

**THE IMPACT OF EXTERNAL ENVIRONMENTAL FORCES ON
STRATEGY DEVELOPMENT BY FIRMS OPERATING IN THE
MOBILE MONEY MARKET IN KENYA**

BY

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DECLARATION

I declare that his research project is my original work and has not been presented to any other university for the award of a degree.

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DEDICATION

This work is dedicated to God for being ever so faithful, my loving mother Doris Ambundo and departed father James Malack Ambundo, my wife Rachel and children –Pele, Teejay and Jamie for their unswerving support in the pursuit of my academic endeavors.

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Abstract

Positive organizational performance and evolution of competitive strategy has been linked to firms that adapted their strategies faster to external forces, and also understood the industry's attractiveness and their own positions than those which did not. As such, this research was conducted to establish the impact of the key external environmental forces on strategy development in firms operating in the mobile money market in Kenya and also establish the strategic measures taken to cope with those forces. All six firms providing mobile financial services i.e Safaricom Ltd, Airtel Kenya Ltd, Telkom Orange Ltd, Essar Telecom, Mobile Pay Ltd and Mobikash Ltd were involved, with primary data gathered through a self administered semi structured questionnaire to 4 respondents per firm involved in heading key functional areas. From the research, it was established that various environmental forces impacted on strategy development to a great extent and there was also consistency amongst the firms in the strategic measures adopted to cope with those forces to a great extent. The study concluded that there was a need to establish more parameters in evaluating the holistic impacts of environmental forces on strategy development. The study recommends that mobile firms need to establish flexible organization wide, yet structured and dynamic integrated environmental analysis systems and reengineer the tools for strategy development and communication across all cadres of staff.

Keywords: External environmental forces, Strategy development, Strategic measures

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

The external environment consists of remote forces i.e political, economic, social, technological, environmental and legislative as well as industry forces i.e competitors, suppliers, customers, new entrants and substitute products. Johnson and Scholes (1997) argue that studying these forces is critical and enables a firm evaluate its competitive position vis a vis its strategy, internal resource capabilities and stakeholder acceptability. Porter (1980) argues that competitive strategy evolves from understanding the industry's attractiveness and a firm's competitive position. As such, the strategy development process variables include environmental scanning, SWOT analysis, industry analysis, strategy evaluation, strategy choice and implementation. Miles & Snow (1978) linked positive organizational performance in firms that adapted their strategies faster to external forces than those which did not. The challenge is for firms to ensure a fit or alignment of their strategies and organizational capabilities to external environmental forces.

Since the first financial transaction by mobile phone in Kenya in 2007 the Communications Commission of Kenya (CCK sector statistic report, Q3-2011/2012) indicates phenomenal growth in the mobile money market. Currently there are six firms offering mobile financial services (MFS) in the industry i.e Safaricom Ltd, Airtel Kenya, Telkom Orange, Essar Communications, Mobikash Ltd and Mobile Pay Ltd serving 18.9 million mobile money customers from a total of 29.2 million phone users; with a total value of transactions for the year 2011 amounting to slightly over 20% of the country's GDP on this platform.

With this rapid growth, new macro environmental challenges e.g. the licensing of competing non-mobile firms ; new government regulations; substitute payment products; technology failures and transaction frauds etc have arisen with long term implications for stakeholders in the industry. It is worth establishing the key external environmental influences impacting firms in the industry and the strategic measures being adopted by mobile financial service firms to cope with these forces.

1.1.1 Strategy Development

There is no universal consensus on what ‘Strategy Development’ is amongst scholars and practitioners of strategy. It is viewed as a multifaceted concept. Thompson et al (2007) view it as ‘a blend of proactive actions and as reactions to unanticipated developments and new market conditions’ .This view is further supported by Mintzberg et al (1999) who view deliberate and realized strategy as forming the endpoints of a continuum along which strategies are crafted. Mintzberg et al (1998) expounded on their strategy perspectives to categorize 10 strategy schools of thought into 2 i.e. the prescriptive schools concerned with planning of strategy and the descriptive schools i.e. those concerned with how strategy emerges .Peters & Waterman (1982) viewed strategy development as both a prescriptive and emergent process. Mintzberg (1987) and Mintzberg et al (2003) best capture various dimensions of strategy development by defining strategy as a plan (deliberate), a pattern (emerging), a position (market placement), a perspective (leadership vision/mission) and as a ploy (tactic to outwit competitors).

Notwithstanding, strategy development is a product of the 5 step strategy-making, strategy-execution processes described by Thompson et al (2007) i.e. 1) developing strategic vision 2) setting objectives 3) crafting the strategy 4) executing strategy effectively and efficiently 5) evaluating performance and initiating corrective action. Johnson and Scholes (1997) view it as a 3 step process involving strategy analysis, choice, and implementation. Classical thought focused on the process as being discrete and linear while modern thinking adopts the view that evaluation of strategy is concurrent and ongoing. Whittington (2001) best captures the historical evolution of strategy by various scholars with his classification of strategy into the classical, processual, evolutionary and systemic schools of thought. Practitioners also distinguish the levels at which strategy applies i.e. at corporate, business and operational level.

Drucker (1969) realized the need for strategy development in an age of ‘discontinuity’ i.e. random and abrupt changes in the business environment. Bourgeois & Eisenhardt (1988) noted the ‘high velocity environment’ characterized by rapid and discontinuous change in demand, technology and or regulation that renders information inaccurate or obsolete. To that end, various schools of thought and tools

have evolved and applied over time to aid the development of strategy in response to environmental turbulence. Some of the key analysis tools include ; PESTEL (political, economic, social, technological , environmental and legal analysis); SWOT (strength, weaknesses, opportunities, threats) analysis propagated by Harvard Business School (1969); for competitor and industry analysis BCG Matrix, Ansoff Matrix, GE/Mckinsey matrix, Porters 5 forces Analysis (1979) and Porters Generic strategies (1980) .

Why is strategy development necessary? Johnson, Scholes and Whittington (2008) suggest 3 reasons, firstly, feasibility; the recognition that resources are scarce and hence a need to always optimize their allocation to realize the strategy; secondly, acceptability, in terms of risks, returns and other stakeholder expectations; thirdly, suitability, in terms of addressing the overall strategic issues such as competitive advantage, strategic fit between the business environment, organizational capability and profitability.

1.1.2 External Environmental Forces

Pearce & Robinson (2011) define the external environment as ‘the factors beyond the control of the firm that influence its choice of direction and action, organizational structure and internal processes’ The authors go further to subcategorize the external environment into 3 interrelated segments i.e. the remote environment consisting of the political ,economic, social, technological, environmental and legal (PESTEL); the industry environment basically consisting of companies providing similar products and services; and the operating or task environment consists of factors in the immediate competitive situation that affects a firm’s success e.g. customers, competitive position , creditors, ability to attract the best staff, supplier reputation etc. Capon (2008) simply defines the external environment as ‘where the opportunities and threats arise to confront the organization’

Political factors include political stability, various laws relating to labor, trade ,environment, tax policy, investment incentives and the provision of public goods , infrastructure etc; Economic factors include per capita income, interest rates, inflation, exchange rates; Social factors include population, population growth rate, age , income distribution, education, trends, lifestyles, cultural practices and religion etc; Technological factors include innovation culture, internet connectivity, digital

and electronic media reach, technology lifecycle, R&D etc; Environmental factors include topography, weather, climate, climate change etc. Legislative factors include consumer laws, labor laws, employment laws, safety laws, environmental laws, investment laws etc

The study of external forces according to Duncan & Ginter (1990) is firstly, to understand them; and secondly evaluate their likely impact .They further identify 4 key activities of this analysis i.e. monitoring current influences, scanning future influences, forecasting and assessment. Stoffels (1994) argues that strategic vision must grow out of a participatory process set up within a firm for purposes of continually scanning the external and internal environment. Whittington et al (2005) see the value of strategy as being concerned with environmental analysis, choice and action.

Various tools for external environmental analysis have been used, mostly The PESTEL and SWOT analysis. According to Thompson et al (2007) the biggest strategy influences emanate from the immediate industry/ competitive environment. For this, Porter's (1979) 5 Forces tool analyzes the impact of industry rivalry, suppliers, customers, threat of new entrants and substitute products; Further, Porters (1980) generic strategies analyze strategy choices from either of cost, differentiation or focus positioning ;while The Ansoff matrix (Ansoff, 1957) from a market and product development; the BCG matrix (Henderson,1970) analysis from a business growth and market share view and the GE/ Mckinsey analysis tool (1971) from a market attractiveness and competitive strength perspective

Why Conduct an External Environmental Analysis? Stoffel (1994) posits that environmental scanning provides firms with early warning signals, assists develop and modify strategy, realign internal structures, advances learning aspects, enhances responsibility and organizational adaptability. On a more contemporary basis, rapid and radical technological changes, turbulence in the global arena and emerging environmental issues all necessitate continuous environmental analysis to ensure there is no mismatch between an organizations strategy, resources and the external environment.

1.1.3 The Mobile Money Market in Kenya

Mobile telephone services were commercially introduced to Kenya in 1993 and operated by the government owned Kenya Posts and Telecommunications monopoly. This monopoly to provide mobile services continued until 1998 when the Kenya Information and Communications Act was enacted to liberalize and bring reforms to the sector. During the period 1993-1999 the mobile telephone subscriber base stood at below 20000 individuals with costs of a mobile handset standing at approximately kshs 250,000 making them unaffordable to the majority. The Kenya Communications Act 1998 led to the establishment in 1999 of the Communications Commission of Kenya (CCK), a national regulatory authority mandated with licensing mobile operators amongst other roles. This laid the foundations for exponential growth and revolution in mobile usage, competition and services.

As at July 2012 there were only four licensed mobile service firms i.e. Safaricom, a listed company owned mostly by UK's Vodafone with 40% shares, Kenya Government 35% and public 25%. Airtel Kenya is owned by India's Bharti Airtel which holds over 80% shares with the rest held by a local shareholder. Essar Telecom is wholly owned by India's Essar Communications while Telkom Orange is jointly owned by France's France Telecom and the Government of Kenya with 51% and 49% shares respectively. According to the CCK (sector report,Q3-2011/2012) these firms served an estimated total subscriber base of slightly under 29,200,000 customers with Safaricom dominating market share with an estimated 65.3% , Airtel Kenya with 15.3% , Essar Telecom accounting for 8.7% and Telkom Orange with 10.6% .Mobile penetration countrywide has now reached 74 per 100 inhabitants.

Although mobile money (defined by the International Finance Corporation as 'any financial service delivered over a phone'. These include money transfers, payments, electronic commerce and banking) services were first commercially introduced to Kenya in 2007 by Safaricom, customers, transactions and values have been increasing exponentially and it is estimated by the CBK (Feb 2012) that as at the end of 2011 Kshs 1.169 billion or about 20% of the country's GDP was transacted comparing with the kshs 732 and kshs 473 billion recorded in 2010 and 2009 respectively. All mobile operators offer mobile financial services under various brands; Of the estimated 18.9 mobile money customers Safaricom with MPESA accounted for 79% ; Airtel with

Airtel Money ,16%; while other players i.e. Telkom Orange with Orange money and Essar Telecom with YU cash shared less than 5% .Two other locally owned non-mobile operators offering mobile cash included in these statistics are Mobile Pay Ltd established in 2011 with its Tangaza brand and Mobikash Ltd established in 2008 with its Mobikash brand .

Since the introduction of mobile money 5 years ago, new developments in the political, social, economic, technological and legislative arena with the potential to undermine industry attractiveness and profitability have arisen that impact the strategic options for firms in the industry. These include fraud and cybercrime especially with the industry drive to integrate mobile services, commerce and customer bank accounts; technology failures leading to delayed processing of transactions; government directives and regulation on e.g. operator compliance and consumer protections as enacted in the Kenya Information and Communications act CAP 411A with respect to prices, tariffs and service quality, reductions in operator licensing costs including for non-mobile firms- all have the potential to undermine long term industry attractiveness.

1.2 Research Problem

Strategy is basically a roadmap intended to provide common understanding, direction and action towards the achievement of organizational goals. Having a strategy facilitates the allocation and optimization of scarce organizational resources to achieve maximum effectiveness and efficiency. The need to continually evaluate and modify strategy is necessary in order to manage the organizational risk profile, optimize returns and manage other stakeholder expectations. Lastly strategy development enables a firm to proactively address the overall strategic issues such as competitive advantage and strategic fit. The typical external environmental influences impacting strategy development include political, economic, social, technological, environmental and legislative forces .Through continuous external environmental monitoring and scanning of largely uncontrollable forces, early warning signals are sounded which in turn enable a firm to develop, reinforce or modify strategy. It also helps firms realign their internal structures to ensure there is no mismatch between strategy, resources and the external environment.

With the rapid growth of the mobile money market in the last 5 years , several challenges affecting 3 distinct interdependent stakeholders i.e. customers, mobile firms and the government have arisen. These include transaction fraud; technology failures; new market entrants; new government directives and regulations e.g. on tariff reductions, monitoring of transactions, operator compliance and consumer protection; and new substitute payment technologies etc. Jack and Suri (2011) noted that a huge majority of customers valued mobile money even though there were inconclusive findings as to the actual socio-economic impacts. Mbiti and Weil (2011) note that in most instances, mobile money is perceived as a “money transfer” service rather than a storage of value. Is this a reflection of socio economic forces? Another concern is that the “success” of mobile money in Kenya has mostly been judged in the context of studies on one dominant firm, Safaricom with its MPESA rather than from an industry context. Other detrimental developments such as frequent fraud and technology failures noted by Kimenyi, Mwangi & Ndungu (2009) that undermine the integrity, reliability and credibility of mobile money services have arisen. Kimenyi, Mwangi and Ndungu (2009) argue the case for opening of markets for a more competitive operating environment.

Whilst the above studies and others have focused on the enabling external environmental factors or an aspect of the key success factors in the mobile money market in Kenya none of them has sought to establish the degree of turbulence of the external environmental forces and the extent to which they impact the survival of firms at the industry level; nor to establish the relationship between the turbulence created by the external environmental forces and the timing of activities involved in the strategy development process (i.e. strategic analysis, strategy choice and implementation). Specifically the study will seek to answer the following questions; what are the major external environmental forces that impact strategy development in firms operating in the mobile money market in Kenya? What are the strategic measures being taken by firms in the mobile money industry to counter the key macro environmental forces impacting them?

1.3 Research Objectives

The objectives of the study are:

- i. To determine the major external environmental forces that impact strategy development in the firms operating in the mobile money market in Kenya
- ii. To establish the measures taken to deal with the external environmental forces that impact on the firms operating in the mobile money market

1.4 Value of the Study

The study will contribute to knowledge by reporting on previously un researched studies on the impact of forces in the external environment, against the suitability, sustainability and evolution of strategies by mobile money firms operating in the industry in Kenya. The mobile firms stand to benefit from empirically evaluated macro environmental forces and their potential impacts on long-term survival thus enabling a timely review of strategy and or strategy development process.

The findings of the study will provide reference material and also help scholars conduct further research in the area of strategy development in innovative technology industries and also form a basis for comparative strategy development studies between industries. The study will also indicate to government if an alternate development policy framework or model for mobile money is necessary to ensure a sustainable financial service in line with its national objectives like the Vision 2030 program.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter seeks to establish scholarly works and literature review on the concept of strategy i.e. the definitions and various dimensions it assumes, strategy schools of thought, strategy development tools and the strategy development process. This chapter also analyzes external environmental forces i.e the definitions, categories, environmental analysis tools and the rationale for studying them in relation to the strategy development process.

2.2 Theoretical Foundation

Scholars generally agree on the perception of strategy as a link between an organization and both its environment and uncertainty. Two broad schools of thought emerge on the subject of strategy development i.e. those who view strategy development as a rational planning process with a defined set of processes and procedures; and those who view it as a complex emergent phenomenon. Other schools of thought have emphasized the nurturing of strategic intent (intuitive approach) as key to strategy development in high turbulence environments. Irrespective of the schools of thought, a need to understand the environment has been emphasized by strategy scholars to aid strategy development .As a rational planning process various tools have been used in environmental analysis to aid the development of strategy e.g. PESTEL, SWOT, Porters Five forces, BCG Matrix, and Ansoff Matrix while as an emergent process, intrapreneurship, learning and intuitive approaches are being deployed in firms.

2.3 Concept of Strategy

Practitioners and scholars of strategy do not have consensus on the concept of 'strategy' i.e. its definition, components or formulation process. For purposes of this study Johnson, Scholes & Whittington (2008) define strategy as 'the direction and scope of an organization over the long term which achieves advantage for the organization through its configuration of resources within a changing environment to meet the needs of markets and to fulfill stakeholder expectations'. However Mintzberg (1994) adopts a multifaceted definition that strategy can assume i.e. as either of; a plan; a pattern; a position; a perspective; or a ploy. Mintzberg et al (1998) further distinguish 2 schools of thought i.e those that plan strategy (prescriptive) and those where strategy emerges (descriptive).Whittingtons (2001) 4 schools of thought

summarize other scholars works and analyzes various strategy development criteria i.e how strategy forms, objectives pursued, strategy style, strategy influences and relevant era in history. A further distinction is made at the level at which strategy exists in a business i.e corporate, business and operational level. Ansoff (1965) and Porter (1980) narrow their view of strategy as focusing on gaining competitive market position at industry level.

Various strategy theories by scholars exist to aid in strategy development. Whittington (2001) grouped them into 4 strategy schools i.e; the classical approach which looks at strategy making as a top down rational and analytical process, positing that good internal planning was necessary to maximize profit from a largely stable environment. The processual approach discounts long range planning citing imperfections both by markets and managers and as such learning and compromise lead to the emergence of a new strategy. This approach alluded to by Ansoff (1969) takes cognisance of environmental adaptation and was largely associated with growing industries. The evolutionary approach asserts that the future is too volatile, dynamic and unpredictable to plan and hence the need to plan strategies for survival today. The systemic approach adopts the view that the goals informing strategy making are dependent on the social setting an organization finds itself. Regardless of the approach adopted from the foregoing it is apparent strategy development lies on a continuum between an intended and realized strategy.

Notwithstanding the different approaches, every strategy has to be planned for and managed. To this end various strategic planning and strategic management techniques and tools are available including situational or SWOT analysis, environmental scans and analysis i.e PESTEL, strategic audits, stakeholder analysis, and industry analysis tools like Porters 5 Force analysis. Most scholars and practitioners of strategy agree the need to foster strategic thinking at all levels i.e intuitive and innovative strategy deployment in light of today's dynamic and rapidly changing environmental forces.

2.4 Environmental Forces

By and large, there is consensus amongst scholars on the understanding of the external environment, its subsystems and the forces within it. Minor variations in classification exist with some preferring the categorizations of macro and micro environment to distinguish between the remote environment and the industry/operating/task environment. The other distinction is made in the classification of the forces themselves with variations to the PESTEL (Political, Economic, Social, Technological, Environmental, Legislative) components. This review also delves into the link between the environment and strategy, environmental analysis tools, and the reasons why it is necessary to study the impact of external forces on strategy development.

Pearce & Robinson (2011) define the external environment as ‘the factors beyond the control of the firm that influence its choice of direction and action, organizational structure and internal processes’ Capon (2008) simply defines the external environment as “where the opportunities and threats arise to confront the organization.”. Bourgeois (1980) classifies the external environment into two categories i.e the general environment - being composed of elements that have an indirect influence on the organization and the task environment- comprising of elements directly influencing and creating most uncertainty for the firm

It is generally accepted that the various external forces have varied impacts on organizations based on industry specific factors. Pearce and Robinson (2011) further subcategorize the external environment into 3 interrelated segments i.e the remote (macro) environment consisting of the political, economic, social, technological, environmental and legal (PESTEL) forces; the industry (micro) environment basically consisting of companies providing similar products and services including forces alluded to by Porter (1980) consisting of customers, suppliers, threat new entrants, substitute products and rivalry between firms ; and the operating or task environment consists of factors in the immediate competitive situation that affects a firm’s success, competitive position, creditors, ability to attract the best staff, supplier reputation etc

Political factors are those related to the extent of government intervention or facilitation in the economy, including political stability, laws relating to labor, trade

,environment, tax policy, tariffs, investment incentives and the provision of public goods , infrastructure etc; Economic factors include per capita income, interest rates, inflation, exchange rates; Social factors include those cultural aspects influencing attitudes including population, population growth rate, age , income distribution, education, trends , lifestyles, cultural practices and religion etc; Technological factors include innovation culture, internet connectivity, digital and electronic media reach, technology lifecycle, R&D etc; Environmental factors include topography, weather, climate, climate change etc. Legislative factors include consumer laws, labor laws, employment laws, safety laws, environmental laws, investment laws etc.

