He discussed various factors that can lead to incorrect implementation of any strategy similar to those already discussed in the above literature discussion. Additionally, Hrebiniak’s research survey of 400 managers contributed to the identification of additional factors.

Burden and Proctor (2000) contend that the pursuit of competitive advantage is an idea that is at the heart of much of the strategic management literature. It has become very important to understand sources of sustained competitive. The strategies enable managers determine how to sustain their business operations, competitive advantage, increase profitability, and improve productivity, quality, and speed. The firm’s ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments is critical for sustained competitive edge.

Even great strategies fail to deliver needed performance gains, if they are not implemented well. Implementation is the most difficult part of the strategic planning process. It involves achieving the objectives set out in the strategic plan while remaining alert and flexible to new opportunities as they unfold.

For successful implementation, the strategic plan has to be robust in the first place. In other words, it must be realistic and solidly grounded in the underlying economics of the organisation's markets. The dynamic capabilities approach is not merely an inward-looking view of the organisation and its strategy. Its central focus is on the degree of ‘fit’ over time between an organisation’s changing external environment and its changing portfolio of activities and capabilities (Porter, 1996)
2.4 Organizational performance measurements

Performance measurement systems developed as a means of monitoring and maintaining organizational control, which is the process of ensuring that an organization pursues action plans that lead to the achievement of overall goals and objectives. At its outset, performance measures were concerned with inputs aspects, mainly financial resources, a practice that was later criticized and mostly abandoned. In an attempt to overcome these criticisms, performance management frameworks are developed to encourage a more balanced view between internal and external factors, financial and non-financial measures. These Multi-dimensional frameworks focus more on non-financial information and are designed to provide a balance by including measures of external success as well as internal performance; they give an early indication of future business performance as well as achievements (Kaplan & Norton, 1996).

The concept of organizational performance is based upon the idea that an organization is the voluntary association of productive assets, including human, physical, and capital resources, for achieving a shared purpose (Alchian & Demsetz, 1972). Those providing the assets only commit them to the organization if they are satisfied with the value they receive in exchange, relative to alternative uses of the assets. Consequently, the essence of performance is the creation of value, as long as value created by the use of a contributed assets is equal to or greater than the value expected by those contributing the assets, it will continue to be available to the organization.

Electronic payment systems are company’s resources that need to be accounted for. The investing company needs to get a return for the huge outlay that these systems require. The change to electronic interactions has created a number of financial processes to transfer funds, secure transactions, and protect sensitive financial information (Hoang, 2009). Organizations invest in technologies that they hope will improve performance and electronic systems is no different (Holden, 2010). Organizational performance is measured in terms of increase market presences, market share, improved brand loyalty and efficient service time at point of sale.
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research design that was used to meet the objectives of the studies as set out in chapter one. Included here is the research design, population of interest, data collection and analysis techniques.

3.2 Research Design

A cross-sectional survey research design was used in this study. The choice was necessitated by the nature of data, which was collected at the same time from different companies in the industry. Cooper & Emory (1985) contend that the surveys are more efficient and economical than observations. It allowed for comparative analysis in order to obtain rational conclusions. Census survey was considered most appropriate for this study since the population of interest is small and most of the subjects of interests differ either in ownership, size or strategy choice.

3.3 Population of the study

The population of interest for this study comprised 14 oil-marketing companies that operate retail outlets in Kenya. These companies are listed in the Petroleum Institute of East Africa (PIEA) insight magazine (See appendix 2). The research was conducted in Nairobi where these companies have their headquarters; this is where the top management is stationed thus the required information is available here.

3.4 Data Collection

Primary data which is both qualitative and quantitative was collected through administration of structured questionnaires. The questions were prepared to capture relevant information based on the study objectives and type of respondents. The questionnaire was divided into four sections.
covering the organization’s structure, the electronic payment systems available, electronic payment implementation strategies and implementation challenges.

The questionnaire targeted Fuel Card and Marketing Managers within the organization since the responsibility of strategy implementation is vested at their level. The questionnaire was delivered to the respondents through either email or drop and pick later.

