VALUE CHAIN ANALYSIS AND COMPETITIVENESS OF APPLICATIONS SERVICE PROVIDERS IN THE TELECOMMUNICATIONS INDUSTRY IN KENYA

BY

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

NOVEMBER, 2013

DECLARATION

I, the undersigned declare that this research project is my original work and has not been submitted for examination in any other university.

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Declaration by Supervisor

The research project has been submitted for examination with my approval as the university supervisor.

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ACKNOWLEDGEMENTS

First, I would like to acknowledge the almighty God for his grace to me during the time I undertook my studies. It was challenging at times but through prayer and meditation I was able to overcome obstacles that I encountered as I undertook the Master of Business Administration Programme.

Secondly, I would like to express my sincere appreciation to my supervisor for his active guidance and strictness through the various stages of the project that was most valuable. His in-depth knowledge and insightful contribution helped me accomplish this research. I wish to thank all the lecturers that impacted knowledge to me during the time of my studies and the assistance given at various times by the staff at the School of Business, University of Nairobi.

Thirdly, my gratitude to the respondents from various Application Service Providers that took their time to complete the questionnaire. The willingness to support research by sharing their important opinions and returning the completed questionnaires in time is greatly appreciated.

And finally, I thank my family who always encouraged me and understood my long hours during the time of my study: my late father for being instrumental to my education and my late mother for her unrelenting support as I undertook the course; to my wife Caroline and my cousin Festus Kiteme who acted as my research assistants, I am greatly indebted to them for the support they gave me during my research.

DEDICATION

With gratitude, I dedicate this research project to my son Keith and daughter Sasha who found me elusive as I dedicated time to my studies and to my late father and mother who sacrificed some of the good things in life to see that I and my siblings got the best education possible. You are long gone but we will carry your dream forward.

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ABBREVIATIONS AND ACRONYMS

ASP	Applications Service Provider
CCK	Communications Commission of Kenya
NFP	Network Facilities Provider
S.D	Standard Deviation

ABSTRACT

The aim of the study was to determine key competencies and capabilities that are attributed to the success of Application Service Providers in Kenya, to establish effectiveness of optimizing the value chain to create competitive advantage and to identify challenges that application service providers face in adopting value chain models. The study adopted cross-sectional survey conducted on application service providers in Kenya. Data was collected from 12 application service provider firms based in Nairobi through questionnaires and analyzed using statistical package for social scientists and presented in tables. The study findings indicate that most application service providers employed value chain concepts in their operations and the key competencies and capabilities were identified to be long term relationships with customers, possession of multi-skilled workforce and efficiencies in operations. Findings indicate that companies employed differentiation strategy to survive the highly competitive environment and achieved customer satisfaction by maintaining excellent customer service, providing high quality services and through achievement of short lead time for the delivery of services. It was established and that most companies had applied deliberate measures to ensure customer satisfaction and most managers were receptive to change. The study recommends that application service providers should adopt a hybrid value chain model that employs differentiation strategy and customer satisfaction aspects highlighted above in order to gain and maintain a competitive advantage that will ensure profitability is maximized. The study also identified challenges faced by application service providers that include poaching of experienced staff by competitors, financing issues and unpredictable government policies and management of these companies should devise strategies to deal with them.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Business organizations in their everyday operations undertake a number of activities to meet the needs of their customers and the expectations of the owners a like. These activities can be viewed to constitute the value chains of these organizations. According to Pearce& Robinson (2011) the value chain describes a way of looking at a business as a chain of activities that transform inputs into outputs which customers' value. Through a careful analysis, an organization is able to establish ways to add value to the various activities in the transformation process and as a result maximize the value of its products and services. The overall goal is to capture customer requirements and then create products or provide services that the customers perceive as of superior value. Success is therefore dependent on a good understanding of an organization's value chain and by extension the value chains of other companies it interacts with it. Organizations that optimize their value chains are able to improve profitability and create sustainable competitive advantage.

Theory on the Resource Based View of organizations advanced by Birger Wernerfelt (1984) recognizes that resources of a business organization are exploited either to improve customer value or lower cost or achieve both objectives. An organization can utilize the unique resources in its possession to create sustainable competitive advantage. Critical to the exploitation of an organization's resources are its capabilities that contribute to performance by supporting resources. The external business environment is highly turbulent and the organization's capabilities are required to be able to adapt to the changing environment.