Various scholars (Miles & Snow, 1978) have linked performance to external environmental adaptation by organizations and consequently attempted to define this relationship in terms of the magnitude of external forces vis a vis strategic orientation and response. Accordingly Milliken (1987) argues that environmental uncertainty arises from an organizations inability to predict its environment while Venkatraman and Prescott (1990) argue that empirically it has been proven that organizations that align their strategies to the external environment demands outperform those that do not. This concept of aligning a) environmental turbulence b) strategy and c) organizational capability is mirrored in Ansoff & McDonnell's (1990) strategic success hypothesis.

Various tools for external environmental analysis have been used, mostly the PESTEL and SWOT analysis. Both these tools are strategic analysis tools with the PESTEL analysis providing a more generic and broader view of the macro environment while the SWOT synthesizes the PESTEL findings into specific micro environment threats and opportunities (matched against strengths and weaknesses) for strategy development . According to Thompson et al (2007) the biggest strategy influences emanate from the immediate industry/ competitive environment. For this, Porter's (1979) 5 Forces tool analyses the impact of industry rivalry, suppliers, customers, threat of new entrants and substitute products; Porters (1980) generic strategies from a cost, differentiation and focus positioning .The Ansoff matrix (Ansoff, 1957) from a market and product development; the BCG matrix (Henderson, 1970) from a business growth and market share view and the GE/ Mckinsey tool (1971) from a market attractiveness and competitive strength perspective

The study of external environmental forces according to Duncan & Ginter (1990) is meant to understand them; evaluate their likely impact and controllability. They further identify 4 key activities of this analysis i.e monitoring current influences, scanning future influences, forecasting and assessment (evaluation of impact on current and future external environmental factors). Stoffel (1994) posits that environmental scanning provides early warning signals, and helps companies develop and modify strategy, realign internal structures, adapt to change, advances learning and enhances innovation. May et al (2000) advance that environmental scanning enables managers establish important events and trends outside their organizations thus enabling them chart a future course of action, a view mirrored by Aguilar(1967). Bourgeois(1980) posits that a study of these forces enables firms establish opportunities for competitive advantage and threats detrimental to its survival.

2.5 Strategy Development

There is general agreement that an understanding of what business the company is in, the environment it operates in, generation of alternative choices of action and selection, allocation of resources and implementation are necessary components of strategy development. These fundamental components answer the classic strategy questions of ‘what business are we in?’; ‘where do we want to be?’ and ‘how do we get there?’

Even where consensus that strategy development is a process such as the 5 step strategy-making, strategy-execution processes described by Thompson et al (2007) i.e 1) developing strategic vision 2) setting objectives 3) crafting the strategy 4) executing strategy effectively and efficiently 5) evaluating performance and initiating corrective action, it assumes a one dimensional (linear) closed loop approach; while Johnson and Scholes (1997) see strategy development as an emergent, organic and reflexive phenomena in a three step i.e. strategic analysis-strategic choice-strategic implementation process.

Various strategy schools of thought exist to assist the strategy development process. Whittington (2001) provides one of the best frameworks for this analysis by classifying the various schools of thinking by various scholars into 4 categories i.e the classical, processual, evolutionary and systemic schools. Whittington looks at both the historical perspective and other strategy development criteria i.e objectives (whether a

single (e.g profit maximization) or pluralistic (multiple objectives); the process by which strategy is formed i.e whether deliberate (planned) or emergent; strategy style and period of influence

The classical school (Whittington, 2001) drawing from the economics discipline and popular in the 1960's, argued that strategy formation is a formal rational planning process i.e .deliberate with a unitary objective of profit maximization (as market conditions were known in a stable environment) - a thinking associated with Ansoff (1968) and Porter (1980) .Competitive advantage would arise from e.g applying the scientific approach to management (Taylor,1947) and theories of mathematical economists Neumann and Mogenstein (1944).The classical approach also distinguishes the thinking (planning) of strategy from the implementation (strategic action) implying a top down approach hence Chandlers (1962) assertion that 'structure follows strategy'.

The processual school popular in the '70's (Whittington, 2001) and embracing the psychology discipline followed the classical school .This school argues that strategy is deterministic but the objectives pursued may be pluralistic. Supported by scholars Cyert and March (1963) and Mintzberg (1978) it recognizes the limitations of both human capabilities and market uncertainties thus questioning the rationale to maximize profits .The processualists advocate for negotiation of competing political interests and compromise i.e "bounded rationality" and satisficing rather than maximization objectives. The processual school embodies the concept of environmental adaptation where strategy becomes crafted rather than a formal process.

The evolutionary approach drawing from economics and biology disciplines, (Whittington, 2001) followed the Processual approach and predominated strategy thinking in the 1980's .It propounded that strategy is emergent with the singular objective of survival i.e "survival for the fittest" or environmental fit. The organization is viewed as an organism that must fit in its environment rather than managers shaping its destiny. The evolutionists argued that strategy focus should be on efficiency in the short term, due to turbulence in the environment. Evolution advocates Hannan and Freeman (1977, 1989) dismissed the concept of rational

planning and argued that market forces would ensure profit maximization and survival for the fittest.

Whittingtons (2001) systemic school of thought, the fourth category subscribed to the 1990's era deems strategy as emergent, necessarily pursues multiple objectives without focusing exclusively on profit and is contextual i.e embedded or dependent on the social and cultural environment in which an organization finds itself .It draws heavily from the discipline of Sociology and necessarily dependent on cultural rules, norms, social interests and resources.

Mintzberg, Ahlstrand and Lampel (1998) propose 10 strategy schools of thought as a basis for analysis, while White (2004) revisits Mintzberg et al (1998) to increase the schools for strategy development analysis into 14 categories. In Mintzberg et al's (1998) two common strategy characteristics are evident i.e the prescriptive schools (Design, Planning and positioning) and the descriptive strategy (cognitive, entrepreneurial, power, learning, cultural, environmental, configuration) schools. In some instances, a hybrid of both schools is recognized.

A number of tools are used to assist in the development of strategy. Two of the more commonly used environmental scanning and situational analysis tools are the PESTEL (political, economic, social, technological, environmental and legal) and SWOT (strengths, weaknesses, opportunities, threat) analysis. Even though PESTEL still addresses itself to examining factors in the remote environment SWOT narrows the analysis to focus more on the competitive industry environment.

At the competitive industry level other strategy development tools are available including Porters (1980) Five Force analysis, a technique for identifying the key forces affecting the level of competition in the industry. Porter (1980) identified 5 forces i.e the bargaining power of suppliers, the bargaining power of buyers, the threat of substitutes, the threat of new entrants and the degree of rivalry amongst firms in the industry. Porter (1980) argues that the issues to consider in developing strategy are industry attractiveness and a firms competitive position. Porter envisaged competitive advantage being obtained on the basis of cost leadership and differentiation with further criteria i.e niche/focus and broad/mass market strategies.

Other established strategy development models include the category of ‘growth models’ like the Boston Consulting Group (BCG) growth matrix and the Ansoff (1957, 1968) product- market Matrix. Both models are linked to the industry life cycle as they provide a framework to develop strategies on the basis of a products competitive position vis a vis its stage of market maturity within the industry/product lifecycle. The strategic options available at each categorization stage of the growth models are then considered. The BCG matrix determines the strategic importance of each product in an organizations portfolio on the basis of its market share relative to the leaders market share and relative to the market maturity stage.

Finally, strategy implementation concerns itself with deployment of organizational resources which must always be judged against the criteria by Johnson, Scholes and Whittington (2005). Firstly, feasibility; the recognition that resources are scarce and hence a need to always optimize their allocation to realize the strategy; secondly, acceptability, in terms of risks, returns and other stakeholder expectations; thirdly, suitability, in terms of addressing the overall strategic issues such as competitive advantage and strategic fit .

2.6 Linking Environmental Forces, Strategy and Strategy Development

Scholars and practitioners of strategy are in general agreement that strategy generally concerns itself with bridging the relationship between a firm and its environment and the environmental turbulence and uncertainty that it brings. Whether as a rational planning process or emergent phenomena, strategy development manages the organic relationship between an organization and its external environment of business to ensure environmental fit. It is therefore incumbent upon organizations to have a framework for analyzing forces in the external environment with a view to exploiting emerging opportunities and or proactively mitigate threats that may impact negatively on the business. This external environmental analysis informs the process of evaluating the current strategy being pursued and if required modify or generate and select new strategy choices.

The challenge in the strategy development process both for survival and competitive positioning is to dynamically ensure the alignment of the firms strategy and by

extension its internal resource capabilities including culture, structure, processes and resource allocation to demands of the external environmental forces. Most firms seeking to understand forces in the external environment strive to predict change (incremental or discontinuous) and degree of turbulence therein which in turn informs how strategy develops, that is whether as a strategic plan, emergent strategy or strategic intent.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The research methodology highlighted in this chapter provides an overview of how the study was implemented to provide answers to the research question(s) governing the study objectives. It specifically outlines the research design, target population of study, sampling design, means by which data was collected and the process by which data was analyzed to arrive at final conclusions.

3.2 Research Design

The study adopted a cross sectional survey design approach. This is a descriptive research design used to obtain information concerning the current status of the phenomena to describe what exists, with respect to variables or conditions in a situation (Mugenda & Mugenda, 1999). The study therefore aimed to describe the dimensions of strategy development by mobile money firms resulting from analyzing the impact of various external environmental forces (variables)

The cross sectional survey descriptive survey approach was most appropriate for this study as it enabled the quantitative description of opinions, attitudes and trends captured (in the PESTEL/industry forces analysis, situational analysis and strategic action areas) as at a given time period across the study population which enabled easier analysis and observation of patterns. In addition, this research design enabled the application of data gathering instruments like the questionnaire which gathered large amounts of data.

3.3 Target Population

A target population is the total collection of elements about which one wishes to make some inferences (Mugenda and Mugenda, 1999). The study population comprised all 6 firms providing mobile financial services in Kenya. Given the small population, data was collected from all members of the population of study thereby necessitating a census survey over a sample survey. Since every population element had a known probability (100%) of being included in the study this was considered a probability sampling census survey.

The study targeted four respondents per firm i.e the Mobile financial services business unit head and three other functional heads responsible for technology, corporate&

regulatory affairs and finance making a total of 24 responses with 22 fully completed questionnaires. The respondents were selected on the basis of having overall responsibility and accountability for their functional and operational areas.

3.4 Data Collection

Data for the study was gathered through primary data collection methods using a self administered semi structured questionnaire (see Appendix), with subsequent clarifications sought through telephone calls. A study of empirical and theoretical secondary data pertinent to the study was undertaken through a review of scholarly books and journals, internet sources, professional journals and government publications.

The questionnaire was divided into 4 sections, requiring responses to 16 dimensions based on the Likert type scale for purposes of enabling easy rating /ranking of answers, coding and data analysis; and a closing open ended section . The first section A, consisted of a brief background regarding the demographic information of the firms in industry which are the subjects of the study .The second section, B focused on the impacts of various dimensions of eleven environmental forces comprising both macro and industry forces on strategy development. The third section, C focused on various aspects of 5 dimensions of strategy development and how they were impacted by environmental forces. The fourth section, D was a semi structured section on strategic measures (31 initiatives) adopted by firms to cope with the influence of environmental forces.

The respondents were the business unit heads designated as General Managers who are responsible for mobile financial services and also functional heads responsible for Finance, Technical and corporate& regulatory affairs. The respondents were selected because they have functional knowledge and overall responsibility for their operational areas and would be intimately involved in developing strategy for achieving competitive advantage. In addition validity was enhanced by having different functional perspectives appraise the impact of external forces on the firms strategy development

3.5 Data Analysis

The Statistical Package for Social Sciences (SPSS) computer package was mainly used for quantitative data and file management, statistical analysis and reporting. The reports were presented in tables, charts, frequency graphs and percentage calculations. For data analysis both descriptive statistics analysis and inferential statistical tests were performed.

Since the study captured several industry specific attributes, it lend itself to analysis of measures of central tendency (i.e mean) and also measures of variability (specifically standard deviation).For inferential test statistics, Pearson's product moment correlation coefficient (r) was used to measure the relationship between (and also amongst the variables themselves) the impacts of various environmental forces and strategy development dimensions including business unit vision/mission; strategy evaluation & strategy choice; strategy implementation and strategic measures taken. Analysis of Variance (ANOVA) tests were used to compare differences between the strategy development outcomes given a set of predictor variables (environmental forces);while multiple regression analysis were used to establish a model determining the degree of variability in the dependent variable that was accounted for by the predictor variables

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter focuses on the presentation, data analysis and interpretation of findings based on the research objectives. The study sought to determine the major external environmental forces that impact strategy development in the firms operating in the mobile money market in Kenya and to establish the measures taken to deal with the external environmental forces that impact on the firms operating in the mobile money market. The data was gathered through a self administered semi structured questionnaire issued in advance to designated senior management team members in charge of core functions specifically finance, legislative/compliance, technology and business unit/strategy head. The study employed various statistical tools for analysis and interpretation of data to arrive at conclusions and recommendations.

4.2 Background Information

This section concerns itself with outlining and presentation of the findings obtained from the questionnaires distributed to the respondents. In order to get the background information on the impact of external environmental forces on strategy development by firms operating in the mobile money industry in Kenya the demographic data of the firms in the study was investigated in the first section of the questionnaire. They are presented in this section under mobile financial services firms, mobile financial services, ownership structure of the mobile money firms, number of employees and average annual turnover. A total of 24 respondents participated in the study with two of them returning incomplete questionnaires even though attributes captured in the complete sections were captured for the research.

4.2.1 Mobile Financial Services Firms

The study seeks to establish the impact of external environmental forces on strategy development by firms operating in the mobile money industry in Kenya. There are a total of six firms offering mobile financial services under various brands to an estimated 18.9 million customers. From the study heads of departments in the six participating firms availed themselves for this study. They were drawn from Safaricom Kenya Ltd; Airtel Kenya, Telkom Orange, Essar Telecom, Mobile Pay Ltd and Mobikash Ltd.

4.2.2 Mobile Financial Services

The study sought to ascertain the length of time that the mobile money firms have been in operation in Kenya. In this regard the respondents were required to indicate the year of incorporation of the firms in Kenya.

Table 4.1: Year of Incorporation of the Firms

| Firm | Year of Incorporation |
|---------------------|------------------------------|
| Safaricom Kenya Ltd | 1997 |
| Airtel Kenya | 2010 |
| Telkom Orange | 2008 |
| Essar Telecom/Yu | 2008 |
| Mobile Pay Ltd | 2006 |
| Mobikash Ltd | 2008 |

Source: Author, 2013

Airtel Kenya was incorporated in Kenya in 2010 having changed ownership and acquired the assets of what was previously Zain Ltd (and earlier Kencell Ltd) which .Telkom Orange was incorporated in 2008 after a merger between France's Orange Telcom and what was previously Kenya's Telkom Ltd (incorporated in 1999).

The firms incorporated in Kenya provide mobile financial services under various brand names. For instance, Safaricom Kenya Ltd offers its mobile financial services under brand name of MPESA; Airtel Kenya with Airtel Money, Telkom Orange with Orange money, Essar Telecom with YU Cash, Mobile Pay Ltd with its Tangaza brand and Mobikash Ltd with its Mobikash brand.

The study thus sought to establish the length of time that the firms mobile financial services had been in operation. The results are as depicted in Table 4.3.

Table 4.2: Year of Establishment of MFS

| Firm | Year of Establishment of MFS |
|------------------------------|-------------------------------------|
| Mpesa (Safaricom Kenya Ltd) | 2007 |
| Airtel Money (Airtel Kenya) | 2009 |
| Orange Money (Telkom Orange) | 2010 |
| Yu Cash (Essar Telecom/Yu) | 2009 |
| Tangaza (Mobile Pay Ltd) | 2011 |
| Mobikash (Mobikash Ltd) | 2011 |

Source: Author, 2013

As seen from the table , Safaricom’s MPESA is the oldest financial service with 6 years in operation while the rest of the firms have only operated their mobile money brands for between 2-4 years.

4.2.3 Ownership Structure of the Mobile Money Firms

The study also sought to establish the ownership statuses of the firms in the mobile money business in Kenya. The results are as depicted in Table 4.4.

Table 4.3: Ownership Structures of the Mobile Money Firms

| Firm | Ownership Status |
|---------------------|--|
| Safaricom Kenya Ltd | Joint private/public (foreign/local ownership) |
| Airtel Kenya | Joint private (foreign/local ownership) |
| Telkom Orange | Joint foreign private/Kenya Govt |
| Essar Telecom/Yu | Private (foreign) |
| Mobile Pay Ltd | Private (local) |
| Mobikash Ltd | Private (local) |

Source: Author, 2013

As can be seen from table 4.4, the majority of the firms in the mobile money business in Kenya are of varied ownership structures

4.2.4 Number of Employees

The study required the respondents to indicate the number of direct employees working in the firms involved in mobile financial services in Kenya. The results are as shown in Table 4.5.

Table 4.4: Number of Employees Working in the MFS Firms

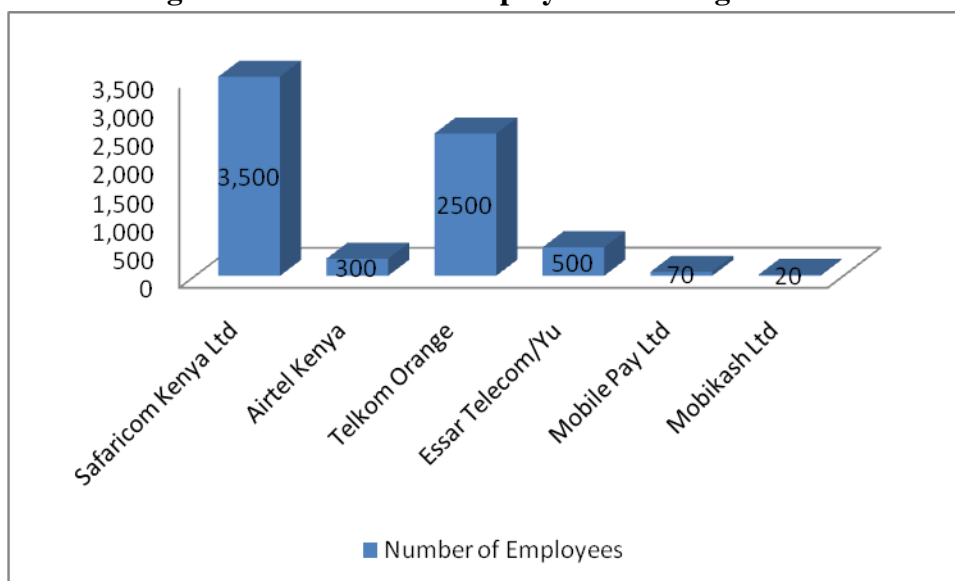
| Firm | Number of Employees |
|---------------------|----------------------------|
| Safaricom Kenya Ltd | 3,500 |
| Airtel Kenya | 300 |
| Telkom Orange | 2500 |
| Essar Telecom/Yu | 500 |
| Mobile Pay Ltd | 70 |
| Mobikash Ltd | 20 |

Source: Author, 2013

The study results indicate that Safaricom is the largest employer among the mobile financial services providers in Kenya with about 3500 employees. Telkom Orange comes second with an estimated 2500 employees countrywide while Essar Telecom

employs 500 staff, Mobile Pay Ltd (Tangaza) employs 70 staff and Mobikash Ltd employing 20 staff members.

Figure 4.1: Number of Employees Working in the MFS Firms



Source: Author, 2013

4.2.5 Average Annual Turnover

Mobile Financial services contribute significantly to the revenue stream generated by the firms total diversified services and product mix. As such the study sought to establish (in billions of Kenya Shillings) the average contribution of the mobile financial services (only) function to the firms annual turnover.