3.5 Data Analysis

Due to the cross sectional and descriptive nature of data received, the study used descriptive statistical tools of analysis. These descriptive statistics comprise frequencies mean scores, standard deviations and percentages. The frequency distribution show the distribution of individual scores for a given variable and percentages gave the proportion of a subgroup to the total sample. Percentages were used to compare proportions of the population relative to the entire sample. Microsoft Excel was used in the analysis of the data.

A qualitative research approach was also adopted as the study sought to get the input of the respondents out of the structured questions. The respondents were requested to give any other information they deemed important for the study. The aim was to gain an understanding of the process of strategy implementation and how these strategies affect performance.
CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter deals with the presentation and analysis of the findings of the study. It presents findings on the challenges faced by oil marketers in the implementation of electronic payment systems. The data was collected from Card Managers or Marketing Managers of fourteen oil-marketing companies that operate retail outlets in Kenya. Out of the fourteen firms that were targeted, ten responded but only six returned filled questionnaires. The four who did not fill the questionnaire stated that they had no electronic payment platforms. This brought the response rate to 71.4%.

Data presented was collected through administration of questionnaire. The respondents were required to provide information on their organization’s structure, the electronic payment systems available, electronic payment implementation strategies and implementation challenges. A 5-point likert scale was used to determine the extent to which a factor posed as a challenge to electronic payment system implementation. The scale ranged from 1 to 5 where 1 indicated a factor posing minimal challenge to electronic payment system implementation while 5 indicated a factor posing a very great challenge. Microsoft Excel was used in analyzing, summarizing and presenting data in form of tables, frequencies, percentages, mean scores and standard deviations.

4.2 Company information

The respondents were asked to indicate the category within which the ownership of their company fell in.
Table 4.1: Company ownership

<table>
<thead>
<tr>
<th>Company ownership</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign owned and not locally incorporated</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Foreign owned but locally incorporated</td>
<td>3</td>
<td>50.00%</td>
</tr>
<tr>
<td>With government participation</td>
<td>1</td>
<td>16.70%</td>
</tr>
<tr>
<td>Wholly locally owned</td>
<td>2</td>
<td>33.30%</td>
</tr>
</tbody>
</table>

Source: Research data

Table 4.1 indicates that a majority of companies that have implemented electronic payment platforms are foreign owned, the country has only one company with government participation, and this company also has ventured in the electronic payment system.

The respondents were asked to indicate the range within which the number of the retail outlets belongs.

Table 4.2: Number of outlets

<table>
<thead>
<tr>
<th>Number of retail outlets</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 to 20 outlets</td>
<td>1</td>
<td>16.70%</td>
</tr>
<tr>
<td>20 to 30 outlets</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>30 to 40 outlets</td>
<td>1</td>
<td>16.70%</td>
</tr>
<tr>
<td>Above 40 outlets</td>
<td>4</td>
<td>66.70%</td>
</tr>
</tbody>
</table>

Source: Research data

From table 4.2, the range of retail outlets for this population varied from 10 to above 40 outlets with 66.7% having above 40 outlets. This implies that most companies that have electronic payment platforms have great presence in the retail market. On the extent to which the retail presence affect acceptance of their offer, all companies felt that their presence greatly affected acceptance of their electronic payment platform.
4.3 Electronic payment systems

In this section respondents were asked to indicate the extent to which various electronic payment systems contribute to improved market share. 1 indicated a very small extent while 5 indicated a very large extent.

Table 4.3: Different electronic payment systems

<table>
<thead>
<tr>
<th>Mode of electronic payment systems</th>
<th>n</th>
<th>Mean</th>
<th>Std Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Branded fuel cards</td>
<td>6</td>
<td>3.50</td>
<td>0.84</td>
</tr>
<tr>
<td>Bank ATM cards, credit and debit cards</td>
<td>6</td>
<td>2.33</td>
<td>0.82</td>
</tr>
<tr>
<td>Mobile money transfer</td>
<td>6</td>
<td>1.83</td>
<td>0.75</td>
</tr>
<tr>
<td>Fuel coupons</td>
<td>6</td>
<td>1.50</td>
<td>0.84</td>
</tr>
</tbody>
</table>

Source: Research data

As shown in the table 4.3, electronic platforms that have contributed to improved market share for these companies are: branded fuel cards with a mean of 3.50 which translates to a great extent, bank ATM cards, credit and debit cards at a mean of 2.33 and mobile money transfer and fuel coupons contributing minimally.