Dynamic capability theory provides the foundation for which management of organizations can maximize utility of internal and external competencies during the lifecycle of the capabilities. Helfat, E& Peteraf MA (2003) argued that while some capabilities may deal specifically with adaptation, learning and change process, all capabilities have the potential to accommodate change.

The telecommunications industry in Kenya is experiencing increased competition due to a number of factors that include the review of the regulatory framework, landing of the undersea cables and the expansion of the economy among others. Customers of telecommunication services are either the end users (individuals, corporates and institutions) or intermediary companies. The main services offered are voice, data and internet. These customers are constantly demanding for reduction of the costs for the various services and hence the needs for applications service provider to deliver services that meet or exceed the customer expectations in value in the face of competition. Players in this industry need to establish effective value chains through realigning their activities in order to remain competitive and rediscovering how they utilize their resources.

1.1.1 Value Chain Analysis

Capon (2008) defines a value chain as a framework for thinking about resources which currently provide competitive advantage and which could provide competitive advantage for an organization. It is critical to understand how organizations create value and then look for ways to add more value to it. This is achieved through analyzing both the primary and support activities that contribute to the delivery of the organization’s products and services and then reviewing them to maximize value to the customer.

Organizations have to create value by analysing their value chains and then exploring ways of adding value to various activities they undertake to meet the needs of customers better than their competitors. The overall goal is to provide customers with superior value in the products and services which in turn translates to better financial performance of the firm. The first step is to identify all the business activities undertaken by an organization. The second step is to group them into primary and support activity categories. The third step is to assess each of the activities for the potential to add value to the customer. The fourth step is to evaluate if it is beneficial for the business to make the changes and then plan for implementation.

1.1.2 Competitive Advantage

Competitive advantage refers to creating edge over competitors in attracting customers and defending against competitive forces. Capon (2008) argues that gaining, maintaining or improving competitive advantage requires a firm's resources and systems to be arranged to reduce the overall cost or add value for least cost and this depends on how a firm configures its value chain and the competitive strategy it is seeking pursue. The goal for every business organization is to make money and to constantly aim at creating more value to customers and being the most profitable.

A business organization needs to build competitive advantage to ensure it is always producing superior performance. Managers have a major task of elevating their organizations to dominant positions and then protecting their profitability and market share from competition. Survival depends in how an organization is able to master the environment. Walker (2007) observes without an offense and defense that are both creative and defensive, no firm can achieve an above average performance and maintain it for long.

1.1.3 Telecommunications Industry in Kenya

The telecommunications market structure in Kenya has been divided into three broad categories namely Network Facilities Provider (NFP), Applications Service Provider (ASP) and Content Services Provider (CSP) .It is based on the principle of technology neutrality that allows any form of communications infrastructure to be used to provide any type of communications service.

The industry has witnessed increased demand of its products since the landing of the undersea cables at the Kenyan coast which provided relatively cheaper internet bandwidth compared to the then existing satellite capacity. The government has further boosted the sector by investing in the National Optical Fiber backbone Infrastructure (NOFBI), an initiative to build fibre infrastructure country wide.

1.1.4 Applications Service Provider in Kenya

An Applications Service Provider (ASP) as defined under the unified licensing framework by CCK is an organization that provides all forms of services using network services of a facilities provider. They provide broadband connectivity to customers, internet connectivity, private networks that can carry voice, data and video among other services. Organizations operating within this industry have in recent times experienced increased competition occasioned by the entry of new players namely; facility providers, multinationals and mobile companies diversifying to provide same services. ASPs do not build core network infrastructure but provide all forms of services to end users using network services of a facilities providers. They use fixed, mobile and wireless technologies to deliver various services to customers.

There were a total 111 Application Service Providers in November 2012 according to Communications Commission of Kenya (CCK) Register of licensees. The sector has recorded constant growth since 2008 when there were only 17 licensed providers. Their numbers have maintained an upward trend to 58, 80,105 in 2009, 2010 and 2011 respectively. Success in the industry is dependent on choices that individual firms make to remain competitive.