Table 4.5: Average Annual Turnover of the MFS Firms

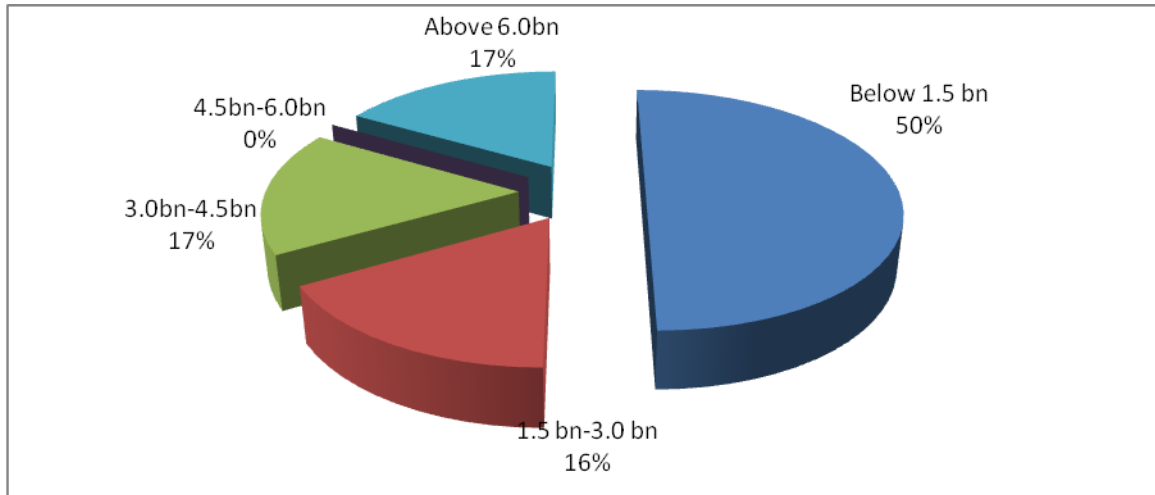
| Firm | Average Annual Turnover (in Billions of KShs) |
|---------------------|---|
| Safaricom Kenya Ltd | Above 6bn |
| Airtel Kenya | 3bn-4.5 bn |
| Telkom Orange | Below 1.5 bn |
| Essar Telecom/Yu | 1.5bn-3.0 bn |
| Mobile Pay Ltd | Below 1.5 bn |
| Mobikash Ltd | Below 1.5 bn |

Source: Author, 2013

From the study, a majority of the firms (including Telkom Orange, Mobile Pay Ltd and Mobikash Afrika Ltd) make an average annual turnover (see Table 4.6 and Figure 4.2)of less than KShs. 1.5 billion. Essar Telecom makes between KShs. 1.5bn-KShs. 3.0 bn, Airtel Kenya makes average annual sales of between KShs. 3.0-4.5

billion, while Safaricom makes the highest average annual turnover amounting to more than KShs. 6.0 billion.

Figure 4.2: Average Annual Turnover of the MFS Firms



Source: Author, 2013

4.3 Impact of External Environmental Forces On Strategy Development

This section sought to establish the key external environment forces and the extent to which they affect strategy development in the firms operating in the mobile money market in Kenya with results as shown in Table 4.6. These environmental forces include political, economic, social, technological, legislative, environmental, bargaining power of customers, bargaining power of suppliers, threat of new entrants, intensity of competitive rivalry and threat of substitute products.

Table 4.6 :External Environmental Forces impact on strategy development

| EXTERNAL ENVIRONMENT FORCES | RESPONDENTS BY NUMBER AND % TERMS | | | | | TOTAL |
|-----------------------------|-----------------------------------|---------------|-----------------|--------------|-------------------|------------|
| | Not at all | Little extent | moderate extent | Great extent | Very great extent | |
| Political Forces | 2 8% | 2 8% | 4 17% | 10 42% | 6 25% | 24 100% |
| Economic Forces | 2 8% | 0 0% | 3 12% | 11 46% | 8 33% | 24 100% |
| Social Forces | 2 8% | 1 4% | 5 21% | 8 33% | 8 33% | 24 100% |
| Technological Forces | 2 8% | 0 0% | 2 8% | 6 25% | 14 58% | 24 100 |

| | | | | | | |
|----------------------------------|---------|----------|----------|----------|-----------|------------|
| Environmental Forces | 2 8% | 5 21% | 7 29% | 5 21% | 5 21% | 24 100% |
| Legislative Forces | 2 8% | 0 0% | 2 8% | 8 33% | 12 50% | 24 100% |
| Threat of substitute products | 2 8% | 0 0% | 7 29% | 5 21% | 10 42% | 24 100% |
| Bargaining power of customers | 2 8% | 0 0% | 1 4% | 9 38% | 12 50% | 24 100% |
| Intensity of competitive rivalry | 2 8% | 0 0% | 3 12% | 8 33% | 11 46% | 24 100% |
| Threat of new entrants | 2 8% | 0 0% | 5 21% | 7 29% | 10 42% | 24 100% |
| Bargaining power of suppliers | 2 8% | 1 4% | 5 21% | 8 33% | 8 33% | 24 100% |

Source: Author, 2013

Accordingly, questions comprising categorical responses on a 5 point scale were provided, where the extent of the external forces impact on strategy development was to be measured on a likert type scale where , 1= not at all; 2= little extent; 3= moderate extent; 4= great extent; 5=very great extent.

Each environmental force was further subcategorized with 5 different attributes each to be responded to thereby creating a 25 point scale for which a single composite score (ranging between 0 to 25) would be generated. The purpose for converting ordinal scale data (categorical variables) responses into interval scale data (continuous variables) was to enable more meaningful descriptive and inferential analysis. As a consequence, the ordinal scale responses were recalibrated into interval scores based on the respondent results where the extent of the impact of external forces would be measured on a scale where , 0-5 = Not at all; > 5-10 = Little Extent; > 10 -15 = Moderate extent ;> 15 -20= Great extent; and > 20-25 = V. great extent

The respondents mean scores and standard deviations were tabulated for each force (Table 4.7)

Table 4.7: Respondent Scores On Impact of Environmental Forces

| | N | Range | Minimum | Maximum | Mean | | Std. Deviation |
|----------------------------------|-----------|-----------|-----------|-----------|-----------|------------|----------------|
| | Statistic | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic |
| Political forces | 24 | 24 | 0 | 24 | 15.08 | 1.294 | 6.338 |
| Economic forces | 24 | 25 | 0 | 25 | 16.83 | 1.298 | 6.357 |
| Social forces | 24 | 24 | 0 | 24 | 15.67 | 1.298 | 6.357 |
| Technological forces | 24 | 25 | 0 | 25 | 18.54 | 1.417 | 6.941 |
| Legislative forces | 24 | 25 | 0 | 25 | 17.71 | 1.326 | 6.497 |
| Environmental forces | 24 | 24 | 0 | 24 | 13.08 | 1.437 | 7.040 |
| Threat of substitute products | 24 | 25 | 0 | 25 | 16.71 | 1.395 | 6.836 |
| Bargaining power of customers | 24 | 25 | 0 | 25 | 18.25 | 1.352 | 6.622 |
| Bargaining power of suppliers | 24 | 25 | 0 | 25 | 16.25 | 1.342 | 6.576 |
| Intensity of competitive rivalry | 24 | 25 | 0 | 25 | 17.38 | 1.336 | 6.546 |
| Threat of new entrants | 24 | 25 | 0 | 25 | 16.67 | 1.307 | 6.404 |
| Valid N (list wise) | 24 | | | | | | |

Source: Author, 2013

According to the study, the respondents indicated that political forces which included political leadership and stability, investment incentives, infrastructure provision, government systems and structures and international relations influenced strategy development among mobile financial service firms to a great extent as evidenced by a mean score of 15.08

Economic forces which included interest rates (and monetary policy), exchange rates, inflation, tax regime (fiscal policy) and disposable income/employment levels influenced strategy development to a great extent as evidenced by a mean score of 16.83 amongst the respondents.

According to results of the study, Social forces comprising demographics (sex, gender, race etc), religious/ethnic/cultural factors, education levels, consumer attitudes & opinions and trends, fads and lifestyles influenced strategy development amongst the firms operating in the mobile money market in Kenya to a great extent as evidenced with a mean score of 15.67.

Technological forces returned the highest mean score of all the external forces even though categorized as having influenced strategy development to a great extent with a mean score of 18.54. These forces comprised of new technological impacts, innovations and inventions, internet impact technology access & cost and technology lifecycles and obsolescence.

According to findings from the study, Legislative forces consisting of current laws and regulations, regulatory bodies and processes, consumer protections, industry specific regulations and competitive regulation influenced strategy development amongst the firms in the mobile money market to a great extent as evidenced by a mean score of 17.71, the third highest mean score after technological force and bargaining power of customers.

Environmental forces according to the study, consisting of environmental laws and regulations, topography (physical features, geography), climate change, ecological factors and international environmental issues only influenced strategy development to a moderate extent amongst the firms in the mobile money market in Kenya - returning the lowest mean score of 13.08 of all the forces studied

According to findings from the study, the threat of substitute products comprising of the following factors; the buyers (customer) propensity to substitute, the ease of substitution, number of substitute products, buyer switching costs and price performance of substitute influenced strategy development to a great extent with a mean score of 16.71 across the respondents.

Findings from the study indicated that the bargaining power of customers influenced strategy development to a great extent as evidenced by a mean score of 18.25, the second highest mean after the influence of technological forces. Attributes measured in the bargaining power of customers included buyer price sensitivity, buyer information availability, buyer bargaining leverage, buyer dependence on current distribution channels and availability of substitute products.

According to the study, the respondents in the firms operating in the mobile money market in Kenya indicated that the bargaining power of suppliers influenced their strategy development to a great extent with a mean score of 16.25 across the industry. Attributes measured under the power of suppliers environmental force included the

availability(or lack of) essential suppliers, threats to reduce quality of inputs, threats to raise input prices, supplier switching costs to other industries and the presence of substitute inputs

The intensity of competitive rivalry comprising of the following evaluated attributes; the level of advertising, competition between mobile and non mobile telephony firms, the degree of innovations amongst competitors, the flexibility of product/service offerings and price competition amongst firms influenced strategy development to a great extent with a mean score of 17.38 across the respondents.

According to findings from the study, the threat of new entrants influenced the development of strategy to a great extent with a mean score of 16.67 across the targeted respondents. The factors measured under the threat of new entrant industry force included industry entry barriers, capital requirements, ability for new entrants to access distribution outlets, expected retaliation by new entrants and government policy on new entrants.

4.4 Impact of Environmental Forces on Strategy Development Aspects

This section sought to establish the extent to which various environmental forces affect specific aspects of strategy development in the firms operating in the mobile money market in Kenya. These aspects of strategy development include vision/mission, strategy evaluation & strategy choice, strategy implementation and strategic measures. Accordingly, questions comprising categorical responses on 5 point scale was provided, where the extent of the external forces impact on each strategy development aspect was to be measured on a likert type scale where , 1= not at all; 2= little extent; 3= moderate extent; 4= great extent; 5=very great extent.

Three strategy development aspects i.e. vision/mission, strategy evaluation & strategy choice, strategy implementation were further subcategorized with 5 different attributes each to be responded to thereby creating a 25 point scale for which a single composite score (ranging between 0 to 25) would be generated. The fourth strategy development aspect i.e strategic measures was subcategorized into 31 different attributes creating a 155 point scale (ranging from 0-155) where scores were recalibrated as 0-29 = Not at all; >29 – 59 =Little extent; >59 -89 = Moderate extent;>89 – 119 = Great Extent; >119=very great extent.

The descriptive results based on recalibration of scores are indicated in Table 4.8.

Table 4.8: Impact of environmental Forces on Strategy development Aspects

| STRATEGY DEVELOPMENT ASPECTS | RESPONDENTS BY NUMBER AND % | | | | | |
|---------------------------------------|-----------------------------|---------------|-----------------|--------------|-------------------|------------|
| | Not at all | Little extent | moderate extent | Great extent | Very great extent | TOTAL |
| Vision and mission | 2 8% | 1 4% | 5 21% | 9 38% | 7 29% | 24 100% |
| Strategy evaluation & strategy Choice | 2 8% | 0 0% | 4 17% | 10 42% | 8 33% | 24 100% |
| Strategy Implementation | 2 8% | 0 0% | 5 21% | 8 33% | 9 38% | 24 100% |
| Strategic measures | 2 8% | 0 0% | 1 4% | 11 46% | 10 42% | 24 100% |

Source: Author, 2013

The respondents mean scores and standard deviations were tabulated for environmental forces impact on each strategy development aspect. (Table 4.9)

Table 4.9 Respondent Scores On Impact of Environmental Forces on strategy development aspect

| | N | Range | Minimum | Maximum | Mean | | Std. Deviation |
|---|-----------|-----------|-----------|-----------|-----------|------------|----------------|
| | Statistic | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic |
| vision and mission | 24 | 23 | 0 | 23 | 15.42 | 1.260 | 6.171 |
| strategy evaluation and strategy choice | 24 | 24 | 0 | 24 | 16.25 | 1.298 | 6.361 |
| strategy implementation | 24 | 24 | 0 | 24 | 16.38 | 1.274 | 6.240 |
| strategy measures | 24 | 143 | 0 | 143 | 104.79 | 7.453 | 36.513 |
| Valid N (list wise) | 24 | | | | | | |

Source: Author, 2013

Findings from the study indicate that the impact of environmental forces on the vision and mission aspect of strategy development was to a great extent as evidenced by a mean score of 15.42 from the respondent subjects. The attributes of vision and mission for which responses were sought were; review of business unit vision , review

of current purpose of the firm, review of values driving the firm, review of core competences and review of market segments/product offerings

According to the study, the impact of environmental forces on the strategy evaluation and strategy choice aspect of strategy development was to a great extent as evidenced by a mean score of 16.26. The attributes measured under this aspect included; the degree of macro environmental scanning, degree of micro (industry) level scanning, degree of competitor analysis, degree of firm specific analysis (SWOT) and the objective setting and strategy selection process

Findings from the study indicate that the impact of environmental forces on the strategy implementation aspect of strategy development was to a great extent as evidenced by a mean score of 16.38 across the respondents. The attributes measured under strategy implementation were; organizational restructuring, resourcing of human resources and capital, internal resource allocation, change management activities and alignment of culture, structure, processes and communication.

According to the study, the respondents indicated that the impact of environmental forces on strategic measures was to a great extent as evidenced by a mean score of 104.79 (maximum score possible is 155). Unlike the other strategy development aspects 31 attributes of strategic measures were evaluated. These were; enhanced CSR/customer loyalty schemes, low cost pricing of service, differentiated our product/service offering, expanded into new geographic region, alliance with data/I.T firms, enhanced regulatory compliance, merged/acquired other firms, targeted niche market/customer segments, diversified in other financial services, expanded agent network, premium pricing of service, consolidated with other products/services, injected further capital/human investment, invested further in secure technology, implemented some cost cutting measures, differentiated service pricing, established new distribution channels, partnered bank/EFT firm for M-Banking, lowered transaction values, interoperability with competitors/others, invested further in network improvement, outsourced some related services, integrated supply chain ownership, enhanced coordination with regulators, increased transaction values, enhanced customer knowledge/ information, increased advertising/awareness campaigns and organizational restructuring/downsizing

4.5 Inferential Analysis

Inferential analysis is utilized in this study to determine if there is a relationship between and amongst the independent (predictor) and dependent variables, as well as the strength of those relationships. The inferential statistics used were; Pearson's product moment correlation coefficient to measure the strength and direction of relationships between the study variables; One way analysis of variance (ANOVA) to compare differences between the outcomes (dependent variables) against a constant set of predictor variables and a multiple regression analysis to establish the degree of variability in the dependent variable that is accounted for by changes in one of the independent variables. The independent variables in this study included the following environmental forces; political, economic, social, technological, legislative, environmental, bargaining power of customers, bargaining power of suppliers, threat of new entrants, intensity of competitive rivalry and threat of substitute products. The dependent variables include the following strategy development aspects; business unit vision/mission, strategy evaluation & strategy choice, strategy implementation and strategic measures.

4.5.1 Pearson's Product Moment Correlation Coefficient

To quantify the strength of the relationship between the variables, the researcher used Karl Pearson's product moment correlation coefficient. The researcher used the Karl Pearson's product moment correlation coefficient (r) to study the correlation between the study variables and the findings were as in Table 4.10

Table 4.10 Correlation between Independent and dependent variables

| | political forces | Economic forces | Social forces | Technological forces | Legislative forces | Environmental forces | Intensity of competitive rivalry | Threat of new entrants | Threat of substitute products | Bargaining power of customers | Bargaining power of suppliers | |
|--|--|-----------------|----------------|----------------------|--------------------|----------------------|----------------------------------|------------------------|-------------------------------|-------------------------------|-------------------------------|----------------|
| Vision and mission | pearson correlation Sig.(2 tailed) | 0.727 0.000 | 0.778 0.000 | 0.832 0.000 | 0.808 0.000 | 0.744 0.000 | 0.585 0.003 | 0.749 0.000 | 0.717 0.000 | 0.812 0.000 | 0.836 0.000 | 0.805 0.000 |
| strategy evaluation and strategy choice | pearson correlation Sig.(2 tailed) | 0.553 0.005 | 0.758 0.000 | 0.729 0.000 | 0.741 0.000 | 0.716 0.000 | 0.507 0.011 | 0.835 0.000 | 0.853 0.000 | 0.759 0.000 | 0.873 0.000 | 0.817 0.000 |
| Strategy implementation | pearson correlation Sig.(2 tailed) | 0.672 0.000 | 0.820 0.000 | 0.695 0.000 | 0.731 0.000 | 0.821 0.000 | 0.603 0.002 | 0.781 0.000 | 0.830 0.000 | 0.706 0.000 | 0.825 0.000 | 0.770 0.000 |
| Strategic measures | pearson correlation Sig.(2 tailed) | 0.660 0.000 | 0.852 0.000 | 0.809 0.000 | 0.864 0.000 | 0.844 0.000 | 0.619 0.001 | 0.881 0.000 | 0.869 0.000 | 0.777 0.000 | 0.872 0.000 | 0.808 0.000 |
| a. Listwise N=24 | | | | | | | | | | | | |
| correlation is significant at the 0.05 level (2 tailed) | | | | | | | | | | | | |

Source: Author, 2013

From the findings, there was a positive correlation between political forces and all dimensions of strategy development comprising vision and mission, strategy evaluation and strategy choice, strategy implementation and strategic measures with correlations coefficients (r) of 0.727, 0.553, 0.672 and 0.660 respectively. Increases in the impact of political forces were correlated with fairly significant increases in all four dimensions of strategy development.

From the findings, there was a positive correlation between economic forces and all dimensions of strategy development comprising vision and mission, strategy evaluation and strategy choice, strategy implementation and strategic measures with correlations coefficients (r) of 0.778, 0.758, 0.820 and 0.852 respectively. Increases in the impact of economic forces were correlated with significant increases in all four dimensions of strategy development.

From the findings, there was a positive correlation between social forces and all dimensions of strategy development comprising vision and mission, strategy evaluation and strategy choice, strategy implementation and strategic measures with correlations coefficients (r) of 0.832, 0.729, 0.695 and 0.809 respectively. Increases in the impact of social forces were correlated with significant increases in all four dimensions of strategy development

From the findings, there was a positive correlation between technological forces and all dimensions of strategy development comprising vision and mission, strategy evaluation and strategy choice, strategy implementation and strategic measures with correlations coefficients (r) of 0.808, 0.741, 0.731 and 0.864 respectively. Increases in the impact of technological forces were correlated with significant increases in all four dimensions of strategy development from the findings, there was a positive correlation between legislative forces and all dimensions of strategy development comprising vision and mission, strategy evaluation and strategy choice, strategy implementation and strategic measures with correlations coefficients (r) of 0.744, 0.716, 0.821 and 0.844 respectively. Increases in the impact of legislative forces were correlated with significant increases in all four dimensions of strategy development

From the findings, there was a positive correlation between environmental forces and all dimensions of strategy development comprising vision and mission, strategy

evaluation and strategy choice, strategy implementation and strategic measures with correlations coefficients (r) of 0.585, 0.507, 0.603 and 0.619 respectively. Increases in the impact of environmental forces were correlated with fairly significant increases in all four dimensions of strategy development

From the findings, there was a positive correlation between the intensity of competitive rivalry forces and all dimensions of strategy development comprising vision and mission, strategy evaluation and strategy choice, strategy implementation and strategic measures with correlations coefficients (r) of 0.749, 0.835, 0.781 and 0.881 respectively. Increases in the impact of competitive rivalry forces were correlated with significant increases in all four dimensions of strategy development

From the findings, there was a positive correlation between the threat of new entrants and all dimensions of strategy development comprising vision and mission, strategy evaluation and strategy choice, strategy implementation and strategic measures with correlations coefficients (r) of 0.717, 0.853, 0.830 and 0.869 respectively. Increases in the impact of the threat of new entrants were correlated with significant increases in all four dimensions of strategy development

From the findings, there was a positive correlation between the threat of substitute products and all dimensions of strategy development comprising vision and mission, strategy evaluation and strategy choice, strategy implementation and strategic measures with correlations coefficients (r) of 0.812, 0.759, 0.706 and 0.777 respectively. Increases in the impact of substitute products were correlated with significant increases in all four dimensions of strategy development

From the findings, there was a positive correlation between the bargaining power of customers and all dimensions of strategy development comprising vision and mission, strategy evaluation and strategy choice, strategy implementation and strategic measures with correlations coefficients (r) of 0.836, 0.873, 0.825 and 0.872 respectively. Increases in the impact of customers bargaining powers were correlated with significant increases in all four dimensions of strategy development

From the findings, there was a positive correlation between the bargaining power of suppliers and all dimensions of strategy development comprising vision and mission, strategy evaluation and strategy choice, strategy implementation and strategic

measures with correlations coefficients (r) of 0.805, 0.817, 0.770 and 0.808 respectively. Increases in the impact of suppliers bargaining powers were correlated with significant increases in all four dimensions of strategy development.