Of the companies that responded 66.7% have collaborations with Safaricom for the mobile money transfer platform while 33.3% have Airtel as their partner. The overriding reason for the partner selection is number of subscribers to these networks. The other two providers: Orange and Yu had no partner, as their subscriber base is small. The managers also felt that the collaboration with these mobile money transfer providers had opened up a new customer base and thus increased market share.

4.4 Implementation strategy

Of the six companies that responded, 66.6% implemented electronic payment systems using the differentiation strategy. The companies try differentiating themselves from others in the market by offering more features on their platforms; the remaining 33.3% implemented the systems
through penetration. They sought to reach the markets they were not serving previously like the matatu saccos and hauler companies.

The respondents were asked to indicate the extent to which the various communication channels have been used in popularizing electronic payment systems.

**Table 4. 4: Mode of advertisement**

<table>
<thead>
<tr>
<th>Mode of advertisement</th>
<th>n</th>
<th>Mean</th>
<th>Std Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print media</td>
<td>6</td>
<td>1.67</td>
<td>0.82</td>
</tr>
<tr>
<td>Radio</td>
<td>6</td>
<td>2.67</td>
<td>1.03</td>
</tr>
<tr>
<td>Television</td>
<td>6</td>
<td>1.67</td>
<td>0.82</td>
</tr>
<tr>
<td>Bill boards</td>
<td>6</td>
<td>2.33</td>
<td>1.21</td>
</tr>
</tbody>
</table>

Source: Research data

From the above table, it shows that the radio was the most popular mode of advertisement for these platforms. The bill boards came in a close second; these are mostly the main display units at the retail outlets and not the main bill boards on the highways.

The respondents were further asked to indicate the extent to which various factors contributed to the need for electronic payment systems implementation within their companies. 1 indicated a very small extent while 5 indicated a very large extent.

**Table 4. 5: Reasons for electronic payment system implementation**

<table>
<thead>
<tr>
<th>Reason</th>
<th>n</th>
<th>Mean</th>
<th>Std Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technological advancement</td>
<td>6</td>
<td>3.50</td>
<td>0.55</td>
</tr>
<tr>
<td>Differentiation</td>
<td>6</td>
<td>3.50</td>
<td>0.55</td>
</tr>
<tr>
<td>Competition</td>
<td>6</td>
<td>3.33</td>
<td>0.82</td>
</tr>
<tr>
<td>Promotion/Build brand loyalty</td>
<td>6</td>
<td>2.83</td>
<td>1.17</td>
</tr>
<tr>
<td>Enhance cash management system</td>
<td>6</td>
<td>2.50</td>
<td>0.55</td>
</tr>
<tr>
<td>Change</td>
<td>6</td>
<td>2.00</td>
<td>0.63</td>
</tr>
<tr>
<td>Response to customers’ demands</td>
<td>6</td>
<td>1.50</td>
<td>0.55</td>
</tr>
</tbody>
</table>

Source: Research data
The table above shows that advancements in technology have had a great impact on the electronic payment systems implementation; with these advancements and fear of being rendered obsolete many companies have opted to adopt electronic payment. Secondly, as petroleum products are homogenous, companies implement electronic payment systems to differentiate themselves from their competition and thus differentiation comes greatly advised the need to implement electronic payment systems. The industry as indicated in the introduction has seen growth in competition and therefore companies have to be innovative in order to attract and maintain customers. Competition is thus another factor that has greatly influenced implementation of electronic payment systems. Despite brand loyalty, coming in fourth the deviation is so big implying that the companies have very varied opinion on brand loyalty and promotion as a factor that has necessitated adoption of electronic payment systems.

4.4 Implementation challenges

The respondents were finally asked to indicate the extent to which various challenges affected the implementation of electronic payment systems.