1.2 Research Problem

The business environment today is dynamic and witnesses increased degree of competition. Managers of companies are responding by reviewing their strategies of operation to adapt to these changes and to beat the competition. A company achieves competitive advantage by ensuring the costs of delivering its products and services to customers are lower than those of competitors for equivalent benefits or if its products and services are perceived to be of superior value and customers are willing to pay a premium. By analyzing its value chain, a company is able to reveal those distinct activities that add value and develop ways to maximize it. Value chain analysis guides managers on the best strategies to apply to create superior value to the company's products and services and this may form the basis of competitive advantage for a company in a particular industry.

The ASP industry in Kenya has grown over 500% in the last five years and has seen entry of many new players each employing different strategies. The level of competition within this industry in Kenya is very high as companies compete for relatively small number of corporates and institutions who represent the main industry customers in terms of revenue per customer and the less attractive individual users.

The main products in this industry are provision of data, Internet and voice services. Companies that intend to beat competition differentiate themselves by providing high quality goods and services and performing their value chain activities better than competition. Excellent customer service has become a key focus activity within ASPs in Kenya in the face of stiff competition. In contrast, those that adopt cost leadership strategy are required to reduce costs associated with the value chain activities or resources. These two strategies differentiation and cost leadership if executed effectively result in increased profitability.

Apart from competition, there is pressure on ASPs in Kenya by shareholders to record better financial results year after year. In addition, majority of their customers are enlightened and are looking out for best value for their money including discounts on pricing. ASPs in Kenya procure bulk capacity from NFPs especially for data and internet but these costs have remained high. To gain competitive advantage, ASPs in Kenya should analyze their value chains to create products and services which their customers perceive as of superior value and to reduce their operating costs.

Recent studies on similar topics have concentrated mainly on analyzing value chains and competitiveness in other industries. For instance, Desarbo, WS et al (2011) looked at customer value chains in an heterogeneous market. Barnes, SJ (2003) studied the developments in the M-Commerce Value chain. Yang, HD et Al (2001) studied the value chain visibility and learning with the internet. In Kenya Mungai (2010) studied the link between value chain and competiveness at Deloitte & Touche. Munyi (2011) focuses on how Porter's model is used in the oil sector to gain competitive advantage, Shikumo (2012) focuses his study on the value chain and competitive advantage of firms in the IT industry. Applications service providers however operate in a different space and face different challenges. Their value chain activities and approaches to create competitive advantage would differ. The study will seek to answer the following questions: What competencies and capabilities are required to build successful ASP business in Kenya? What strategies have ASPs adopted to create competitive advantage? What challenges do ASPs face in carrying out their business operations?

1.3 Research Objectives

i. The first objective of this study was to determine the key competencies and capabilities that can be attributed to the success of Applications Service Providers in Kenya.
ii. The second objective was to establish effectiveness of optimizing value chains to create competitive advantage in these companies.
iii. The third objective was to identify challenges that ASPs in Kenya face in adopting value chain models.

1.4 Value of the Study

The study will help policy makers understand the essentials for growth and success of ASPs as well as the challenges and guide the government to propose the right incentives to both existing and potential investors that encourage sector growth. The study will give insight to the operating environment and assist regulatory bodies like the CCK in the formulation of policies that promote healthy competition and address the challenges that will be identified to be of relevance to it. It will help policy makers come up with right policies, formulate appropriate regulation and controls.

The study will contribute to the body of knowledge and identify areas for further research. It will act as a source of reference material for future researchers and academicians who may opt to study related topics or even replicate the study. This study on value chain analysis and competitiveness of ASPs in Kenya may also prompt further research in the same or other industries.

The study will identify key competencies and capabilities required to succeed as an ASP. It will also reveal management approaches that ASPs should adopt to gain competitive advantage. Through the study the management of ASPs will be able to review the strategies in order to enhance or develop these competencies and capabilities and create advantaged positions that improve their profitability. The study will help create awareness on the need for ASPs to devise means and ways of protecting these positions. To the potential investors this study will provide an insight to how the value chain of ASPs operates and the essentials as well as strategies required to set up a successful enterprise. The study will act as a lead to organizations reassessing their value chains to identify key competencies and capabilities required to succeed in any industry and the effectiveness of optimizing the value chain to create, gain or sustain their competitive advantage depending on industry and nature of the business.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter looks at the review of literature relevant to the study to be carried out and looks at the resource based view, dynamic capabilities theory, competitive advantage and value chain analysis.