Overall, the relationships between the independent and dependent variables were positive and met the researchers threshold for consideration as being significant ($p < 0.01$). Although the various predictor variables had varying impacts on the outcomes (dependent variables), noticeably the environmental forces seemed to have relatively lesser impact than the other forces.

4.5.2 Correlation Between Independent Variables

The study also sought to find out if there was a relationship between the independent variables given grounded literature on the interdependence between subsystems in the external environment and establish whether these may impact strategy and decision making in the task environment of the firms operating in the mobile money market in Kenya.

Below (Table 4.11) is a summary table derived from bivariate correlation analysis between the independent variables carried out in the SPSS statistical package.

Table 4.11 Correlation between Independent variables

| | | political forces | Economic forces | Social forces | Technological forces | Legislative forces | Environmental forces | Intensity of competitive rivalry | Threat of new entrants | Threat of substitute products | Bargaining power of customers | Bargaining power of suppliers |
|----------------------|--|------------------|-----------------|----------------|----------------------|--------------------|----------------------|----------------------------------|------------------------|-------------------------------|-------------------------------|-------------------------------|
| political forces | pearson correlation Sig.(2 tailed) | 1 | | | | | | | | | | |
| Economic forces | pearson correlation Sig.(2 tailed) | 0.802 0.000 | 1 | | | | | | | | | |
| Social forces | pearson correlation Sig.(2 tailed) | 0.723 0.000 | 0.700 0.000 | 1 | | | | | | | | |
| Technological Forces | pearson correlation Sig.(2 tailed) | 0.693 0.000 | 0.806 0.000 | 0.774 0.000 | 1 | | | | | | | |
| Legislative forces | pearson correlation Sig.(2 tailed) | 0.719 0.000 | 0.851 0.000 | 0.600 0.002 | 0.814 0.000 | 1 | | | | | | |

| | | | | | | | | | | | | |
|--|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---|
| Environmental Forces | pearson correlation | 0.726 | 0.686 | 0.759 | 0.475 | 0.509 | 1 | | | | | |
| | Sig.(2 tailed) | 0.000 | 0.000 | 0.000 | 0.019 | 0.011 | | | | | | |
| Intensity of competitive rivalry | pearson correlation | 0.637 | 0.820 | 0.606 | 0.869 | 0.907 | 0.408 | 1 | | | | |
| | Sig.(2 tailed) | 0.001 | 0.000 | 0.002 | 0.000 | 0.000 | 0.048 | | | | | |
| Threat of new entrants | pearson correlation | 0.646 | 0.825 | 0.608 | 0.754 | 0.862 | 0.51 | 0.92 | 1 | | | |
| | Sig.(2 tailed) | 0.001 | 0.000 | 0.002 | 0.000 | 0.000 | 0.011 | 0.000 | | | | |
| Threat of substitute products | pearson correlation | 0.768 | 0.791 | 0.795 | 0.841 | 0.755 | 0.58 | 0.807 | 0.725 | 1 | | |
| | Sig.(2 tailed) | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.003 | 0.000 | 0.000 | | | |
| Bargaining power of customers | pearson correlation | 0.679 | 0.844 | 0.709 | 0.848 | 0.872 | 0.478 | 0.922 | 0.858 | 0.843 | 1 | |
| | Sig.(2 tailed) | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.018 | 0.000 | 0.000 | 0.000 | | |
| Bargaining power of suppliers | pearson correlation | 0.561 | 0.755 | 0.647 | 0.737 | 0.777 | 0.575 | 0.789 | 0.801 | 0.675 | 0.885 | 1 |
| | Sig.(2 tailed) | 0.004 | 0.000 | 0.000 | 0.000 | 0.000 | 0.003 | 0.000 | 0.000 | 0.000 | 0.000 | |
| N=24 | | | | | | | | | | | | |
| correlation is significant at the 0.05 level (2 tailed) | | | | | | | | | | | | |

Source: Author, 2013

Findings from the correlation analysis amongst independent variables indicate positive correlations on all the bivariate comparisons. From the Table (4.11) out of the 55 possible bivariate correlation analysis conducted, 50 correlations not only had positive relationships, but also met the criterion set by the researcher to be of statistical significance with p values <0.05 . The balance of 5 correlations although positively related did not meet the criterion for significance as they have p values >0.05 .

The strongest positive relationships ($r > 0.9$) were between the intensity of competitive rivalry & bargaining power of customers, threat of new entrants & competitive rivalry and competitive rivalry & legislative forces with correlation coefficients (r) of 0.922, 0.920 and 0.907 respectively. Out of the 10 bivariate correlation comparisons for each force those having strong correlation coefficients greater than 0.8 were, the bargaining power of customers force had with seven, followed by the intensity of competitive rivalry and economic forces which had six each, while legislative forces and the threat of new entrants had 5.

The five bivariate correlations that did not meet the criterion for significance even though positively related but not strong were between environmental force & technology, environmental force & legislative force, environmental force & threat of new entrants, environmental force & bargaining power of customers, competitive rivalry & environmental forces which had correlation coefficients of 0.475, 0.509, 0.51, 0.478 and 0.408 respectively. The impact of environmental force is weaker on bivariate correlations between independent variables and closely reflected the same when correlated against the dependent variables.

4.5.3 Correlation Between Dependent Variables

Even though dependent variables are outcomes or effects from predictor variables, the study sought to establish the extent to which dependent variables correlate. From a review of the literature related to this study, the nature of strategy development as a process and emergent phenomena is noted and hence the need to establish the interrelationships amongst the outcomes or dimensions of strategy development.

Table 4.12 Correlation between dependent variables

| | | vision and mission | strategy evaluation and strategy choice | strategy implementation | strategic measures |
|---|---------------------|--------------------|---|-------------------------|--------------------|
| vision and mission | Pearson Correlation | 1 | .838** | .708** | .822** |
| | Sig. (2-tailed) | | .000 | .000 | .000 |
| | N | 24 | 24 | 24 | 24 |
| strategy evaluation and strategy choice | Pearson Correlation | .838** | 1 | .795** | .856** |
| | Sig. (2-tailed) | .000 | | .000 | .000 |
| | N | 24 | 24 | 24 | 24 |
| strategy implementation | Pearson Correlation | .708** | .795** | 1 | .799** |
| | Sig. (2-tailed) | .000 | .000 | | .000 |
| | N | 24 | 24 | 24 | 24 |
| strategy measures | Pearson Correlation | .822** | .856** | .799** | 1 |
| | Sig. (2-tailed) | .000 | .000 | .000 | |
| | N | 24 | 24 | 24 | 24 |

** . Correlation is significant at the 0.05 level (2-tailed).

Source: Author, 2013

From the analysis (see Table 4.12), there was a strong positive correlation between vision & mission and strategy evaluation & strategy choice as evidenced by a correlation coefficient of 0.838. Similarly, there was a positive correlation between Vision & Mission and strategy implementation as evidenced by a correlation coefficient of 0.708. A strong positive correlation was also noted between vision & mission and strategic measures as evidenced by a correlation coefficient of 0.822. From the analysis it was also apparent that there was a positive correlation between strategy evaluation & strategy choice and strategy implementation with a correlation coefficient of 0.795. There is also a strong positive relationship between strategy evaluation & strategy choice and strategic measures as evidenced by a correlation coefficient of 0.856. A positive correlation is also evidenced between strategic measures and strategy implementation with a correlation coefficient of 0.799. The relationships amongst the dependent variables are all positive and fairly strong and also meet the criteria for being significant for purposes of the study.

4.5.4 Analysis of Variance (ANOVA)

The study sought to establish whether the various independent variables had an effect on each of the dependent variables. This was to be done by analyzing and comparing

the variability of the scores (means) for the 11 predictor variables (external environment forces) against each of the strategy development outcomes (dependent variables) The null hypothesis would be that the means for all independent variables would be equal while the alternate hypothesis is that the means are not equal . A one way ANOVA test was used for analysis so that if the means were significantly different, conclusions would be drawn that Independent Variables (environmental forces)), had an effect on the dependent variable or ; if they were the same then the outcomes were chance occurrences rather than effects from manipulation of the independent variables .

Table 4.13 Dependent variable: Mission and Vision

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|--------|-------------------|
| 1 | Regression | 808.819 | 11 | 73.529 | 13.167 | .000 ^b |
| | Residual | 67.014 | 12 | 5.585 | | |
| | Total | 875.833 | 23 | | | |

b. Predictors: (Constant), Threat of new entrants, Environmental forces, Technological forces, Political forces, Bargaining power of suppliers, Threat of substitute products, Social forces, Legislative forces, Economic forces, Intensity of competitive rivalry, Bargaining power of customers

Source: Author, 2013

From the ANOVA analysis (Table 4.13), the P-value is 0.000 which is less than the 0.05 (significance level of 5%) and therefore confirming statistically significant differences between the means of the independent variables being compared. This leads us to conclude that the dependent variable outcome (mission and vision) is not attributable to chance but more probably caused by the impacts of environmental forces (independent variables)

Table 4.14 Dependent Variable: strategy evaluation and strategy choice

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|-------|-------------------|
| 1 | Regression | 835.487 | 11 | 75.953 | 9.593 | .000 ^b |
| | Residual | 95.013 | 12 | 7.918 | | |
| | Total | 930.500 | 23 | | | |

b. Predictors: (Constant), Threat of new entrants, Environmental forces, Technological forces, Political forces, Bargaining power of suppliers, Threat of substitute products, Social forces, Legislative forces, Economic forces, Intensity of competitive rivalry, Bargaining power of customers

Source: Author, 2013

From the ANOVA analysis (Table 4.14), the P-value is 0.000 which is less than the 0.05 (significance level of 5%) and therefore confirming statistically significant differences between the means of the independent variables being compared. This leads us to conclude that the dependent variable outcome (strategy evaluation and strategy choice) is not attributable to chance but more probably caused by the impacts of environmental forces (independent variables)

Table 4.15 :Dependent Variable: Strategy implementation

| | | | | | | |
|---|------------|---------|----|--------|-------|-------------------|
| 1 | Regression | 727.174 | 11 | 66.107 | 4.709 | .006 ^b |
| | Residual | 168.451 | 12 | 14.038 | | |
| | Total | 895.625 | 23 | | | |

b. Predictors: (Constant), Threat of new entrants, Environmental forces, Technological forces, Political forces, Bargaining power of suppliers, Threat of substitute products, Social forces, Legislative forces, Economic forces, Intensity of competitive rivalry, Bargaining power of customers

Source: Author, 2013

From the ANOVA analysis (Table 4.15), the P-value is 0.006 which is less than the 0.05 (significance level of 5%) and therefore confirming statistically significant differences between the means of the independent variables being compared. This

leads us to conclude that the dependent variable outcome (strategy implementation) is not attributable to chance but more probably caused by the impacts of environmental forces (independent variables)

Table 4.16 Dependent Variable: strategic measures

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|--------|-------------------|
| 1 | Regression | 28787.752 | 11 | 2617.068 | 16.738 | .000 ^b |
| | Residual | 1876.206 | 12 | 156.351 | | |
| | Total | 30663.958 | 23 | | | |

b. Predictors: (Constant), Threat of new entrants, Environmental forces, Technological forces, Political forces, Bargaining power of suppliers, Threat of substitute products, Social forces, Legislative forces, Economic forces, Intensity of competitive rivalry, Bargaining power of customers

Source: Author, 2013

From the ANOVA analysis (Table 4.16), the P-value is 0.000 which is less than the 0.05 (significance level of 5%) and therefore confirming statistically significant differences between the means of the independent variables being compared. This leads us to conclude that the dependent variable outcome (strategic measures) is not attributable to chance but more probably caused by the impacts of environmental forces (independent variables)

4.5.5 Univariate ANOVA

The researcher also sought to establish the relationship between each of the independent and dependent variables i.e linearity of two variables and extent to which the variability in the dependent variable could be attributed to changes in the predictor variable.

Table 4.17 Univariate ANOVA: Political Force

Dependent Variable: vision and mission

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|-----------|-------------------------|----|-------------|--------|------|
| Model | 6282.067 ^a | 5 | 1256.413 | 80.125 | .000 |
| political | 6282.067 | 5 | 1256.413 | 80.125 | .000 |
| Error | 297.933 | 19 | 15.681 | | |
| Total | 6580.000 | 24 | | | |

a. R Squared = .955 (Adjusted R Squared = .943)

Dependent Variable: strategy evaluation and strategy choice

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|-----------|-------------------------|----|-------------|--------|------|
| Model | 6927.817 ^a | 5 | 1385.563 | 77.387 | .000 |
| Political | 6927.817 | 5 | 1385.563 | 77.387 | .000 |
| Error | 340.183 | 19 | 17.904 | | |
| Total | 7268.000 | 24 | | | |

a. R Squared = .953 (Adjusted R Squared = .941)

Dependent Variable: strategy implementation

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|-----------|-------------------------|----|-------------|---------|------|
| Model | 7071.167 ^a | 5 | 1414.233 | 103.414 | .000 |
| political | 7071.167 | 5 | 1414.233 | 103.414 | .000 |
| Error | 259.833 | 19 | 13.675 | | |
| Total | 7331.000 | 24 | | | |

a. R Squared = .965 (Adjusted R Squared = .955)

Dependent Variable: strategic measures

| Source | Type III Sum of Squares | Df | Mean Square | F | Sig. |
|-----------|-------------------------|----|-------------|---------|------|
| Model | 287737.567 ^a | 5 | 57547.513 | 168.802 | .000 |
| political | 287737.567 | 5 | 57547.513 | 168.802 | .000 |
| Error | 6477.433 | 19 | 340.918 | | |
| Total | 294215.000 | 24 | | | |

a. R Squared = .978 (Adjusted R Squared = .972)

Source: Author, 2013

Results of the univariate ANOVA as seen from Table 4.17 between political forces /Vision& Mission ;Political forces /Strategy evaluation & strategy choice; Political forces / Strategy implementation and; Political forces /strategic measures variables were all statistically significant as evidenced by P values of 0.000 both for the regression models and the linear correlations(less than the significance level at P =0.05) and with the following coefficient of determination statistics -adjusted R Squared values of 0.943,0.953,0.941 and 0.972 respectively. This implies that 94.3%, 95.3%, 94.1% & 97.2% of the respective outcomes are attributable to the impacts of the predictor variable (political forces). We conclude that the model is good (the linear regression represents a good fit) and can be relied upon to explain the

relationship between variables as well as offer predictive value of the proportion of an outcome attributable to a certain condition of the independent variable

Table 4.18 Univariate ANOVA: Economic Force

Dependent Variable: vision and mission

| Source | Type III Sum of Squares | Df | Mean Square | F | Sig. |
|----------|-------------------------|----|-------------|---------|------|
| Model | 6270.424 ^a | 4 | 1567.606 | 101.274 | .000 |
| economic | 6270.424 | 4 | 1567.606 | 101.274 | .000 |
| Error | 309.576 | 20 | 15.479 | | |
| Total | 6580.000 | 24 | | | |

a. R Squared = .953 (Adjusted R Squared = .944)

Dependent Variable: strategy evaluation and strategy choice

| Source | Type III Sum of Squares | Df | Mean Square | F | Sig. |
|----------|-------------------------|----|-------------|---------|------|
| Model | 6954.788 ^a | 4 | 1738.697 | 111.024 | .000 |
| economic | 6954.788 | 4 | 1738.697 | 111.024 | .000 |
| Error | 313.212 | 20 | 15.661 | | |
| Total | 7268.000 | 24 | | | |

a. R Squared = .957 (Adjusted R Squared = .948)

Dependent Variable: strategy implementation

| Source | Type III Sum of Squares | Df | Mean Square | F | Sig. |
|----------|-------------------------|----|-------------|---------|------|
| Model | 7095.822 ^a | 4 | 1773.955 | 150.861 | .000 |
| economic | 7095.822 | 4 | 1773.955 | 150.861 | .000 |
| Error | 235.178 | 20 | 11.759 | | |
| Total | 7331.000 | 24 | | | |

a. R Squared = .968 (Adjusted R Squared = .962)

Dependent Variable: strategy measures

| Source | Type III Sum of Squares | Df | Mean Square | F | Sig. |
|----------|-------------------------|----|-------------|---------|------|
| Model | 289912.549 ^a | 4 | 72478.137 | 336.916 | .000 |
| Economic | 289912.549 | 4 | 72478.137 | 336.916 | .000 |
| Error | 4302.451 | 20 | 215.123 | | |
| Total | 294215.000 | 24 | | | |

a. R Squared = .985 (Adjusted R Squared = .982)

Source: Author, 2013

The univariate ANOVA as seen from Table 4.18 between Economic forces /Vision& Mission ;Economic forces /Strategy evaluation & strategy choice; Economic forces / Strategy implementation and; Economic forces /strategic measures variables were all statistically significant as evidenced by P values of 0.000 both for the regression models and the linear correlations(less than the significance level at P =0.05) and with the following coefficient of determination statistics -adjusted R Squared values of 0.944,0.948,0.962 and 0.982 respectively. This implies that 94.4%, 94.8%, 96.2% & 98.2% of the respective outcomes are attributable to the impacts of the predictor variable(economic forces). We conclude that the model is good (the linear regression represents a good fit) and can be relied upon to explain the relationship between variables as well as offer predictive value of the proportion of an outcome attributable to a certain condition of the independent variable

Table 4.19 Univariate ANOVA: Social Force

Dependent Variable: vision and mission

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|--------|-------------------------|----|-------------|--------|------|
| Model | 6334.625 ^a | 5 | 1266.925 | 98.101 | .000 |
| social | 6334.625 | 5 | 1266.925 | 98.101 | .000 |
| Error | 245.375 | 19 | 12.914 | | |
| Total | 6580.000 | 24 | | | |

a. R Squared = .963 (Adjusted R Squared = .953)

Dependent Variable: strategy evaluation and strategy choice

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|--------|-------------------------|----|-------------|--------|------|
| Model | 6989.325 ^a | 5 | 1397.865 | 95.306 | .000 |
| social | 6989.325 | 5 | 1397.865 | 95.306 | .000 |
| Error | 278.675 | 19 | 14.667 | | |
| Total | 7268.000 | 24 | | | |

a. R Squared = .962 (Adjusted R Squared = .952)

Dependent Variable: strategy implementation

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|--------|-------------------------|----|-------------|---------|------|
| Model | 7092.325 ^a | 5 | 1418.465 | 112.919 | .000 |
| social | 7092.325 | 5 | 1418.465 | 112.919 | .000 |
| Error | 238.675 | 19 | 12.562 | | |
| Total | 7331.000 | 24 | | | |

a. R Squared = .967 (Adjusted R Squared = .959)

Dependent Variable: strategy measures

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|--------|-------------------------|----|-------------|---------|------|
| Model | 289439.450 ^a | 5 | 57887.890 | 230.313 | .000 |
| social | 289439.450 | 5 | 57887.890 | 230.313 | .000 |
| Error | 4775.550 | 19 | 251.345 | | |
| Total | 294215.000 | 24 | | | |

a. R Squared = .984 (Adjusted R Squared = .979)