Table 4.6: Challenges of electronic payment system implementation

<table>
<thead>
<tr>
<th>Challenges</th>
<th>n</th>
<th>Mean</th>
<th>Std Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation took more time than originally allocated</td>
<td>6</td>
<td>2.83</td>
<td>1.17</td>
</tr>
<tr>
<td>Major problems like maintenance and machine breakdown</td>
<td>6</td>
<td>4.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Key implementation tasks and activities were not sufficiently defined</td>
<td>6</td>
<td>2.33</td>
<td>0.82</td>
</tr>
<tr>
<td>Insufficient financial resources to execute the strategy</td>
<td>6</td>
<td>1.50</td>
<td>0.55</td>
</tr>
<tr>
<td>Inadequate training given to pump attendants</td>
<td>6</td>
<td>3.67</td>
<td>1.03</td>
</tr>
<tr>
<td>Lack of support from other business lines</td>
<td>6</td>
<td>3.50</td>
<td>0.55</td>
</tr>
<tr>
<td>Customer perception of on hidden costs on electronic platform</td>
<td>6</td>
<td>4.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Privacy of personal data</td>
<td>6</td>
<td>2.50</td>
<td>1.05</td>
</tr>
</tbody>
</table>

Source: Research data
The various companies agree on machine breakdown and maintenance cost for the electronic payment machines as posing the greatest challenge on implementation at a mean of 4. Equally challenging is the perception that customers have that electronic payment systems are expensive as compared to cash. Customers tend to think there is a hidden cost that companies pass to them when they transact electronically. These two challenges have zero standard deviation implying that all companies are in agreement. Another challenge that these companies face is the high turnover of pump attendants with a mean of 3.67. The turn over implies that they require to regularly train the attendant also some of the attendants are semi-literate and therefore may not be in a position to run some of the machines used for electronic payment.

In some of the companies, the electronic payment systems do not have enough support from other business lines. The structuring of these companies promotes this as the card is considered a business line and not a support as it ought to be. This leads to the other business lines not paying attention to the competitive edge that these platforms can offer.

4.5 Discussion

There are over 40 Oil marketing companies in Kenya but only 14 are involved in the retail business as this section requires huge investments to put up stations. The sector was previously dominated by large multinational companies but with liberalisation more local companies came into this business. This has make competition to be cut throat and therefore companies have to find a way to operate and be able to make enough returns on initial capital outlay.

With price regulation by the energy regulatory commission in place companies cannot use pricing strategy to attract customers and grow market share instead, they have to find other non-pricing strategies. The electronic payment platforms lend themselves as very good tools to be incorporated to enhance loyalty and brand recognition. The pioneers in this area; Total Kenya are enjoying greater market share as most corporations took up the offer with them. Other
entrants in this space have been differentiating themselves by offering services like RFID that is able to ensure that only the registered vehicle fuels using the card assigned to it.

Technological advancements seem to be the driving force behind the push to go electronic in payment and as the world becomes a global village it is clear that the oil industry is taking up the challenge. Companies are taking up the electronic payment systems for various reasons but the bottom line is that this is the payment mode of the future and no company wants to be left out. The number of companies with electronic payment offers is bound to increase exponentially in the coming years.

The implementation of these electronic systems seems to pose a great challenge to the attainment of a cashless system with the cost of operating them being too high for small firms to handle. This may force them to relook at the option of collaborating with other providers like the banks and mobile telephone operators to offer these options but it seems the wheels have rolled and there is no way the electronic payment system can be stopped in the oil industry. The current collaborations with mobile phone operations is expected to continue with a keen interest on the customer base growth thus convenience and number of subscribers will continue to be a key determinant on partner selection.

On the advertisement, not much is expected on the mass media due to the high cost of running adverts and therefore the main display units at retail station seem to be the most ideal advertisement mode. A few campaigns will be run by these companies in line with the cashless public service system but most companies seem to have some reservations on running huge campaigns of a platform that is not generally a money making venture. With the oil industry being very critical to all other sectors, players tend to be very sceptical on value addition of advertising and thus even the electronic platforms may not receive as much play. Managers of the electronic payment systems however require support from other business lines in order to grow their presence.
On the high turnover of employees at retail outlets managers have small to minimal influence on this and therefore their only action would be to increase the frequency of trainings offered to the pump attendants. Another thing that will improve implementation would be promotion of system transparency; customers need to be educated of the importance of embracing these technology and also the advantages like security that they get from using the electronic platforms. The policy makers are keen on these systems but it should move from just policy talk to implementation with the government supporting oil marketers with lowering cost of importation of these electronic devices and also spare parts.