2.2 Theoretical Framework

This section discusses two theories to inform the study on value chain analysis and competitiveness of ASPs in Kenya as viewed by different authors. The study reviews resource based view and dynamic capabilities theories

2.2.1 Resource Based View

Resources of a company refer to both tangible and intangible assets that can be valued and exchanged for economic returns. Examples of the resources are patents, brand name, efficient procedure, skilled personnel and special technology among others. Walker (2007) observes that resources of a business organization are exploited to improve customer value and to lower cost. This study seeks to appreciate the various activities in the value chain of ASPs and determine those to which value can be added and then establish the key resources or combination of resources that are required to execute these activities. The study is informed by resource based theory that what a company can do is not only a function of the opportunities it confronts but it also depends on the resources the organization can muster (Teece D.J ,et al ,1997).

Eisenhardt, KM &Martin, JA (2000) argues that resources form the basis of unique value creating strategies and their potential to create sustainable advantage is enhanced when they complement their related activity systems. In normal business operation, we find some resources will support more than one activity while others will be specialized. It is therefore important to understand the various value chain activities and how they utilize existing resources. Peteraf (1993) informs this study that differences in profitability of firms within an industry which can be attributed to the endowment of unique resources and how effectively they are exploited.

Wernerfelt (1984) held the view that optimal growth of the firm involved striking a balance between exploitation of existing resources and development of new ones. Walker (2007) argues that a firm's attractive resources are exploited for economic benefits which provides it with the financial resources required to develop them further. This informs the study on the need to re-invest in a firm's attractive resources.

Wernerfelt (1984) argued that if a firm possesses attractive resources, it will create a situation where its own resource position directly or indirectly makes it more difficult for others to catch up and maintain a leadership position. The leadership position can be maintained by applying barriers to the resource acquisition and as development of enhancements to the resource functions to ensure rivals do not catch up.

According to Walker (2007), competitive advantage is achieved if organizations produce resources that are difficult for competitors to imitate or for substitutes to neutralize. This informs this study that if an organization is endowed with a resource such as a unique technology, it is possible build exceptional competencies around this exclusive technology and use it to create competitive advantage.

Eisenhardt, KM &Martin, JA (2000) argues that availability of substitute resources tends to depress returns of the holders of a given resource and this justifies the reason why they should be shielded from competitors. By conducting an effective value chain analysis, an organization is able to identify these scarce resources that give it competitive advantage and apply appropriate mechanisms to protect the resources from competitors.

2.2.2 Dynamic Capabilities Theory

The dynamic capabilities perspective lays emphasis of exploitation of existing competencies in the face of the rapid changes in the environment. Teece D.J, et al, (1997) argues that success is dependent on timely responsiveness, rapid and flexible product and the management capability to redeploy internal as well as external competencies. This brings out the need to match resources with capabilities in order to gain competitive advantage in an environment of constant change and calls for development as well as renewal an organization's capabilities and competencies.

Teece D.J, et al, (1997) define dynamic capabilities as the firm's ability to integrate, build and reconfigure internal and external competencies to address rapidly changing environments. Walker (2007) observes that dynamic capability is located in those activities and business processes that improve firm's value or lowers its cost. A thorough analysis of an organizations activities and processes can reveal those capabilities. It is required to build them repeatedly to keep competitors at bay and retain a leadership position within the industry.

Walker (2007) informs the study that competitive advantage can be sustained over time but may shift as the industry grows and an organization should seek to understand the dynamic growth cycle. The cycle starts when companies invest in innovations to increase value and reduce their costs. This improves the company's market position and results in increased profitability and out of which companies can invest increase their capacities to meet the positive growth in demand of its products and services. According to Walker (2007) the cycle re-starts again when companies re-invest in innovation to stay ahead of competition.

Learning within an organization contributes to the establishment of efficient ways of accomplishing different tasks and routines. Teece D.J, et al (1997), define learning as a process by which repetition and experimentation enable tasks to be performed better and quicker. The learning curve effects contribute significantly to making the production and internal processes efficient and this is evident especially with the complex processes that have many steps and sub processes.