Source: Author, 2013

The univariate ANOVA as seen from Table 4.19 between Social forces /Vision& Mission ;Social forces /Strategy evaluation & strategy choice; Social forces / Strategy implementation and; Social forces /strategic measures variables were all statistically significant as evidenced by P values of 0.000 both for the regression models and the linear correlations(less than the significance level at P =0.05) and with the following coefficient of determination statistics -adjusted R Squared values of 0.953,0.952,0.959,0.962 and 0.979 respectively. This implies that 95.3%, 95.2%, 95.9% & 97.9% of the respective outcomes are attributable to the impacts of the predictor variable (social forces). We conclude that the model is good (the linear regression represents a good fit) and can be relied upon to explain the relationship between variables as well as offer predictive value of the proportion of an outcome attributable to a certain condition of the independent variable

Table 4.20 Univariate ANOVA: Technological Force

Dependent Variable: vision and mission

| Source | Type III Sum of Squares | Df | Mean Square | F | Sig. |
|---------------|-------------------------|----|-------------|---------|------|
| Model | 6290.952 ^a | 4 | 1572.738 | 108.822 | .000 |
| technological | 6290.952 | 4 | 1572.738 | 108.822 | .000 |
| Error | 289.048 | 20 | 14.452 | | |
| Total | 6580.000 | 24 | | | |

a. R Squared = .956 (Adjusted R Squared = .947)

Dependent Variable: strategy evaluation and strategy choice

| Source | Type III Sum of Squares | Df | Mean Square | F | Sig. |
|---------------|-------------------------|----|-------------|---------|------|
| Model | 6925.238 ^a | 4 | 1731.310 | 101.021 | .000 |
| technological | 6925.238 | 4 | 1731.310 | 101.021 | .000 |
| Error | 342.762 | 20 | 17.138 | | |
| Total | 7268.000 | 24 | | | |

a. R Squared = .953 (Adjusted R Squared = .943)

Dependent Variable: strategy implementation

| Source | Type III Sum of Squares | Df | Mean Square | F | Sig. |
|---------------|-------------------------|----|-------------|---------|------|
| Model | 7050.310 ^a | 4 | 1762.577 | 125.589 | .000 |
| technological | 7050.310 | 4 | 1762.577 | 125.589 | .000 |
| Error | 280.690 | 20 | 14.035 | | |
| Total | 7331.000 | 24 | | | |

a. R Squared = .962 (Adjusted R Squared = .954)

Dependent Variable: strategy measures

| Source | Type III Sum of Squares | Df | Mean Square | F | Sig. |
|---------------|-------------------------|----|-------------|---------|------|
| Model | 288921.310 ^a | 4 | 72230.327 | 272.892 | .000 |
| technological | 288921.310 | 4 | 72230.327 | 272.892 | .000 |
| Error | 5293.690 | 20 | 264.685 | | |
| Total | 294215.000 | 24 | | | |

a. R Squared = .982 (Adjusted R Squared = .978)

Source: Author, 2013

The univariate ANOVA as seen from Table 4.20 between Technological forces /Vision& Mission ;Technological forces /Strategy evaluation & strategy choice; Technological forces / Strategy implementation and; Technological forces /strategic

measures variables were all statistically significant as evidenced by P values of 0.000 both for the regression models and the linear correlations(less than the significance level at P =0.05) and with the following coefficient of determination statistics - adjusted R Squared values of 0.947,0.943,0.954,0.962 and 0.978 respectively. This implies that 94.7%, 94.3%, 95.4% & 97.8% of the respective outcomes are attributable to the impacts of the predictor variable (Technological forces). We conclude that the model is good (the linear regression represents a good fit) and can be relied upon to explain the relationship between variables as well as offer predictive value of the proportion of an outcome attributable to a certain condition of the independent variable

Table 4.21 Univariate ANOVA: Legislative Force

Dependent Variable: vision and mission

| Source | Type III Sum of Squares | Df | Mean Square | F | Sig. |
|-------------|-------------------------|----|-------------|--------|------|
| Model | 6245.958 ^a | 4 | 1561.490 | 93.491 | .000 |
| legislative | 6245.958 | 4 | 1561.490 | 93.491 | .000 |
| Error | 334.042 | 20 | 16.702 | | |
| Total | 6580.000 | 24 | | | |

a. R Squared = .949 (Adjusted R Squared = .939)

Dependent Variable: strategy evaluation and strategy choice

| Source | Type III Sum of Squares | Df | Mean Square | F | Sig. |
|-------------|-------------------------|----|-------------|---------|------|
| Model | 6931.875 ^a | 4 | 1732.969 | 103.115 | .000 |
| legislative | 6931.875 | 4 | 1732.969 | 103.115 | .000 |
| Error | 336.125 | 20 | 16.806 | | |
| Total | 7268.000 | 24 | | | |

a. R Squared = .954 (Adjusted R Squared = .945)

Dependent Variable: strategy implementation

| Source | Type III Sum of Squares | Df | Mean Square | F | Sig. |
|-------------|-------------------------|----|-------------|---------|------|
| Model | 7108.083 ^a | 4 | 1777.021 | 159.434 | .000 |
| legislative | 7108.083 | 4 | 1777.021 | 159.434 | .000 |
| Error | 222.917 | 20 | 11.146 | | |
| Total | 7331.000 | 24 | | | |

a. R Squared = .970 (Adjusted R Squared = .964)

Dependent Variable: strategy measures

| Source | Type III Sum of Squares | Df | Mean Square | F | Sig. |
|-------------|-------------------------|----|-------------|---------|------|
| Model | 288764.000 ^a | 4 | 72191.000 | 264.873 | .000 |
| legislative | 288764.000 | 4 | 72191.000 | 264.873 | .000 |
| Error | 5451.000 | 20 | 272.550 | | |
| Total | 294215.000 | 24 | | | |

a. R Squared = .981 (Adjusted R Squared = .978)

Source: Author, 2013

The univariate ANOVA as seen from Table 4.21 between Legislative forces /Vision& Mission ;Legislative forces /Strategy evaluation & strategy choice; Legislative forces / Strategy implementation and; Legislative forces /strategic measures variables were all statistically significant as evidenced by P values of 0.000 both for the regression models and the linear correlations(less than the significance level at P =0.05) and with the following coefficient of determination statistics -adjusted R Squared values of 0.939,0.949,0.964,0.978 respectively. This implies that 93.9%, 94.9%, 96.4% & 97.8% of the respective outcomes are attributable to the impacts of the predictor variable (Legislative forces). We conclude that the model is good (the linear regression represents a good fit) and can be relied upon to explain the relationship between variables as well as offer predictive value of the proportion of an outcome attributable to a certain condition of the independent variable

Table 4.22 Univariate ANOVA: Environmental Force

Dependent Variable: vision and mission

| Source | Type III Sum of Squares | Df | Mean Square | F | Sig. |
|---------------|-------------------------|----|-------------|--------|------|
| Model | 6308.286 ^a | 5 | 1261.657 | 88.223 | .000 |
| environmental | 6308.286 | 5 | 1261.657 | 88.223 | .000 |
| Error | 271.714 | 19 | 14.301 | | |
| Total | 6580.000 | 24 | | | |

a. R Squared = .959 (Adjusted R Squared = .948)

Dependent Variable: strategy evaluation and strategy choice

| Source | Type III Sum of Squares | Df | Mean Square | F | Sig. |
|---------------|-------------------------|----|-------------|--------|------|
| Model | 6958.571 ^a | 5 | 1391.714 | 85.456 | .000 |
| environmental | 6958.571 | 5 | 1391.714 | 85.456 | .000 |
| Error | 309.429 | 19 | 16.286 | | |
| Total | 7268.000 | 24 | | | |

a. R Squared = .957 (Adjusted R Squared = .946)

Dependent Variable: strategy implementation

| Source | Type III Sum of Squares | Df | Mean Square | F | Sig. |
|---------------|-------------------------|----|-------------|---------|------|
| Model | 7100.886 ^a | 5 | 1420.177 | 117.261 | .000 |
| environmental | 7100.886 | 5 | 1420.177 | 117.261 | .000 |
| Error | 230.114 | 19 | 12.111 | | |
| Total | 7331.000 | 24 | | | |

a. R Squared = .969 (Adjusted R Squared = .960)

Dependent Variable: strategy measures

| Source | Type III Sum of Squares | Df | Mean Square | F | Sig. |
|---------------|-------------------------|----|-------------|---------|------|
| Model | 288627.800 ^a | 5 | 57725.560 | 196.303 | .000 |
| environmental | 288627.800 | 5 | 57725.560 | 196.303 | .000 |
| Error | 5587.200 | 19 | 294.063 | | |
| Total | 294215.000 | 24 | | | |

a. R Squared = .981 (Adjusted R Squared = .976)

The univariate ANOVA as seen from Table 4.22 between Environmental forces /Vision& Mission ;Environmental forces /Strategy evaluation & strategy choice; Environmental forces / Strategy implementation and; Environmental forces /strategic measures variables were all statistically significant as evidenced by P values of 0.000 both for the regression models and the linear correlations(less than the significance level at P =0.05) and with the following coefficient of determination statistics - adjusted R Squared values of 0.948,0.946,0.960,0.976 respectively. This implies that 94.8%, 94.6%, 96.0% & 97.6% of the respective outcomes are attributable to the impacts of the predictor variable (Environmental forces). We conclude that the model is good (the linear regression represents a good fit) and can be relied upon to explain

the relationship between variables as well as offer predictive value of the proportion of an outcome attributable to a certain condition of the independent variable

Table 4.23 Univariate ANOVA: Threat of substitute products

Dependent Variable: vision and mission

| Source | Type III Sum of Squares | Df | Mean Square | F | Sig. |
|-----------------|-------------------------|----|-------------|---------|------|
| Model | 6357.843 ^a | 4 | 1589.461 | 143.093 | .000 |
| Threat sub.prod | 6357.843 | 4 | 1589.461 | 143.093 | .000 |
| Error | 222.157 | 20 | 11.108 | | |
| Total | 6580.000 | 24 | | | |

a. R Squared = .966 (Adjusted R Squared = .959)

Dependent Variable: strategy evaluation and strategy choice

| Source | Type III Sum of Squares | Df | Mean Square | F | Sig. |
|-----------------|-------------------------|----|-------------|---------|------|
| Model | 6992.743 ^a | 4 | 1748.186 | 127.022 | .000 |
| Threat sub prod | 6992.743 | 4 | 1748.186 | 127.022 | .000 |
| Error | 275.257 | 20 | 13.763 | | |
| Total | 7268.000 | 24 | | | |

a. R Squared = .962 (Adjusted R Squared = .955)

Dependent Variable: strategy implementation

| Source | Type III Sum of Squares | Df | Mean Square | F | Sig. |
|-----------------|-------------------------|----|-------------|---------|------|
| Model | 7064.671 ^a | 4 | 1766.168 | 132.631 | .000 |
| Threat sub prod | 7064.671 | 4 | 1766.168 | 132.631 | .000 |
| Error | 266.329 | 20 | 13.316 | | |
| Total | 7331.000 | 24 | | | |

a. R Squared = .964 (Adjusted R Squared = .956)

Dependent Variable: strategy measures

| Source | Type III Sum of Squares | Df | Mean Square | F | Sig. |
|-------------------|-------------------------|----|-------------|---------|------|
| Model | 288515.871 ^a | 4 | 72128.968 | 253.123 | .000 |
| threatsubprod5cat | 288515.871 | 4 | 72128.968 | 253.123 | .000 |
| Error | 5699.129 | 20 | 284.956 | | |
| Total | 294215.000 | 24 | | | |

a. R Squared = .981 (Adjusted R Squared = .977)

Dependent Variable: vision and mission

Source: Author, 2013

The univariate ANOVA as seen from Table 4.23 between Threat of Substitute products /Vision& Mission ; Threat of Substitute products /Strategy evaluation & strategy choice; Threat of Substitute products / Strategy implementation and; Threat of Substitute products /strategic measures variables were all statistically significant as evidenced by P values of 0.000 both for the regression models and the linear correlations(less than the significance level at P =0.05) and with the following coefficient of determination statistics -adjusted R Squared values of 0.959,0.955,0.956,0.977 respectively. This implies that 95.9%, 95.5%, 95.6% & 97.7% of the respective outcomes are attributable to the impacts of the predictor variable (Threat of Substitute products). We conclude that the model is good (the linear regression represents a good fit) and can be relied upon to explain the relationship between variables as well as offer predictive value of the proportion of an outcome attributable to a certain condition of the independent variable

Table 4.24 Univariate ANOVA: Bargaining power of customers

Dependent Variable: vision and mission

| Source | Type III Sum of Squares | Df | Mean Square | F | Sig. |
|------------------|-------------------------|----|-------------|---------|------|
| Model | 6383.083 ^a | 4 | 1595.771 | 162.076 | .000 |
| Barg power .cust | 6383.083 | 4 | 1595.771 | 162.076 | .000 |
| Error | 196.917 | 20 | 9.846 | | |
| Total | 6580.000 | 24 | | | |

a. R Squared = .970 (Adjusted R Squared = .964)

Dependent Variable: strategy evaluation and strategy choice

| Source | Type III Sum of Squares | Df | Mean Square | F | Sig. |
|------------------|-------------------------|----|-------------|---------|------|
| Model | 7077.083 ^a | 4 | 1769.271 | 185.345 | .000 |
| Barg.power.fcust | 7077.083 | 4 | 1769.271 | 185.345 | .000 |
| Error | 190.917 | 20 | 9.546 | | |
| Total | 7268.000 | 24 | | | |

a. R Squared = .974 (Adjusted R Squared = .968)

Dependent Variable: strategy implementation

| Source | Type III Sum of Squares | Df | Mean Square | F | Sig. |
|-----------------|-------------------------|----|-------------|---------|------|
| Model | 7130.778 ^a | 4 | 1782.694 | 178.072 | .000 |
| Barg power cust | 7130.778 | 4 | 1782.694 | 178.072 | .000 |
| Error | 200.222 | 20 | 10.011 | | |
| Total | 7331.000 | 24 | | | |

a. R Squared = .973 (Adjusted R Squared = .967)

Dependent Variable: strategy measures

| Source | Type III Sum of Squares | Df | Mean Square | F | Sig. |
|-----------------|-------------------------|----|-------------|---------|------|
| Model | 289996.111 ^a | 4 | 72499.028 | 343.688 | .000 |
| Barg power cust | 289996.111 | 4 | 72499.028 | 343.688 | .000 |
| Error | 4218.889 | 20 | 210.944 | | |
| Total | 294215.000 | 24 | | | |

a. R Squared = .986 (Adjusted R Squared = .983)

Source: Author, 2013

The univariate ANOVA as seen from Table 4.24 between Bargaining power of customers/Vision& Mission ; Bargaining power of customers /Strategy evaluation & strategy choice; Bargaining power of customers / Strategy implementation and; Bargaining power of customers /strategic measures variables were all statistically significant as evidenced by P values of 0.000 both for the regression models and the linear correlations(less than the significance level at P =0.05) and with the following coefficient of determination statistics -adjusted R Squared values of 0.964,0.968,0.967,0.983 respectively. This implies that 96.4%, 96.8%, 96.7% & 98.3% of the respective outcomes are attributable to the impacts of the predictor variable (Bargaining power of customers). We conclude that the model is good (the linear regression represents a good fit) and can be relied upon to explain the relationship between variables as well as offer predictive value of the proportion of an outcome attributable to a certain condition of the independent variable

Table 4.25 Univariate ANOVA: Bargaining Power of suppliers

Dependent Variable: vision and mission

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|-----------------|-------------------------|----|-------------|---------|------|
| Model | 6348.800 ^a | 5 | 1269.760 | 104.349 | .000 |
| Barg.power.supp | 6348.800 | 5 | 1269.760 | 104.349 | .000 |
| Error | 231.200 | 19 | 12.168 | | |
| Total | 6580.000 | 24 | | | |

a. R Squared = .965 (Adjusted R Squared = .956)

Dependent Variable: strategy evaluation and strategy choice

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|-----------------|-------------------------|----|-------------|---------|------|
| Model | 7027.700 ^a | 5 | 1405.540 | 111.133 | .000 |
| Barg.power supp | 7027.700 | 5 | 1405.540 | 111.133 | .000 |
| Error | 240.300 | 19 | 12.647 | | |
| Total | 7268.000 | 24 | | | |

a. R Squared = .967 (Adjusted R Squared = .958)

Dependent Variable: strategy implementation

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|-----------------|-------------------------|----|-------------|--------|------|
| Model | 7045.800 ^a | 5 | 1409.160 | 93.878 | .000 |
| Barg.power.supp | 7045.800 | 5 | 1409.160 | 93.878 | .000 |
| Error | 285.200 | 19 | 15.011 | | |
| Total | 7331.000 | 24 | | | |

a. R Squared = .961 (Adjusted R Squared = .951)

Dependent Variable: strategy measures

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|-----------------|-------------------------|----|-------------|---------|------|
| Model | 289528.700 ^a | 5 | 57905.740 | 234.771 | .000 |
| bpowerofsup5cat | 289528.700 | 5 | 57905.740 | 234.771 | .000 |
| Error | 4686.300 | 19 | 246.647 | | |
| Total | 294215.000 | 24 | | | |

a. R Squared = .984 (Adjusted R Squared = .980)

Dependent Variable: vision and mission

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|-----------------|-------------------------|----|-------------|---------|------|
| Model | 6348.800 ^a | 5 | 1269.760 | 104.349 | .000 |
| bpowerofsup5cat | 6348.800 | 5 | 1269.760 | 104.349 | .000 |
| Error | 231.200 | 19 | 12.168 | | |
| Total | 6580.000 | 24 | | | |

a. R Squared = .965 (Adjusted R Squared = .956)

Dependent Variable: strategy evaluation and strategy choice

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|-----------------|-------------------------|----|-------------|---------|------|
| Model | 7027.700 ^a | 5 | 1405.540 | 111.133 | .000 |
| bpowerofsup5cat | 7027.700 | 5 | 1405.540 | 111.133 | .000 |
| Error | 240.300 | 19 | 12.647 | | |
| Total | 7268.000 | 24 | | | |

a. R Squared = .967 (Adjusted R Squared = .958)

Dependent Variable: strategy implementation

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|-----------------|-------------------------|----|-------------|--------|------|
| Model | 7045.800 ^a | 5 | 1409.160 | 93.878 | .000 |
| bpowerofsup5cat | 7045.800 | 5 | 1409.160 | 93.878 | .000 |
| Error | 285.200 | 19 | 15.011 | | |
| Total | 7331.000 | 24 | | | |

a. R Squared = .961 (Adjusted R Squared = .951)

Dependent Variable: strategy measures

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|-----------------|-------------------------|----|-------------|---------|------|
| Model | 289528.700 ^a | 5 | 57905.740 | 234.771 | .000 |
| bpowerofsup5cat | 289528.700 | 5 | 57905.740 | 234.771 | .000 |
| Error | 4686.300 | 19 | 246.647 | | |
| Total | 294215.000 | 24 | | | |

a. R Squared = .984 (Adjusted R Squared = .980)

Source: Author, 2013

The univariate ANOVA as seen from Table 4.25 between Bargaining power of suppliers/Vision& Mission ; Bargaining power of suppliers /Strategy evaluation & strategy choice; Bargaining power of suppliers / Strategy implementation and; / Bargaining power of suppliers /strategic measures variables were all statistically significant as evidenced by P values of 0.000 both for the regression models and the linear correlations(less than the significance level at P =0.05) and with the following coefficient of determination statistics -adjusted R Squared values of 0.956,0.958,0.952,0.980 respectively. This implies that 95.6%, 95.8%, 95.2% & 98.0% of the respective outcomes are attributable to the impacts of the predictor variable (Bargaining power of suppliers). We conclude that the model is good (the linear regression represents a good fit) and can be relied upon to explain the

relationship between variables as well as offer predictive value of the proportion of an outcome attributable to a certain condition of the independent variable