From the data collected it is evident that a lot needs to be done to increase the uptake of these electronic payment offers. From the companies, they need to sensitize the public of these offers and also have unity within where all managers are aligned to the bigger picture of the need for implementation. The companies are vague on strategy and this presents a challenge in implementation as every stakeholder is not well informed. The dealers of the retail stations ought to be fully involved as the turnover at station also affects the company implementation.
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

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

5.2 Summary

The study was to determine challenges faced by oil marketing companies in the implementation of electronic payment systems as strategy to enhance performance. The study was by way of census survey, a 71.4% response rate was achieved. Based on the study, it was established that most of the companies that have adopted the electronic payment systems have some foreign connection however a fewer local companies have also ventured into electronic payment systems.

The respondents companies have a variety of electronic payment systems ranging from branded fuel cards, fuel coupons, and even mobile money transfer. The acceptance of branded fuel card is greatly affected by the spread/ number of retail outlets a company has. This can be attributed to the perceived convenience that customers would have from a wide spread of outlets. Safaricom was seen to be the mobile money transfer partner of choice due to the large number of subscribers on their network. Managers view these collaborations as important due to the convenience that they offered the customers in cases of emergencies.

Fuel is similar across all the marketers as it is purchased jointly through the open tender system so the companies resort to other services in order to gain an advantage. The electronic payment platform offer these companies a way to differentiate themselves from competition for instance
National oil of Kenya’s Supa card uses the radio frequency identification technology to stand out from the rest. The other reason for these companies venturing into the electronic payment systems is the technological advancements, as other sectors embrace the electronic payment systems the oil industry has also seen the need to keep up with the trend. In the advertisement of the platforms the companies prefer the radio due to the wide coverage and also their main display at the retail outlets as it is less costly.

The companies have faced major challenges in implementation of these electronic payment systems. One key challenge is machine breakdown and high cost of maintenance, the machines used in electronic transactions are much specialised. There repair is quite costly as currently there is only one company that can provide this service (Compulynx). The machines also breakdown regularly as the people who handle them (pump attendants) are not well trained. The training of these attendants is mainly hampered by the high turnover as most of them are hired on a temporary basis by the dealers. Training was a great challenge despite all the respondent stating that they hold quarterly training for the attendants. Another challenge is the lack of support from other business lines, the electronic payment platform does not make money for the companies thus other business lines are not keen to promote it. Most of the managers argue that they would still make the sale without offering the electronic payment platform and thus they view the offer as an unnecessary burden on the company.

5.3 Conclusion

The challenges faced by the oil marketing companies in implementation of electronic payment systems are many but there is a need to embrace these payment modes in order to keep up with the developed economies. The study shows that local companies are joining in the electronic payment offer; with the industry being dominates by local companies this is a good sign of embracing technology and keeping up with world changes.
Used strategically the electronic payment systems can improve companies market share and by extension its profitability. Managers who embrace these payment methods find it easy to differentiate them despite trading in homogenous products. Electronic payment systems are no longer a future idea but a payment method of today, with the government being keen on implementing cashless payment system in the transport sector it is paramount that oil marketers ensure that they have such systems in places to ease transaction processes.

5.4 Limitations of the study

This study was limited in several dimensions. First, not all the target respondents filled and returned the questionnaire, though the response rate was 71.4%. The number of respondent who returned the questionnaire without filling in was high (four) this meant that though the response rate was high there was less data to work with. For those without electronic payment platforms, no reason was given for their cash payment model and neither did they share any future plans for venturing in the electronic payment systems. Lastly, time limitations did not allow the researcher to wait for marketers who failed to respond.

5.5 Suggestions for further research

The study found out that companies are limited by running cost however the uptake of these electronic payment offers is still low. The researcher therefore suggests further research to be undertaken on the customer’s perception of electronic payment systems with the aim of understanding the reasons for slow adoption in Kenyan oil industry as evident from the data obtained less than 50% of oil marketers have electronic payment platforms.

5.6 Recommendations

The study found that electronic payment systems are still in the initial stages of acceptance within the oil industry in the country. With policy makers in the country advocating for cashless systems in the transport sector it is recommended that oil companies implement electronic
payment systems to allow for seamless operations. The researcher recommends that the government zero rates duty on importation of PDQ machines and also on spare parts for these machines to reduce running cost. At company level, the researcher recommends involving all employees at initial implementation process in order to have greater buy in and support.