Walker (2007) argues that differences in learning rates across industry are determined by their capabilities based on employee training and expertise and to achieve cost advantage a firm must learn faster and longer than its rivals. This informs the study that experience earned over time has associated benefits and can be a source of competitive advantage. An organization should identify activities and processes that it has considerable experience in their execution and exploit that advantage.

Yang, H.D.et al(2011) argue that advantages derived from increased visibility of the value chain can be associated with the learning process and further adds that the capability for more rapid learning may form the basis of sustainable competitive advantage. This informs this study of the link between organization learning and economic success.

2.3 Competitive Advantage

Porter (1998) argued that competitive advantage stems out of the value a firm is able to create to its buyers and present them with prices lower than competitors for equivalent benefits that more than offset a premium price. Porter adds that a firm can position itself and earn high rates of return even though industry structure is unfavorable and the average profitability is modest.

According to Porter(1998) organizations attain cost leadership by adopting methods of producing goods and services that are cheaper or creating unique products for which customers are willing to pay a premium. Walker (2007) argued that to achieve sustainable competitive advantage, a firm must set an objective to attain market dominant position and develop strong defense to protect the firm. Organizations therefore can achieve and maintain above average performance if they employ offense and defense mechanisms that require creativity and aggressiveness.

According to Munyi (2010) sustainable advantage is a situation where a firm is capable of creating value that is difficult for competitors to copy and such a situation makes it possible for the firm to earn economic rents. Eisenhardt, KM &Martin, JA(2000) observe that sustainable competitive advantage can be achieved by implementing fresh value creating strategies not be easily copied by competing firms.

Desarbo, W.S, et al (2001) argue that understanding what buyers value within a given offering, creating value for them and managing it overtime are recognized as essential elements of every market oriented firm's core business strategy. Competitive advantage is anchored around successful execution of the two strategies namely: differentiation and cost leadership and this is closely linked to a firm's position in an industry.

According to Walker(2007) in a market where customers are sensitive about pricing ; cost reductions can be applied if the method to lower the cost cannot be imitated by competitors and associated costs to differentiate by developing enhancements is expensive. Porter (1998) observes that at equivalent or lower prices to its rivals a cost leader's position translates to higher returns. To lead in cost, an organization should identify all activities and processes that can be sources of its cost advantage and exploit them effectively. Cost advantage sources include the following; economies of scale, preferred access to raw materials and access exclusive distribution networks.

Walker (2007) observes that cost reduction is less attractive when firms in an industry have access to same resources and practices and same sources of lower costs of inputs as this will not improve the firm's position and an alternative approach to beat competition in these circumstances is through differentiation. Differentiation strategy is justified when customers are sensitive to value in industry where products and services are similar. In highly competitive environment players will innovate more and create enhancements to their products. Nzivo (2011) observed that increase in players as witnessed in the telecommunications sector in Kenya following market liberalization results in competition and businesses have to devise strategies to remain relevant.

Differentiation requires organizations to produce or deliver services that customers perceive to be unique and are willing to pay more. Porter (1998) argues that a firm can achieve and sustain differentiation in its industry if its premium price exceeds the extra cost incurred in being unique. This strategy succeeds if the value attribute selected is unique to itself for example; customer support, efficient delivery or technology among others. ASPs in Kenya are required to differentiate themselves to stand out as they present their customers with identical products namely data, internet and voice. Organizations should ensure that the value attributes of its products are visible to customers.

2.4 Value Chain Analysis

According to Porter (1998) the value chain disaggregates a firm's strategically relevant activities in order to understand the behavior of cost and the existing sources of differentiation. Each activity an organization undertakes contributes to its bottom line cost in the creation of value to product or delivery of services. Organization create value by carefully reviewing their value chain activities and processes and then establishing ways to add value in what is referred to as value chain analysis.

The value chain of an organization will be linked to the other value chains it interacts with such as those of suppliers, distribution networks and customer it has an impact on the overall performance of an organization. Marete (2010) argues that the purpose of a value chain is to attain full and seamless interaction among stakeholders to create a win-win situation. Understanding these relationships and their various impacts to the value of an organization's products and services is a critical ingredient to the success of an organization.

According to Porter(1998) the value chain can be analyzed in several steps; The first step is identifying the various distinct value chain activities that organization undertakes and categorizing them as either primary or support activities. The next step is to group them by their activity types whether direct , indirect or quality assurance. The next step involves establishing linkages of these activities within the value chain. The next important step is to carry out an assessment of the distinct activities or combinations of activities that have the potential to add value to the customer. The last step involves developing a strategy and applying changes to those activities that contribute to the competitive advantage of the firm.