Table 4.26 Univariate ANOVA: Intensity of competitive rivalry

Dependent Variable: vision and mission

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|-------------------|-------------------------|----|-------------|---------|------|
| Model | 6354.277 ^a | 4 | 1588.569 | 140.754 | .000 |
| Int compt rivalry | 6354.277 | 4 | 1588.569 | 140.754 | .000 |
| Error | 225.723 | 20 | 11.286 | | |
| Total | 6580.000 | 24 | | | |

a. R Squared = .966 (Adjusted R Squared = .959)

Dependent Variable: strategy evaluation and strategy choice

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|-------------------|-------------------------|----|-------------|---------|------|
| Model | 7058.943 ^a | 4 | 1764.736 | 168.828 | .000 |
| Int compt rivalry | 7058.943 | 4 | 1764.736 | 168.828 | .000 |
| Error | 209.057 | 20 | 10.453 | | |
| Total | 7268.000 | 24 | | | |

a. R Squared = .971 (Adjusted R Squared = .965)

Dependent Variable: strategy implementation

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|-------------------|-------------------------|----|-------------|---------|------|
| Model | 7098.652 ^a | 4 | 1774.663 | 152.759 | .000 |
| Int compt rivalry | 7098.652 | 4 | 1774.663 | 152.759 | .000 |
| Error | 232.348 | 20 | 11.617 | | |
| Total | 7331.000 | 24 | | | |

a. R Squared = .968 (Adjusted R Squared = .962)

Dependent Variable: strategy measures

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|-------------------|-------------------------|----|-------------|---------|------|
| Model | 291417.943 ^a | 4 | 72854.486 | 520.937 | .000 |
| int compt rivalry | 291417.943 | 4 | 72854.486 | 520.937 | .000 |
| Error | 2797.057 | 20 | 139.853 | | |
| Total | 294215.000 | 24 | | | |

a. R Squared = .990 (Adjusted R Squared = .989)

Source: Author, 2013

The univariate ANOVA as seen from Table 4.26 between Intensity of competitive rivalry/Vision& Mission ; between Intensity of competitive rivalry /Strategy evaluation & strategy choice; between Intensity of competitive rivalry / Strategy implementation and; / between Intensity of competitive rivalry /strategic measures variables were all statistically significant as evidenced by P values of 0.000 both for the regression models and the linear correlations(less than the significance level at P =0.05) and with the following coefficient of determination statistics -adjusted R Squared values of 0.959,0.965,0.962,0.989 respectively. This implies that 95.9%, 96.5%, 96.2% & 98.9% of the respective outcomes are attributable to the impacts of the predictor variable (between Intensity of competitive rivalry). We conclude that the model is good (the linear regression represents a good fit) and can be relied upon to explain the relationship between variables as well as offer predictive value of the proportion of an outcome attributable to a certain condition of the independent variable

Table 4.27 Univariate ANOVA: Threat of new entrants

Dependent Variable: vision and mission

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---------------------|-------------------------|----|-------------|--------|------|
| Model | 6253.043 ^a | 4 | 1563.261 | 95.625 | .000 |
| Threat new entrants | 6253.043 | 4 | 1563.261 | 95.625 | .000 |
| Error | 326.957 | 20 | 16.348 | | |
| Total | 6580.000 | 24 | | | |

a. R Squared = .950 (Adjusted R Squared = .940)

Dependent Variable: strategy evaluation and strategy choice

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---------------------|-------------------------|----|-------------|---------|------|
| Model | 7004.743 ^a | 4 | 1751.186 | 133.040 | .000 |
| Threat new entrants | 7004.743 | 4 | 1751.186 | 133.040 | .000 |
| Error | 263.257 | 20 | 13.163 | | |
| Total | 7268.000 | 24 | | | |

a. R Squared = .964 (Adjusted R Squared = .957)

Dependent Variable: strategy implementation

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---------------------|-------------------------|----|-------------|---------|------|
| Model | 7097.471 ^a | 4 | 1774.368 | 151.962 | .000 |
| Threat new entrants | 7097.471 | 4 | 1774.368 | 151.962 | .000 |
| Error | 233.529 | 20 | 11.676 | | |
| Total | 7331.000 | 24 | | | |

a. R Squared = .968 (Adjusted R Squared = .962)

Dependent Variable: strategy measures

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---------------------|-------------------------|----|-------------|---------|------|
| Model | 290163.871 ^a | 4 | 72540.968 | 358.127 | .000 |
| Threat new entrants | 290163.871 | 4 | 72540.968 | 358.127 | .000 |
| Error | 4051.129 | 20 | 202.556 | | |
| Total | 294215.000 | 24 | | | |

a. R Squared = .986 (Adjusted R Squared = .983)

Source: Author, 2013

The univariate ANOVA as seen from Table 4.27 between Threat of new entrants/Vision& Mission ; between Threat of new entrants /Strategy evaluation & strategy choice; between Threat of new entrants/ Strategy implementation and; / between Threat of new entrants /strategic measures variables were all statistically significant as evidenced by P values of 0.000 both for the regression models and the linear correlations(less than the significance level at P =0.05) and with the following coefficient of determination statistics -adjusted R Squared values of 0.940,0.957,0.962,0.983 respectively. This implies that 94.0%, 95.7%, 96.2% & 98.3% of the respective outcomes are attributable to the impacts of the predictor variable (between Threat of new entrants). We conclude that the model is good (the linear regression represents a good fit) and can be relied upon to explain the relationship between variables as well as offer predictive value of the proportion of an outcome attributable to a certain condition of the independent variable

4.5.6 Multiple Regression Analysis

In addition, the researcher conducted a multiple regression analysis so as to establish the relationship between environmental forces and various dimensions of strategy development among mobile financial service providers in Kenya. Multiple regression

is a statistical technique that allows us to predict a score of one variable on the basis of their scores on several other variables. The main purpose of multiple regressions is to learn more about the relationship between several independent or predictor variables and a dependent or criterion variable

Table 4.28 Regression : vision and mission

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|--------|-------------------|
| 1 | Regression | 808.819 | 11 | 73.529 | 13.167 | .000 ^b |
| | Residual | 67.014 | 12 | 5.585 | | |
| | Total | 875.833 | 23 | | | |

a. Dependent Variable: vision and mission

b. Predictors: (Constant), environmental forces

Coefficients^a

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | |
|-------|----------------------------------|------------|---------------------------|--------|--------|------|
| | B | Std. Error | Beta | | | |
| 1 | (Constant) | -.620 | 1.540 | | -.403 | .694 |
| | Political forces | .401 | .178 | .412 | 2.258 | .043 |
| | Economic forces | .625 | .263 | .644 | 2.372 | .035 |
| | Social forces | 1.163 | .284 | 1.198 | 4.098 | .001 |
| | Technological forces | -.720 | .297 | -.810 | -2.426 | .032 |
| | Legislative forces | .102 | .218 | .107 | .467 | .649 |
| | Environmental forces | -.865 | .243 | -.987 | -3.558 | .004 |
| | Threat of substitute products | .226 | .192 | .251 | 1.181 | .260 |
| | Bargaining power of customers | -1.229 | .475 | -1.319 | -2.588 | .024 |
| | Bargaining power of suppliers | 1.099 | .282 | 1.172 | 3.898 | .002 |
| | Intensity of competitive rivalry | .771 | .455 | .818 | 1.693 | .116 |
| | Threat of new entrants | -.509 | .280 | -.528 | -1.816 | .094 |

Source: Author, 2013

The researcher conducted a multiple regression analysis so as to establish the relationship between various dimensions of strategy development and the eleven independent (external environment) variables.

The regression equation ($Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \beta_7X_7 + \beta_8X_8 + \beta_9X_9 + \beta_{10}X_{10} + \beta_{11}X_{11}$) now becomes based on the coefficients derived in Table 4.28:

$$(Y = -0.620 + 0.401X_1 + 0.625X_2 + 1.163X_3 - 0.720X_4 + 0.102X_5 - 0.865X_6 + 0.226X_7 - 1.229X_8 + 1.099X_9 + 0.771X_{10} - 0.509X_{11})$$

(NB: Adjustments can be made for the Standard error to get relevant range)

Where

Y=Mission and Vision

X_1 = political forces ; X_2 = economic forces; X_3 =social forces X_4 ; =technological forces; X_5 = legislative forces; X_6 = environmental forces; X_7 =threat of substitute products; X_8 =bargaining power of customers; X_9 =bargaining power of suppliers ; X_{10} = intensity of competitive rivalry; X_{11} =threat of new entrants

According to the regression equation established, taking all independent variables political forces, economic forces, social forces, technological force, legislative forces, environmental forces, threat of substitute products, bargaining power of customers, bargaining power of suppliers , intensity of competitive rivalry and threat of new entrants constant at zero , the vision and mission outcomes would regress or be negatively impacted by a magnitude of -0.620 among mobile financial service providers in Kenya .The data findings also indicate that all the independent variables with the exception of legislative, threat of substitute products and intensity of competitive rivalry had a significant impact on the vision and mission variable given they all had lower p values than the 0.05 significance level .From the study Social forces (P value of 0.001)= had the biggest impact on vision mission where a unit increase assuming all other forces constant led to a 1.226 increase in vision and mission outcome .In terms of order of impact the other significant forces were intensity of competitive rivalry, economic forces and political forces with contributions to vision and mission outcomes of 0.771, 0.625 and 0.401respectively

for every unit increase. Interestingly for every unit increase in the bargaining power of customers it had a significant negative impact on vision and mission outcomes with a contribution of -1.229.

Table 4.29 Regression : strategy evaluation and strategy choice

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|-------|-------------------|
| 1 | Regression | 835.487 | 11 | 75.953 | 9.593 | .000 ^b |
| | Residual | 95.013 | 12 | 7.918 | | |
| | Total | 930.500 | 23 | | | |

a. Dependent Variable: strategy evaluation and strategy choice

b. Predictors: (Constant), environmental forces

Coefficients^a

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | |
|-------|----------------------------------|------------|---------------------------|-------|--------|------|
| | B | Std. Error | Beta | | | |
| 1 | (Constant) | .486 | 1.834 | | .265 | .796 |
| | Political forces | -.147 | .211 | -.147 | -.697 | .499 |
| | Economic forces | .328 | .314 | .328 | 1.047 | .316 |
| | Social forces | .633 | .338 | .633 | 1.875 | .085 |
| | Technological forces | -.467 | .354 | -.510 | -1.321 | .211 |
| | Legislative forces | -.358 | .259 | -.365 | -1.380 | .193 |
| | Environmental forces | -.244 | .290 | -.270 | -.842 | .416 |
| | Threat of substitute products | .075 | .228 | .081 | .329 | .748 |
| | bargaining power of customers | -.037 | .565 | -.039 | -.066 | .949 |
| | Bargaining power of suppliers | .322 | .336 | .333 | .958 | .357 |
| | Intensity of competitive rivalry | .627 | .542 | .645 | 1.156 | .270 |
| | Threat of new entrants | .241 | .334 | .243 | .724 | .483 |

a. Dependent Variable: strategy evaluation and strategy choice

Source: Author, 2013

The regression equation ($Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \beta_7X_7 + \beta_8X_8 + \beta_9X_9 + \beta_{10}X_{10} + \beta_{11}X_{11}$) now becomes based on coefficients derived in Table 4.29:

$$(Y = 0.486 - 0.147X_1 + 0.328X_2 + 0.633X_3 - 0.467X_4 - 0.358X_5 - 0.244X_6 + 0.075X_7 - 0.037X_8 + 0.322X_9 + 0.627X_{10} + 0.241X_{11})$$

(NB: Adjustments can be made for the Standard error to get relevant range)

Where

Y=Strategy evaluation and strategy choice

X_1 = political forces; X_2 = economic forces; X_3 =social forces X_4 ; =technological forces; X_5 = legislative forces; X_6 = environmental forces; X_7 =threat of substitute products; X_8 =bargaining power of customers; X_9 =bargaining power of suppliers ; X_{10} = intensity of competitive rivalry; X_{11} =threat of new entrants

From the regression equation , the findings indicate that all independent variables being constant at zero, the level of strategy evaluation and strategy choice amongst firms in the mobile money market would be at 0.486. Interestingly using the significance level criterion at $p=0.05$, the findings are statistically insignificant as all the P values are greater than 0.05. This implies that the contributions to strategy evaluation and strategy choice are not necessarily attributable to the predictor variables and the regression equation may not be a good predictor of strategy evaluation and strategy choice outcomes.

Table 4.30 Regression : strategy implementation

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|-------|-------------------|
| 1 | Regression | 727.174 | 11 | 66.107 | 4.709 | .006 ^b |
| | Residual | 168.451 | 12 | 14.038 | | |
| | Total | 895.625 | 23 | | | |

a. Dependent Variable: strategy implementation

b. Predictors: (Constant), environmental forces

Coefficients^a

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|----------------------------------|-----------------------------|------------|---------------------------|-------|------|
| | B | Std. Error | Beta | | |
| 1 (Constant) | .286 | 2.441 | | .117 | .909 |
| Political forces | -.141 | .282 | -.143 | -.501 | .625 |
| Economic forces | .053 | .418 | .054 | .127 | .901 |
| Social forces | .061 | .450 | .062 | .135 | .895 |
| Technological forces | .158 | .471 | .176 | .335 | .743 |
| Legislative forces | .366 | .345 | .381 | 1.061 | .309 |
| Environmental forces | .179 | .386 | .202 | .463 | .652 |
| Threat of substitute products | -.125 | .304 | -.137 | -.412 | .688 |
| Bargaining power of customers | .665 | .753 | .706 | .884 | .394 |
| Bargaining power of suppliers | -.225 | .447 | -.237 | -.502 | .625 |
| Intensity of competitive rivalry | -.662 | .722 | -.695 | -.918 | .377 |
| Threat of new entrants | .583 | .444 | .599 | 1.313 | .214 |

a. Dependent Variable: strategy implementation

Source: Author, 2013

The regression equation ($Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \beta_7X_7 + \beta_8X_8 + \beta_9X_9 + \beta_{10}X_{10} + \beta_{11}X_{11}$) now becomes based on coefficients from Table 4.30:

$$(Y = 0.286 - 0.141X_1 + 0.328X_2 + 0.53X_3 + 0.61X_4 + 0.158X_5 - 0.366X_6 + 0.179X_7 - 0.125X_8 + 0.665X_9 - 0.225X_{10} + 0.662X_{11} + 0.583X_{11})$$

(NB: Adjustments can be made for the Standard error to get relevant range)

Where

Y=Strategy implementation

X_1 = political forces; X_2 = economic forces; X_3 =social forces X_4 ; =technological forces; X_5 = legislative forces; X_6 = environmental forces; X_7 =threat of substitute products; X_8 =bargaining power of customers; X_9 =bargaining power of suppliers ; X_{10} = intensity of competitive rivalry; X_{11} =threat of new entrants

From the regression equation , the findings indicate that all independent variables being constant at zero, the residual level of strategy implementation is 0.286 amongst firms in the mobile money market .Interestingly using the significance level criterion at p=0.05, the findings are statistically insignificant for all the independent variables as all the P values are greater than 0.05.This implies that the contributions to strategy evaluation and strategy choice are not necessarily attributable to the predictor variables. This leads us to conclude that the regression model may not be a good predictor of the outcomes for the strategy implementation dimension.

Table 4.31 Regression: Strategic measures

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|--------------|----------------|----|-------------|--------|-------------------|
| 1 Regression | 28787.752 | 11 | 2617.068 | 16.738 | .000 ^b |
| Residual | 1876.206 | 12 | 156.351 | | |
| Total | 30663.958 | 23 | | | |

a. Dependent Variable: strategy measures

b. Predictors: (Constant), environmental forces

Coefficients^a

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|----------------------------------|-----------------------------|------------|---------------------------|--------|------|
| | B | Std. Error | Beta | | |
| 1 (Constant) | 3.535 | 8.148 | | .434 | .672 |
| Political forces | -1.070 | .940 | -.186 | -1.139 | .277 |
| Economic forces | 1.643 | 1.394 | .286 | 1.179 | .261 |
| Social forces | 3.448 | 1.501 | .600 | 2.297 | .040 |
| Technological forces | -.220 | 1.571 | -.042 | -.140 | .891 |
| Legislative forces | .632 | 1.152 | .112 | .548 | .594 |
| Environmental forces | -.121 | 1.287 | -.023 | -.094 | .926 |
| Threat of substitute products | -1.286 | 1.014 | -.241 | -1.268 | .229 |
| Bargaining power of customers | -.840 | 2.513 | -.152 | -.334 | .744 |
| Bargaining power of suppliers | .318 | 1.493 | .057 | .213 | .835 |
| Intensity of competitive rivalry | 3.191 | 2.409 | .572 | 1.325 | .210 |
| Threat of new entrants | .384 | 1.482 | .067 | .259 | .800 |

a. Dependent Variable: strategy measures

Source: Author, 2013

The regression equation ($Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \beta_7X_7 + \beta_8X_8 + \beta_9X_9 + \beta_{10}X_{10} + \beta_{11}X_{11}$) based on the coefficients derived from Table 4.31 now becomes:

$$(Y = 3.535 - 0.107X_1 + 1.643X_2 + 3.448X_3 - 0.220X_4 + 0.632X_5 - 0.121X_6 - 0.1286X_7 - 0.840X_8 + 0.318X_9 + 3.1 + 0.384X_{11})$$

(NB: Adjustments can be made for the Standard error to get relevant range)

Where

Y=Strategic measures

X_1 = political forces; X_2 = economic forces; X_3 =social forces X_4 ; =technological forces; X_5 = legislative forces; X_6 = environmental forces; X_7 =threat of substitute products; X_8 =bargaining power of customers; X_9 =bargaining power of suppliers ; X_{10} = intensity of competitive rivalry; X_{11} =threat of new entrants

According to the regression equation(Table 4.31) established, taking all independent variables at zero the default level of strategic measures instituted among mobile financial service providers in Kenya realized would be 3.535. In terms of statistical significance only the social forces ($p=0.40$) are statistically significant with a p value that is less than 0.05. This leads us to make the conclusion that the regression equation may not be relied upon as a predictor of strategic measures given multiple independent variables.

From the four multiple regression equations relating to the various strategy dimension (outcomes) only the vision and mission regression equation appears a more indicative predictor as most independent variables met the test for statistical significance.

4.6 Strategic Measures Taken To Cope With The Impact of Environmental Forces

This section of the study sought to establish the strategic measures that had been instituted or effected by mobile money firms to cope with the impact of environmental forces. Many possible relevant measures gathered in the secondary literature review were listed in the data gathering instrument with an open ended section for respondents to indicate the extent these had been implemented. A 5 point scale was provided, where the extent to which strategic measures had been

implemented would be measured on a likert type scale where , 1= not at all; 2= little extent; 3= moderate extent; 4= great extent; 5=very great extent. Strategic measures were further subcategorized into 31different attributes creating a 155 point scale (ranging from 0-155) where scores were recalibrated as 0-29 = Not at all; >29 – 59 =Little extent; >59 -89 = Moderate extent;>89 – 119 = Great Extent; >119=very great extent

The attributes of strategic measures were; enhanced CSR/customer loyalty schemes, low cost pricing of service, differentiated our product/service offering, expanded into new geographic region, alliance with data/I.T firms, enhanced regulatory compliance, merged/acquired other firms, targeted niche market/customer segments, diversified in other financial services, expanded agent network, premium pricing of service, consolidated with other products/services, injected further capital/human investment, invested further in secure technology, implemented some cost cutting measures, differentiated service pricing, established new distribution channels, partnered bank/EFT firm for M-Banking, lowered transaction values, interoperability with competitors/others, invested further in network improvement, outsourced some related services, integrated supply chain ownership, enhanced coordination with regulators, increased transaction values, enhanced customer knowledge information, increased advertising/awareness campaigns and organizational restructuring/downsizing

Out of the total 24 respondents (see Table 4.32) 10 (42%) indicated that they had implemented the outlined strategic measures to a very great extent; 11 (46%) indicated they had implemented to a great extent; 1 respondent (4%) indicated to a moderate extent; and 2 (8%) to a little extent. The mean score (refer to Table 4.9) for the extent to which strategic measures had been implemented to cope with environmental forces from the respondents was 104.79 (standard deviation of 7.453) placing them in the category of “great extent”.