5.7 Implementation of the study

Policy makers need to note that currently there are no established means of ensuring that oil companies implement electronic systems even with the push for cashless public service transport. This means that there will be great challenge to the attainment of this system and therefore there is need to subsidize cost of devices like PDQ. There also needs to be some legal frameworks that can protect customers from loss of cash in case they load their cards and the company goes under.

For the managers they ought to ensure a 360 degree involvement to avoid sabotage from within their own organization. This should be able to address the issue of business support offered to the card managers. Also based on the study, oil marketing companies should implement forecourt control project where the pump attendants are educated on these systems to improve buy in and system ownership. It is important that all stakeholders see the need for pull together to attain more electronically paid for transactions as it would also reduce cash handling cost.
REFERENCES


Munck, M. G. (2010). The future is contactless. *Presentation from a Get FIT meeting at Nets on the 30th of November 2010.*


Rutan, S. (1999). Strategic management: 3 Steps to the Cycle of Success. *Compass Points Vol. 6*


APPENDICES

Appendix 1: Letter of Introduction

University Of Nairobi, School Of Business
P.O Box 30197, 00100-G.P.O, Nairobi,
Telephone: (+254-20) 318262
19TH September 2014

Dear Respondent,

RE: DATA COLLECTION

As one of the oil marketer in Kenya, your company has been selected to participate in the study on challenges faced by oil companies in the implementation of electronic payment. Along with this letter is a short questionnaire that asks a variety of questions on challenges that your organization faces in implementation of electronic payment systems.

This survey should take you about 10-15 minutes to complete. I hope you will take time out of your busy schedule to complete the questionnaire and return it to me. Your participation is voluntary and highly appreciated.

I hope to share my results through a thesis and subsequent publishing of the same in the University press where students and the public can access them. I guarantee that your responses will be handled with utmost confidentiality. Kindly do not put your name on the questionnaire.

Regardless of whether you choose to participate, please let me know if you would like a summary of my findings. If you have any questions or concerns about completing the questionnaire or about being in this study, you may contact me through my cell phone line +254721883668. The board of postgraduate studies at University of Nairobi has approved this study.

Thank you for your attention and assistance.

Yours sincerely

Margaret Kagu

MBA Student
Appendix 2: Questionnaire

Your responses to these questions will provide data relating to Challenges your organization faces in the implementation of electronic payment platforms (Fuel card & mobile money). It will also provide data that will enable the researcher identify effectiveness of these systems as strategic tools for competitive advantage.

PART A: ORGANISATIONAL DATA

1. Name of your organization______________________________________

2. Respondent title _____________________________________________

3. Please tick the category that best describes your company
   a) Foreign owned and not locally incorporated [ ]
   b) Foreign owned but locally incorporated [ ]
   c) With government participation [ ]
   d) Wholly locally owned [ ]

4. How many retail outlets do you have in Kenya? (Tick where appropriate)
   a) 20 to 30 outlets [ ]
   b) 30 to 40 outlets [ ]
   c) 40 to 50 outlets [ ]
   d) Above 50 outlets [ ]

5. To what extent has, the spread and number of your retail outlets influenced acceptance of your organization’s electronic payment options
   a) Very great extent [ ]
   b) Great extent [ ]
   c) Moderate extent [ ]
   d) Small extent [ ]
   e) Not applicable [ ]
PART B: E-PAYMENT SYSTEMS

6. For the following commonly used electronic payment systems, indicate the extent to which each has improved your organization’s market share. (Tick where appropriate)

<table>
<thead>
<tr>
<th>SYSTEMS</th>
<th>5 - Very great extent</th>
<th>4 - Great extent</th>
<th>3 - Moderate extent</th>
<th>2 - Small extent</th>
<th>1 - Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Branded fuel cards</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank ATM cards, credit and debit cards</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile money transfer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fuel coupons</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. Which mobile money transfer providers have you collaborated with?

   - Safaricom – M-pesa [ ]
   - Airtel – Airtel money [ ]
   - Orange – Orange money [ ]
   - Yu – Yu cash [ ]

8. What advised the selection of the partnership? (Tick where appropriate)

   - Number of subscribers [ ]
   - Strength and coverage of communication network [ ]
   - Tariff flexibility [ ]
   - Perceived convenience [ ]

9. How has the market received this collaboration? Please explain your performance (sales & market share)

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

PART C: IMPLEMENTATION STRATEGIES

10. What strategies has your company used in the introduction of electronic payment platforms?

   - Penetration [ ]
   - Niche [ ]
   - Differentiation [ ]
11. To what extent has your company used the communication channels below to popularise your electronic payment platforms? (Tick where appropriate)

<table>
<thead>
<tr>
<th>CHANNELS</th>
<th>5 - Very great extent</th>
<th>4 - Great extent</th>
<th>3 - Moderate extent</th>
<th>2 - Small extent</th>
<th>1 - Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print media</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Television</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bill boards</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. To what extent, did the following factors necessitate implementation of electronic payment system? (Tick where appropriate)

<table>
<thead>
<tr>
<th>FACTORS</th>
<th>5 - Very great extent</th>
<th>4 - Great extent</th>
<th>3 - Moderate extent</th>
<th>2 - Small extent</th>
<th>1 - Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technological advancement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Differentiation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promotion/Build brand loyalty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enhance cash management system</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Response to customers’ demands</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. Please specify any other factors that necessitate implementation of electronic systems in your company other than the above mentioned

________________________________________________________________________________________________________________
________________________________________________________________________________________________________________
________________________________________________________________________________________________________________
PART D: IMPLEMENTATION CHALLENGES

14. What extent have the following challenges affected your company during implementation of electronic payment system? (Tick where appropriate)

<table>
<thead>
<tr>
<th>CHALLENGES</th>
<th>5-Very great extent</th>
<th>4 –Great extent</th>
<th>3 –Moderate extent</th>
<th>2 –Small extent</th>
<th>1 -Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation took more time than originally allocated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major problems surfaced which had not been identified – Maintenance, machine breakdown etc</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Key implementation tasks and activities were not sufficiently defined</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insufficient financial resources to execute the strategy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inadequate training given to pump attendants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of support from other business lines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer perception of on hidden costs on electronic platform</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Privacy of personal data</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. What are other challenges faced by your company in implementing electronic payment systems?

____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________

v
16. How often do you conduct training for pump attendants on how to operate these cashless platforms?

- Monthly [  ]
- Quarterly [  ]
- Yearly [  ]
- Arbitrary [  ]

17. Please give any other comment that you may deem useful in this study?

_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

THANK YOU
### Appendix 3: Overall Market Share January - March 2014

<table>
<thead>
<tr>
<th>Rank</th>
<th>Company Name</th>
<th>(%) Market share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TOTAL</td>
<td>21.7</td>
</tr>
<tr>
<td>2</td>
<td>VIVO</td>
<td>18.9</td>
</tr>
<tr>
<td>3</td>
<td>KENOL KOBIL</td>
<td>13.9</td>
</tr>
<tr>
<td>4</td>
<td>LIBYA OIL</td>
<td>6.2</td>
</tr>
<tr>
<td>5</td>
<td>HASHI</td>
<td>4.5</td>
</tr>
<tr>
<td>6</td>
<td>NOCK</td>
<td>4.3</td>
</tr>
<tr>
<td>7</td>
<td>ENGEN</td>
<td>3.6</td>
</tr>
<tr>
<td>8</td>
<td>GAPCO</td>
<td>3.4</td>
</tr>
<tr>
<td>9</td>
<td>GULF</td>
<td>2.8</td>
</tr>
<tr>
<td>10</td>
<td>PETRO</td>
<td>2.6</td>
</tr>
<tr>
<td>11</td>
<td>HASS</td>
<td>2.4</td>
</tr>
<tr>
<td>12</td>
<td>MGS</td>
<td>2.1</td>
</tr>
<tr>
<td>13</td>
<td>TOSHA</td>
<td>1.7</td>
</tr>
<tr>
<td>14</td>
<td>OILCOM</td>
<td>1.5</td>
</tr>
<tr>
<td>15</td>
<td>Others</td>
<td>3.7</td>
</tr>
</tbody>
</table>

PIEA INSIGHT: JULY 2014