Table 4.32: Descriptives: Strategic Measures taken to cope with environmental forces

| | Total | strategy measures | | | |
|---------------|------------|-------------------|-----------------|--------------|-------------------|
| | | Not at all | Moderate extent | Great extent | Very Great extent |
| Total | 24 100% | 2 8% | 1 4% | 11 46% | 10 42% |
| Safaricom | 4 17% | 0 0% | 1 4% | 3 12% | 0 0% |
| Airtelkenya | 4 17% | 0 0% | 0 0% | 3 12% | 1 4% |
| Orange Kenya | 4 17% | 1 4% | 0 0% | 2 8% | 1 4% |
| Yu Mobile | 4 17% | 0 0% | 0 0% | 0 0% | 4 17% |
| Tangaza Kenya | 4 17% | 1 4% | 0 0% | 2 8% | 1 4% |
| Mobikash | 4 17% | 0 0% | 0 0% | 1 4% | 3 12% |

Source: Author, 2013

The respondents' breakdown by mobile financial services firm is also indicated in Table 4.32. Clearly from the table most respondents within the firms indicated that out of the 6 firms Safaricom and Airtel each had 3 out of 4 respondents indicating they had implemented strategic measures to a great extent with Mobile Pay Ltd (Tangaza) and Mobikash having 3 out of 4 respondents indicating to a very great extent. Essar Telecom (Yu mobile) had all 4 respondents indicating they had implemented strategic measures to a very great extent; while Telkom Orange had 2 respondents indicating to a great extent and 1 to a very great extent. These findings serve to confirm the mean score indicating that the strategic measures have been implemented to a great extent

Whether as a rational planning process or emergent property as the strategy development schools of thought posit, several almost similar strategic measures have been implemented to a great extent by mobile financial service firms. This affirms a cognitive process of strategy analysis or recognition of need to modify strategy, strategy evaluation and choice, strategy implementation and alignment of organizational resources. From the large consensus on implementation of strategic measures (greater than all the other strategy development dimensions) we conclude

that the analytical stage necessarily involves some sort of a process of environmental and industry analysis by mobile money firms which when evaluated against firm specific factors informs the strategy development process .The similarity of strategic measures adopted could also be a pointer to discontinuous changes and higher levels of environmental turbulence leading to tactical, copycat or reactive approaches to strategy development for purposes of environmental fit. In general this confirms what scholars deem the complex and multifaceted nature of strategy

4.7 Discussion

From results of the study, demographic information of the firms involved in provision of mobile financial services was not sufficient to establish empirically that organizations that align their strategies to external environmental demands outperform those that don't as articulated by scholars Miles & snow and Venkatraman & Prescott. It can be argued that Safaricom's mobile financial services being the pioneers in the market with a two year head start over their nearest competitors may have developed competencies and competitive advantage in their value chain over their rivals. Similarly other parameters besides turnover, such as profitability, service quality, impact of ownership changes etc would have to be incorporated to gauge overall performance.

In gauging the effect of each of the environmental forces on strategy development in general, there was largely consensus on the findings with all the external environmental forces (with the exception of environmental forces) rated as impacting to a great extent. These relationships between environmental forces and strategy development are evidenced in the correlation and ANOVA analysis even though multiple regression analysis were inconclusive .This indicates awareness on the part of respondents and is consistent with the studies by Duncan & Ginter and also May et al on the need to study external forces with a view to evaluate their likely impact and controllability. This is supported by the similarity of strategic measures adopted by the mobile financial service firms to cope with those external forces. The findings of the study are also relatively consistent with the assertions of previous scholars like Thompson et al that the biggest strategy influences emanate from the immediate industry/ competitive environment hence the applicability and relevance of Porters five force analysis tool. This is evidenced in the study by the relatively stronger correlations shown between industry forces and the various strategy development

dimensions than between the remote environment forces and strategy development dimensions. However, of great significance in this study was the impact of technological, economic and social forces as key drivers of strategy with issues of technology cost, technology lifecycle, disposable incomes, employment, customer lifestyles, fads and tastes coming to the fore

From the study, there were not only high correlations between the external environmental forces and strategy development dimensions, but also between the strategy development dimensions themselves. This was captured in the correlation analysis between strategy development dimensions lending support to a form of rational planning process amongst the mobile financial service firms as posited by Thompson et al .However given the impact of technology, social forces and huge consensus on adoption of similar strategic measures as noted in this study, it is more consistent with the sentiments noted by Bourgeois & Eisenhardt and also Drucker about strategy development in an age of ‘discontinuity’.These scholars were alluding to high technology environments of rapid and discontinuous change in demand, technology etc that renders information inaccurate or obsolete. The findings of this study also lend support to Whittingtons evolutionary approach to strategy where some of the firms seem to copy similar strategic measures for purposes of survival (as the main objective) and environmental fit while others leaned towards crafting strategy rather than formalizing it as Mintzberg and Whittingtons processual school advocate.

This study established the adoption of largely several similar strategic measures amongst mobile financial service firms. This is not consistent with Porters generic strategies of pursuing cost leadership or differentiation with a focus on niche or the mass market as a basis for competitive advantage. Rather, all the firms while targeting the mass market offered differentiated service/products and differentiated pricing as well as implementing measures consistent with the growth models advanced by the BCG matrix and Ansoff matrix models. The high priority on enhanced risk management measures as indicated in the study findings is also a pointer to recognition of turbulence in the external environment and need to manage it as well as confirmation of the emergent, crafted or evolutionary lean to strategy development amongst the mobile financial service firms.

CHAPTER FIVE: SUMMARY CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter outlines the summary of findings, discussions, conclusions, limitations and recommendations for further research studies both for policy and application by the firms in the mobile money market in Kenya. The objectives of the study were to determine the major external environmental forces that impact strategy development in the firms operating in the mobile money market in Kenya and to establish the measures taken to cope with the external environmental forces that impact on the firms operating in the mobile money market. The study attempted to answer the questions: what are the major external environmental forces that impact strategy development in firms operating in the mobile money market in Kenya? What are the strategic measures being taken by firms in the mobile money industry to counter the key macro environmental forces impacting them?

5.2 Summary of Findings

The study of environmental forces that is both external and industry forces has been deemed crucial in the development of firm strategy given the interdependencies and the symbiotic relationship between the external and internal environment of business. For that purpose, various categories of environmental forces are distinguished as well as the tools for environmental analysis. It is also accepted that strategy development is a multifaceted process with varying concepts, dimensions, schools of thought and tools used to explain its development. The objective of this study was to identify the key environmental forces and their impact on the strategy development process as well as the strategic measures taken to cope with them.

The study established that all the respondents in the firms offering mobile financial services in Kenya were conversant with the key external environmental forces and were also able to categorize the impacts of those forces on strategy development from their functional perspectives. These forces include political, economic, social, technological, legislative, environmental, customer bargaining power, supplier bargaining power, intensity of industry rivalry, threat of new entrants and threat of substitute products. The respondents were also able to identify and evaluate the impacts of the forces on the various strategy development dimensions including

vision & mission, strategy evaluation & strategy choice, strategy implementation and strategic measures.

The firms provide mobile financial services under various brand names Safaricom Ltd with the MPESA brand; Airtel Money brand for Airtel Kenya Ltd , Orange money brand for Telkom Orange, Essar Telecom with the YU Cash brand , Tangaza brand for Mobile Pay Ltd and Mobikash Ltd with its Mobikash brand..The ownership structures of the firms in the mobile money business in Kenya are varied with Telkom Orange and Safaricom Kenya Ltd being joint private/public ventures (including foreign shareholders),while Airtel Kenya, and Essar Telecom are privately owned ventures largely by foreign entities; while Mobile Pay Ltd and Mobikash Ltd are fully privately owned local firms.

It was established that collectively, political forces impacted the development of strategy to a great extent among the mobile financial service providers in Kenya. The key identified political forces included, state provided infrastructure government systems/structures, investment incentives, international relations and political stability/leadership. From the study, economic factors such as inflation, tax regime (fiscal policy), disposable income/employment level ,exchange rates and interest rates (and monetary policy) influences strategy development among the mobile financial service providers in Kenya to a great extent.

The study also established that social forces such as trends, fads and lifestyles, consumer attitudes/opinions and demographics (age, gender, race e.t.c) education levels and religious/ethnic /cultural factors influences strategy development among the mobile financial service providers in Kenya to a great extent. In addition technological forces including, technology lifecycles & obsolescence, new technology impacts, internet impact, technology access & cost and innovations & inventions influence strategy development among the mobile financial service providers in Kenya to a great extent. Technological forces were ranked highest in terms of impact score on strategy development

Legislative forces like the current laws & regulations, consumer protection, regulatory bodies & processes, competitive regulation and industry specific regulation influence strategy development among the mobile financial service providers in Kenya to a great extent while , environmental factors such as international

environmental issues, topography (physical features, geography etc), ecological factors and climate change had the least impact on strategy development among the mobile financial service providers in Kenya with its influence indicated as being moderate.

The study further found that industry forces comprising of the threat of substitute products, bargaining power of customers, bargaining power of suppliers, and intensity of competitive rivalry and threat of new entrants influenced strategy development among the mobile financial service providers in Kenya to a great extent. Under the threat of substitute products, buyer switching costs, the number of substitute products, the ease of substitution, buyer propensity to substitute and the price performance of substitutes all served to influence strategy development among the mobile financial service providers in Kenya to a great extent.

Under the power of buyers bargaining leverage the study established that collectively buyer information availability, availability of substitute products, buyer dependence on existing distribution channels and buyer price sensitivity all influenced strategy development among the mobile financial service providers in Kenya to a great extent. From the study, the power of the supplier bargaining power including; supplier switching costs (to other industries), availability or lack of essential suppliers, threat to reduce quality of inputs, threat to raise input prices and presence of substitute inputs all influenced strategy to a great extent.

The study established that the intensity of competitive rivalry with the following factors; price competition, level of advertising, flexibility of product/service offerings and degree of innovation amongst competitors and competition between mobile & non mobile telephony firms influences strategy development among the mobile financial service providers in Kenya to a great extent. The threat of new entrants with the following factors considered; entry barriers (or lack of), expected retaliation by new entrants, government policy on new entrants and ability to access to distribution outlets influenced strategy development among the mobile financial service providers in Kenya to a great extent.

The study also sought to establish the impact of environmental forces on the identified dimensions of strategy development which included; vision & mission, strategy evaluation and strategy choice and strategy implementation. On the vision/mission

dimension, the study found that environmental forces affected a review of values driving the firm, a review of current purpose of firm a review of market segments/product ,a review of business unit vision and review of core competences to a great extent

With regard to the strategy evaluation and strategy choice dimension, the study established that environmental forces affects the degree of micro (industry level) scanning, objective setting/strategy selection processes, degree of competitor analysis, degree of macro environmental scanning and degree of firm specific analysis (SWOT) to a great extent. The study also found that environmental forces affected strategy implementation with the following factors considered; change management activities, alignment of culture, structure, processes & communication, organizational restructuring and resourcing of both human and capital to and internal resource allocation to a great extent.

One of the study objectives of the study was to establish the strategic measures that had been taken to cope with the impact of environmental forces affecting the firms in the mobile money market in Kenya. The strategic measures considered were; low cost pricing of service, premium pricing of service, differentiated service pricing, lowered transaction values, increased transaction values, increased advertising/awareness campaigns, enhanced CSR/customer loyalty schemes, differentiated the product/service offering, targeted niche market/customer segments, diversified in other financial services, consolidated with other products/services, expanded agent network and established new distribution channels among others. Respondents to the study indicated that the strategic measures identified had been implemented to a great extent to cope with the impact of environmental forces.

Both descriptive and inferential analysis were utilized to describe and analyze the data with a view to defining the relationships between the variables. Pearsons Correlation analysis largely indicated strong positive linear relations between and within the variables of interest with the exception of the environmental force which had a lesser degree of association. The ANOVA was used to establish the statistical significance of the correlations and establish the extents to which outcomes could be attributed to the predictor variables. From the findings there was a good fit on almost all the relationships analyzed in ANOVA. Finally a multiple regressions

analysis between the independent(predictor) variables and the dependent variables was conducted to establish a regression equation (model) that can be relied upon to project or predict a strategy development outcome given a certain condition of the environmental forces (independent). Three of the four regression equations ,(with the exception of the vision/ mission regression) were inconclusive in their predictive value as most showed statistically insignificant tests (on the basis of P values) and seemingly random outcomes that could not be attributed to the predictor variables..

5.3 Conclusion

Generally the respondents were able to identify the environmental forces and their distinct categorizations i.e external and industry forces as well as evaluate their impact on strategy development within their firms. This may not be totally unexpected as the respondents designated to respond to the questionnaire were selected on the basis of being knowledgeable or involved in the process of strategy development within their respective firms. It also worth noting that since four respondents per firm from different functional areas i.e finance, legal, technology and mobile financial service business unit head were selected to respond there would not necessarily be consensus on assessing the various impacts of environmental forces.

On assessment of the impacts of environmental forces, the majority of the respondents felt that political forces impacted their strategy development to a great extent. This was reflected in the fact that that 75% of the respondents were of the opinion that political forces impacted their strategy development either to a great or very great extent. 17 % were of the opinion that it impacted them to a moderate extent while 4% indicated that political forces impacted them to a little or no extent. The major political forces having the biggest influence as indicated by respondents were government structures and systems and infrastructure provision.

The magnitude of the impact of economic forces on strategy development according to the majority of the respondents was slightly higher than that of political forces even though they were rated as having affected strategy to a great extent. 79% of the respondents were of the opinion that the impacts of economic forces were to a great extent or very great extent with only 5% indicating their impact was of moderate extent or less. The attributes considered most critical by respondents under economic

forces were disposable incomes/employment, inflation levels and the tax regime/fiscal policy.

The impact of social forces was considered to affect strategy development to a great extent by the respondents. In terms of score its impacts were felt to be slightly more than those of political forces but below economic forces as 87% of respondents indicated its impacts as being of moderate extent and higher, while only 12 % indicated that its impacts were to a little or no extent. Under social forces the attributes of significance cited by respondents in the strategy development process were consumer attitudes / opinions and trends /fads/ lifestyles.

Of the forces evaluated by the respondents, technological forces in terms of score had the highest impact on strategy development within the firms even though its influence was rated as being of great extent. 58% of the respondents indicated that technological forces influenced strategy development to a very great extent while cumulatively 91% of respondents rated technological impacts at moderate and higher. This is understandable in light of the industry in which the firms operate as the mobile financial services are heavily technology dependent. The respondents indicated that the major technological attributes impacting on strategy were technology lifecycle and technology access and cost.

Out of all the external environmental forces evaluated, respondents indicated that environmental forces had the least impact on strategy development amongst the firms operating in the mobile money market in Kenya. The impacts of environmental forces were considered to be of moderate extent with only 42% of respondents indicating its impacts were to a great extent or higher while 58% indicated impacts of moderate extent or less on strategy development. The main aspects under environmental laws influencing strategy cited by respondents were the current environmental laws and climate change issues

Legislative forces had a significant impact on strategy development as evidenced by the fact that 83% of respondents indicated their impacts were to a great extent or very great extent with only 4% indicating moderate to lesser impacts. Of the five attributes evaluated under the legislative forces, the two cited most by respondents as having more influence on strategy development included the current laws and regulations governing operations of the industry as well as competitive regulation presumably by

the regulatory bodies like the communications Commission of Kenya and the Central Bank.

The respondents also evaluated the category of industry forces which based on grounded strategy literature, have a greater impact on strategy development in firms operating in an industry. This seems confirmed by findings from the study which indicate slightly higher impact ratings for industry forces when compared against the remote environmental forces. The threat of substitute products in general was rated as influencing strategy development to a great extent . 63% of the respondents had a rating of great extent or higher in evaluating the impact of threat of substitute products on strategy while only 37% had a rating of moderate to lower extents. The major aspects contributing to strategy under threat of substitute products indicated by respondents were their price performance and number of substitute product.

The bargaining power of customers had the highest impact ratings of the industry forces and only second to technological forces in terms of impact on strategy development even though it was scored as having influence to a great extent on the measurement scale.88% of the respondents felt the impacts of bargaining power of customers on strategy were to a great extent or very great extent while only 12 % indicated a rating of moderate and lesser. Respondents indicated that dependence on current distribution outlets and buyer price sensitivity were the most significant contributors to strategy development

The intensity of competitive rivalry was rated as having impacted strategy development to a great extent (with 79% of respondents in the great extent or above), while 12% indicated the influence of competitive rivalry at moderate .Of interest to note, 8% of the respondents indicated that the intensity of competitive rivalry did not influence strategy development. This may be attributed to the perception of market or niche segments respondents felt were unaffected by this force. In terms of magnitude, respondents ranked the influence of competitive rivalry as the fourth most impacting force on strategy development after technological, bargaining power of customers and legislative forces. In addition, respondents noted that the price performance of substitutes and number of substitute products were the most critical factors under the competitive rivalry force

On average, the threat of new entrants influenced the development of strategy to a great extent (a cumulative 79% of respondents scored great extent or higher) even though the highest proportion of respondents (42% indicated that the impact was to a very great extent). 21% of the respondents indicated that the influence of the threat of new entrants to industry only influenced their strategy to a moderate extent. In terms of significance of the attributes under the threat of new entrants force, the expected retaliation of new entrants, their ability to access distribution outlets and the entry barriers were major considerations in strategy development.

The respondents were also required to evaluate the impact of environmental forces on specific aspects of strategy development i.e vision & mission, strategy evaluation & strategy choice, strategy implementation and strategic measures. It is apparent that most respondents recognized strategy development as a multifaceted concept or process with distinct dimensions and were thus able to evaluate in a fairly consistent manner across the various aspects. Respondents indicated that environmental forces impacted the vision & mission dimension of strategy development to a great extent. 67% of the respondents indicated that environmental forces impacted this attribute to a great or very great extent, while 21% noted the impacts at moderate with only 3% giving a lower rating. The strategy evaluation and strategy choice dimension was on average impacted by environmental forces to a great extent (higher than the vision/mission aspect) as evidenced by respondent scores. 29% of respondents indicated that the impacts on strategy evaluation & strategy choice were to a very great extent, 38% to a great extent, 21% to a moderate extent and 3% at little or not at all. Respondents noted that the strategy implementation dimension was on average impacted by environmental forces to a great extent. 38% of the respondents indicated that environmental forces impacted strategy implementation to a very great, 33 to a great extent and 21% to moderate extents.

The study identified several (31) strategic measures that had been implemented by mobile money firms in the industry to cope with the impacts of environmental forces. Respondents were required to indicate from their perspectives, the extent to which these strategic measures had been implemented in their firms. 88% of the respondents indicated that environmental forces impacted the implementation of strategic measures to a great or very great extent, while only 3% noted the impacts at moderate or a lower rating. While not all the strategic measures can be discussed in this study,

the significant ones of interest implemented to a great extent or very great extent to cope with environmental forces based on the scoring by respondents were: partnered with Bank/EFT firm for M-banking (82%); enhanced coordination with regulators (81%); differentiated service pricing (77%); Enhanced the risk management framework (77%); Outsourcing of related services (73%); differentiated products/service offering (72%); increased advertising/awareness campaigns (68%); enhanced CSR/customer loyalty schemes (68%); investment in network improvements (68%); partnering with I.T/data firm (68%); Enhanced customer knowledge information (68%). Based on the large consensus of findings on strategic measures is fair to conclude that greater emphasis is placed on implementation of strategic measures compared to other strategy development dimensions thus confirming earlier scholarly works on the increased emergence of strategy at the expense of planning for strategy

The researcher added value to the study by establishing high correlations between the independent variables themselves which implies that the interplay between environmental forces inherently can impact strategy development positively or negatively. This can also form the basis for future studies.

5.4 Recommendations

Although respondents were able to evaluate the impact of various environmental forces on their firms strategy development it is crucial that a structured way of evaluating those forces is put in place. The targeted respondents were largely responsible for their functional areas and may have evaluated a wide range of cross functional forces on the basis of their own experiences. It is recommended that a formal but dynamic environmental analysis process that is integrated across all departments and cadres of staff be established to enable the institutionalization of environmental scanning and analysis tools . Although most respondents indicated that enhanced risk management measures had been adopted it is not clear whether these cascade down the lower staffing levels and which risk factors that are evaluated. Given the dynamic and technology dependent nature of the mobile money market it is crucial that the ability to conduct environmental analysis and scanning is inbuilt into job descriptions.

Similarly, strategy development in most firms remains the preserve of top management, or a strategy team. There is a need to relook at the process of how strategy is developed, its various dimensions and how it is communicated. It is only through an ongoing and interactive organization wide strategy awareness program that staff will appreciate and counter the impact of any threats, risks or opportunities presented by the external environment, more so in an industry that changes very rapidly like the mobile money market. It is not apparent whether the respondents utilized any known strategy development models such as Porter's 5 forces model, BCG matrix or Ansoff's matrix in responding to the study, however it is imperative that firms in the mobile money market proactively engage known and established strategy development and evaluation tools.

The government is a major stakeholder in the mobile money sector through the taxes it levies and also as a regulator through the Communication Commission of Kenya (CCK) and Central Bank of Kenya. It has an obligation to provide incentives and investments countrywide especially infrastructure like data connectivity lines and also appropriate incentives to reduce technology and technology device costs. For this reason I recommend that mobile money firms consider more private –public partnership agreements with the government rather than engaging more private data, I.T and other such like firms whose strategic interests come first while the government stake is always more long term and focuses on the social component.

5.5 Limitations

This study was administered to senior management from four different functional areas per firm (making a total of 4 responses per firm). In addition each respondent was required to evaluate the impacts of external forces on strategy development from other functional areas which had the likely danger of introducing subjectivity in the interpretation of the questions hence affecting reliability of the study. Although respondents were carefully selected in the belief that they were at least involved in core functions of the company and hence had inputs in the strategy development process it was assumed that they appreciated the various distinct and related dimensions of strategy –which may not necessarily be the case.

The study involved all the six firms involved in the mobile money market in Kenya and great care was taken to ensure all aspects relating to the study objectives were

captured in the questionnaire. It is worth noting however that two of those firms are not mobile telephony firms per se i.e they do not offer traditional telecommunication services like data , voice and mail services and only focus on mobile financial services exclusively. This implies that some of the criteria or factors driving strategy development may not be adequately captured in the data gathering instrument; and even where captured may not adequately explain or answer the questions the study sought to answer bringing into question the aspect of relevance and applicability.

Finally inferential tests were conducted to establish the relationship between the study variables and arrive at an interpretation and conclusion of the findings. This is purely a quantification of the study and does not involve an assessment of the qualitative aspects that go into decision making on aspects related to strategy development. Soft skills such as cognitive abilities of managers, managerial style, organization culture and decision making are not taken into account yet these are as crucial as the quantitative assessments.

5.6 Suggestions for Further Research

This study may be considered a baseline study that seeks to establish the key environmental forces and their impact on strategy development; as well as establish the strategic measures taken to cope with environmental forces in the mobile money market in Kenya. From the inferential analysis conducted, specifically the multiple regression analysis, it is inconclusive to establish the extent to which all the independent variables (11 environmental forces) collectively contribute to the development of strategy or extent to which the model can be relied on to predict the magnitude of change in the strategy development dimensions. It may be prudent to conduct a similar study with an increased number of respondents (from the current 24) and incorporate various cadres of management.

Similarly, this study has been commissioned with a focus on the external environment variables of business in relation to the strategy development process. It may be more realistic for a future study to incorporate variables from the internal or task environment of business such as value chain processes, firm size, years in operation, ownership structures, internal structures and decision making processes etc to get a holistic appreciation of the interactions that collectively contribute to strategy development.

REFERENCES

- Aguilar, F.J. (1967). *Scanning the business environment*. New York, NY: MacGraw-Hill.
- Ansoff, I. (1965). *Corporate strategy: An Analytic Approach to Business Policy for Growth and Expansion*: New York. McGraw-Hill
- Ansoff, I. (1969). *Business Strategy*: Hammondsworth, UK. Penguin Books
- Ansoff, I. & McDonnell (1990). *Implanting Strategic Management* 2nd edition, NY: Prentice Hall, pp38)
- Ansoff, I. (1968). *Corporate Strategy*: New York. Penguin Books
- Ansoff, I. (1957). Strategies for diversification. *Harvard Business Review*.
- Bourgeois, L.J. (1980). Strategy and environment: a conceptual integration. *Academy of Management Review*, 5(1), 25-39.
- Bourgeois, L. & Eisenhardt, K. (1988). Strategic decision processes in high velocity environments: Four cases in the microcomputer industry. *Management science*, 34.
- Bowen, H. & Goldstein, P. (2010). *The Mobile Money Revolution*. Retrieved on 21st May 2012 from Audience scapes website: www.audiencescapes.org/sites/default/files/AScapes%20Briefs%20Mobile%20Money%20Revolution.pdf
- Capon, C. (2008). *Understanding strategic management*. (1st ed). London: Financial Times/Prentice Hall.
- CCK sector statistic report Q3-2011/2012. Retrieved on July 30th 2012, from Communication Commission of Kenya website:
- Central Bank of Kenya Governor presentation in Abu Dhabi. (Feb 2012). *Mobile Phone Financial Services: Integration and financial intermediation*. Retrieved on 30th April, 2012, from Central Bank of Kenya website:

- Chandler, A.D. (1962).*Strategy and Structure: Chapters In The History of The American Industrial Enterprise*. Cambridge, MA: MIT Press
- Cyert, R. & March, J (1963). *A Behavioural Theory of the Firm*. Englewood Cliffs, New Jersey : Prentice Hall, Inc
- Definition of mobile money . Retrieved April 30th, 2012, from International Finance Corporation Web
 site: [www.ifc.org/ifcext/gfm.nsf/AttachmentsByTitle/Tool4.3CGAPTool-MNOMobileMoneyMarketSizing/\\$FILE/Tool+4.3.+CGAP+Tool+MNO+Mobile+Money+Market+Sizing+\(CONFIDENTIAL\).pdf](http://www.ifc.org/ifcext/gfm.nsf/AttachmentsByTitle/Tool4.3CGAPTool-MNOMobileMoneyMarketSizing/$FILE/Tool+4.3.+CGAP+Tool+MNO+Mobile+Money+Market+Sizing+(CONFIDENTIAL).pdf)
- Donovan, K.(2011).*Mobile Money in the Developing World: The Impact of MPESA on Development, Freedom and Domination*. Retrieved on 30th May 2012 from: [http://blurringborders.com/wp-content/uploads/2011/06/Donovan MPESA Thesis Prepublication.pdf](http://blurringborders.com/wp-content/uploads/2011/06/Donovan_MPESA_Thesis_Prepublication.pdf)
- Drucker, P. (1968).*The age of discontinuity: Guidelines to our changing society*. New York: Harper and Row
- Duncan, Peter, M., & Ginter, W.J.(1990).*Macro-environmental analysis for strategic management, Long range planning* 23(6), December.
- GE/MckinseyMatrix.(1971). Retrieved on 30th April 2012 from Value based Management Web site: [www.valuebasedmanagement.net/methods ge.mckinsey.html](http://www.valuebasedmanagement.net/methods/ge.mckinsey.html)
- Government of Kenya, (2008).*Kenya Vision 2030: A Globally Competitive and Prosperous Kenya*. Nairobi, Kenya. Government Printer
- Government of Kenya, (2011) .Communication Commission of Kenya 2010/2011 Annual Report annual report) : retrieved on April 30th 2012, from Communication Commission of Kenya website: [www.cck.go.ke/resc/publications/annual reports/CCK annual Report 2011.pdf](http://www.cck.go.ke/resc/publications/annual%20reports/CCK%20annual%20Report%202011.pdf)
- Hamel ,G. & Prahalad, C.(1990) The core competence of the corporation. *Harvard Business Review*, May- June

- Hamel, G.(2000) *Leading the revolution* .Plume (Penguin Books): New York
- Hannan, M. & Freeman, J.(1989).*Organizational Ecology*.Cambridge, Massachusetts :Harvard University Press
- Henderson ,B. (1970) The product portfolio. *BCG Perspectives*,January 1970
- <http://pesatalk.com/2012/03/battle-of-the-mobile-money-transfer-service-2/>
- Jack,W. & Suri,T.(2010, 2011).*Economics of Mpesa*. Study commissioned by Central Bank of Kenya Retrieved May 5th, 2012, from Massachusetts Institute of Technology website:
- Jack,W. & Suri,T.(2010, 2011).*Economics of Mpesa*. Study commissioned by Central Bank of Kenya Retrieved May 5th, 2012, from Massachusetts Institute of Technology website:
- Johnson, G .Scholes,K. & Whittington ,R.(2008).*Exploring Corporate Strategy:Text and Cases* 8th edn, Harlow: F T Prentice Hall
- Johnson, Scholes , K. & Whittington, R. (2005).*Exploring Corporate Strategy*.(7th ed.).London: Prentice Hall.
- Johnson,G. & Scholes, K (1997).*Exploring Corporate Strategy*: Englewood, New Jersey. Prentice Hall
- Kaplan, R.S., & Norton, D.P. (1996).*The balanced scorecard*. Boston: Harvard Business School Press.
- Kimenyi, S., Mwangi, S &Ndungu,N.(2009).*Expanding the financial services frontier: Lessons from mobile banking in Kenya* . Retrieved May 5th, 2012, from Brookings Institution website:www.brookings.edu/articles/2009/1016/mobile_phone_kimenyi.aspx
- Kimenyi, S., Mwangi, S &Ndungu,N.(2009).*Expanding the financial services frontier: Lessons from mobile banking in Kenya* . Retrieved May 5th, 2012, from Brookings Institution website:www.brookings.edu/articles/2009/1016/mobile_phone_kimenyi.aspx

Kinyoda (2012). Retrieved May 13th, 2012 from URL link:

Manica, L. & Vescovi, M. (2008). *Mobile Telephony in Kenya: Is it making the life better?* Retrieved on June 18th 2012 from: www.it46.se/projects/UNITN/ICT4SD/manica_vescovi.pdf:

Manica, L. & Vescovi, M. (2008). *Mobile Telephony in Kenya: Is it making the life better?* Retrieved on June 18th 2012 from: www.it46.se/projects/UNITN/ICT4SD/manica_vescovi.pdf:

May, R.C., Stewart, Jr. W.H. & Sweo, R. (2000). Environmental scanning behaviour in a transitional economy: evidence from Russia. *Academy of Management Journal*, 43(3), 403-427

Mbiti, I. & Weil, D. (2011). *Mobile banking. The impact of m-pesa in Kenya*. NBER working paper, no 17129. Retrieved May 5th, 2012, from National Bureau of Economic Research website:

Mbiti, I. & Weil, D. (2011). *Mobile banking. The impact of m-pesa in Kenya*. NBER working paper, no 17129. Retrieved May 5th, 2012, from National Bureau of Economic Research website:

Miles, R.E. & Snow, C.C. (1978). *Organizational Strategy, Structure, and Processes*. New York, NY: McGraw-Hill.

Milliken, F.J. (1987). Three types of perceived uncertainty about environment: state, effect, and response uncertainty. *Academy of Management Review*, 12(1), 133-143.

Mintzberg, H., Quinn, J.B., & Ghoshal, S. (1999). *The Strategy Process*. London: Prentice Hall.

Mintzberg, H. (1987). Five p's for strategy. *California Management Review*. (fall).

Mintzberg, H., Lampel, J., Quinn, J., & Ghoshal, S. (2003). *The strategy process. Concepts, Contexts and Cases*. (4th ed). Essex: Pearson Education.

- Mugenda, O. & Mugenda, A. (1999). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi: African Center for Technology
- Neumann, J. & Morgenstern, O. (1944). *Theory of Games and Economic Behavior*: Princeton University press
- Omwansa, T. (2009). *MPESA : Progress and Prospects*. Retrieved on June 8th 2012 from: www.strathmore.edu/pdf/innov-gsma-omwansa.pdf
- Pearce, J.A., & Robinson, R.B., (2011). *Strategic Management. Formulation, Implementation and Control*. (12th ed). New York: McGraw-Hill International.
- Peters, T.J., & Waterman, R.H. (1982). *In Search of Excellence*. New York: Harper & Row
- Porter, M.E. (1979). How competitive forces shape strategy. *Harvard Business Review*, 57 (2), 137-145.
- Porter, M.E. (1980). *Competitive strategy: Techniques for analyzing industries and competitors*. (pp.35-40). New York: Free Press.
- Stoffels, J.D. (1994). *Strategic Issues management. A comprehensive guide to environmental scanning*. Oxford: The planning Forum
- Taylor, F. (1947). *Scientific Management*. New York.
- Thompson, Strickland & Gamble. (2007). *Crafting and executing strategy*. (15th ed.). New York: McGraw-Hill International.
- Thompson, J.L. (2001). *Strategic management*. London: Thomson Learning.
- Venkatraman, N. & Prescott, J.E. (1990). Environmental-strategy coalignment: An empirical test of its performance implications. *Strategic Management Journal*, 11(1), 1-23.
- White, C. (2004). *Strategic Management*. Basingstoke. Palgrave Macmillan
- Whittington, R. (2001). *What is Strategy -and does it matter?* (2nd ed). London. Thomson Learning

World Economic Forum & Boston Consulting Group, (2011) The Mobile Financial Services Development report .Retrieved on April 30th 2012 from World Economic Forum website: www.weforum.org/reports/mobile-financial-services-development-report-2011

[www.cck.go.ke/resc/downloads/SECTOR STATISTICS REPORT Q1 11-12.pdf](http://www.cck.go.ke/resc/downloads/SECTOR_STATISTICS_REPORT_Q1_11-12.pdf)

APPENDIX: DATA GATHERING QUESTIONNAIRE

SECTION A: Background Information

The study seeks to establish the impact of external environmental forces on strategy development by firms operating in the mobile money industry in Kenya. Currently there are a total of 6 firms offering mobile financial services under various brands to an estimated 18.9 million customers. Of the six firms, four with a majority foreign shareholding are mobile telephone operators offering traditional telecommunication services including voice, data and Short Messaging Services (SMS) including financial services under various brands; These include Safaricom Kenya Ltd with MPESA; Airtel Kenya with Airtel Money , Telkom Orange with Orange money and Essar Telecom with YU Cash .Two other wholly Kenyan owned non-mobile operators in the industry are Mobile Pay Ltd with its Tangaza brand and Mobikash Ltd with its Mobikash brand. The study targets to obtain the perceptions and opinions of 4 respondents in each firm with key functional and operational responsibilities especially in the areas of finance, technology, regulatory , business unit strategy and who would be intimately knowledgeable or involved in strategy development.

SECTION B: Environmental Forces

1. To what extent is your strategy development affected by each of the following environmental forces?

Rate on a 5 point scale where:

1=Not at all; 2= Little extent; 3= Moderate extent; 4= Great extent; 5=Very great extent

Tick accordingly in the appropriate column against each force.

| ENVIRONMENTAL FORCES | 1 | 2 | 3 | 4 | 5 |
|------------------------------------|----------|----------|----------|----------|----------|
| POLITICAL: | | | | | |
| Political stability/leadership | | | | | |
| Investment incentives | | | | | |
| Infrastructure provision | | | | | |
| Govt systems/structures | | | | | |
| International relations | | | | | |
| | | | | | |
| ECONOMIC: | | | | | |
| Interest rates (& monetary policy) | | | | | |
| Exchange rates | | | | | |

| | | | | | |
|--------------------------------------|--|--|--|--|--|
| Inflation | | | | | |
| Tax regime (fiscal policy) | | | | | |
| Disposable income/employment level | | | | | |
| | | | | | |
| SOCIAL: | | | | | |
| Demographics (age, gender ,race etc) | | | | | |
| Religious/ethnic /cultural factors | | | | | |
| Education levels | | | | | |
| Consumer attitudes/opinions | | | | | |
| Trends, fads, lifestyles | | | | | |
| | | | | | |
| TECHNOLOGICAL: | | | | | |
| New technology impacts | | | | | |
| Innovations & inventions | | | | | |
| Internet impact | | | | | |
| Technology access & cost | | | | | |
| Technology lifecycles & obsolescence | | | | | |

| | | | | | |
|--|---|---|---|---|---|
| ENVIRONMENTAL FORCE | 1 | 2 | 3 | 4 | 5 |
| LEGISLATIVE: | | | | | |
| Current laws & regulations | | | | | |
| Regulatory bodies & processes | | | | | |
| Consumer protection | | | | | |
| Industry specific regulation | | | | | |
| Competitive regulation | | | | | |
| | | | | | |
| ENVIRONMENTAL: | | | | | |
| Environmental laws/regulation | | | | | |
| Topography (physical features,geography etc) | | | | | |
| Climate change | | | | | |
| Ecological | | | | | |
| International environmental issues | | | | | |
| | | | | | |
| INDUSTRY FORCES | | | | | |
| THREAT OF SUBSTITUTE PRODUCTS: | | | | | |
| Buyer propensity to substitute | | | | | |
| Ease of substitution | | | | | |
| Number of substitute products | | | | | |
| Buyer switching costs | | | | | |
| Price performance of substitute | | | | | |

| BARGAINING POWER OF CUSTOMERS: | | | | | |
|--|--|--|--|--|--|
| Buyer price sensitivity | | | | | |
| Buyer information availability | | | | | |
| Buyer bargaining leverage | | | | | |
| Buyer dependence on existing distribution channels | | | | | |
| Availability of substitute products | | | | | |

| ENVIRONMENTAL FORCE: | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| | | | | | |
| BARGAINING POWER OF SUPPLIERS: | | | | | |
| Presence of substitute inputs | | | | | |
| impact of inputs in costs | | | | | |
| Degree of differentiation of inputs | | | | | |
| Supplier switching costs | | | | | |
| Supplier concentration (availability of many suppliers) | | | | | |
| | | | | | |
| INTENSITY OF COMPETITIVE RIVALRY: | | | | | |
| Level of advertising | | | | | |
| Competition between mobile & non mobile telephony firms | | | | | |
| degree of innovation amongst competitors | | | | | |
| | | | | | |
| Flexibility of product/service offerings | | | | | |
| Distinct/powerful strategy by competitor | | | | | |
| | | | | | |
| THREAT OF NEW ENTRANTS: | | | | | |
| Entry barriers (or lack of) | | | | | |
| Capital requirements | | | | | |
| Access to distribution outlets | | | | | |
| Customer loyalty | | | | | |
| Switching costs | | | | | |

SECTION C: Strategy Development

2. To what extent do environmental forces affect strategy development in your firm?

Rate on a 5 point scale where:

1=Not at all; 2= Little extent; 3= Moderate extent; 4= Great extent; 5=Very great extent

Tick accordingly in the appropriate column against each force.

| STRATEGY DEVELOPMENT ASPECTS | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| VISION /MISSION: | | | | | |
| Necessitated review of Business unit vision | | | | | |
| Necessitated review of current purpose of firm | | | | | |
| Review of values driving the firm | | | | | |
| Review of core competences | | | | | |
| Review of market segments/product offering | | | | | |
| | | | | | |
| STRATEGY EVALUATION & STRATEGY CHOICE: | | | | | |
| Degree of macro environmental scanning | | | | | |
| Degree of micro (Industry level) scanning | | | | | |
| Degree of competitor analysis | | | | | |
| Degree of firm specific analysis (SWOT) | | | | | |
| Objective setting/strategy selection processes | | | | | |
| STRATEGY DEVELOPMENT ASPECT: | 1 | 2 | 3 | 4 | 5 |
| STRATEGY IMPLEMENTATION | | | | | |
| Organizational restructuring | | | | | |
| Resourcing of both human and capital | | | | | |
| Internal resource allocation | | | | | |
| Change management activities | | | | | |
| Alignment of culture, structure, processes & communication | | | | | |

SECTION D: STRATEGIC MEASURES TAKEN

3. Outline the key measures taken to deal with environmental forces impacting on your strategy development.

Tick as many as apply. Add any others not listed or elaborate further in the space given .

| STRATEGIC MEASURES | TICK APPLICABLE/ELABORATE |
|---|----------------------------------|
| Customer tariff reviews | |
| Expansion of agent network | |
| Alliance with technology/I.T. firms | |
| Mergers/Acquisitions of other firms | |
| Partnered with bank for M-banking | |
| Differentiated our product/service offering | |
| Differentiated customer segments/markets | |
| Consolidated with other product/service | |
| | |
| STRATEGIC MEASURES | TICK APPLICABLE/ELABORATE |
| Interoperability with competitors/others | |
| Infrastructure sharing with other parties | |
| Further capital/human investment in firm | |
| Invested further in secure technology | |
| Organizational restructuring/downsizing | |
| Divested business unit/ market segment | |
| Outsourced some related services | |
| Implemented some cost cutting measures | |
| Enhanced regulatory compliance | |
| Enhanced CSR/customer loyalty schemes | |