Porter (1998) informs this study that linkages within the value chain are crucial to competitive advantage and their exploitation depends on how effectively they are optimized and coordinated. For instance, conducting good quality management through inspection improves reliability of products entering the market and reduces the cost of servicing or replacement. In his model of value chain, Porter(1998) recognizes the various activities performed by an organization contribute to its overall profitability. The principal focus of this model is profitability and is often referred to as the push system.

A contrasting model was advanced by Peter Hines who distinguished himself as a critic of the earlier model released by Michael Porter. He observed that while Porter's model helps managers improve strategies in areas such as inbound logistics, it focuses more on profitability but does very little about satisfying the customer. Hines (1993) argues that customer satisfaction instead of profitability should be principal focus of organizations.

Hines(1993) observed that if the customer's requirements are satisfied it would result in increased profitability as they tend to purchase more of an organization's products or services. This model recognizes that a firm has primary activities and secondary activities but they differ from those of earlier model by Porter.

Hines model emphasizes collaboration between teams and requires integration of a firm's primary activities to meet the organization's objectives. Barnes, S.J (2003) informs this study that diverse inputs must be combined to create and deliver value and this may be achieved through collaboration and aligning the organization's competencies in way that ensures maximum exploitation of opportunities. Achieving competitive advantage and sustaining profitability is essential for business organizations and ASPs in Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses how research data was obtained to address the objectives of the study. The chapter is divided into five parts namely research design, population, sample design, data collection and data analysis.

3.2 Research Design

According to Nyandemo (2007) a most appropriate design is the one that yields maximum information and that provides opportunity for considering many different aspects of a problem. This research uses a cross-sectional survey to respond to the identified research objectives. This survey was administered using a questionnaire as the key instrument

A survey performed on a population does not emphasize on the diverse aspects of a single case but the interest is more on the number of answers to the same question from responses of different people and therefore the emphasis generally shifts to the answers of questions responded to by all participants.

3.3 Population of the Study

According to Mugenda, O.M. & Mugenda, A.G. (1999), population refers to an entire group of individuals, events or objects having a common observable characteristic. The characteristics are attributes among units of the population and the objects of the study. Target population refers to that part of the entire population for which the survey was intended.

Kothari (2004) indicates that a population is said to be finite if it consists of a fixed number of elements so that it is possible to enumerate it in totality. In this study the population was finite and consisted of 111 companies duly licensed by CCK (2012) and those that appear in register of licensees for the Application Service Providers.

3.4 Sampling and Size

According to Kothari (2004), sampling is defined as the process of obtaining information about an entire population by examining only part of it. The researcher then makes generalizations about the population based on the sample. The researcher conducted purposive sampling among licensed ASPs in Kenya. Hassan, A. A. (2012) states that a purposive sample refers to selection of units based on personal judgment rather than randomization and are in some way representative of the population.

The sample size consisted of 18 ASPs that the researcher felt were most competitive and that likely applied value chain analysis to improve their competitive positions. This number represents approximately 16% of the population and according to Mugenda, O.M & Mugenda, A.G. (1999) , a representative sample is at least 10% of the population and therefore the sample size meets this criteria.

3.5 Data Collection

This study has used of both primary and secondary data. Primary data was collected using a detailed questionnaire to ensure that critical data is captured during the survey. The survey consisted of a semi-structured questionnaire and this was give the respondents chance to explain phenomenon in their own words and assist to provide more insights.

The target respondents for the study were key persons critical to strategy formulation and execution of the organizations surveyed. These were Sales and Marketing Managers, Operations Managers, Finance and Administration Managers, Customer Service Managers and the IT Managers or Network Specialists. Secondary data was obtained from various sources such as the quarterly publications by CCK, articles and magazines. This method assisted in obtaining data quickly and cheaply and also assisted in probing during collection of primary data. Secondary data was used to assist in addressing the second objective that is concerned with establishing effectiveness of optimizing value chains to create competitive advantage in the face of competition.

3.6 Data Analysis

The data collected from the study was analyzed using statistical analysis tools such as mean, mode, frequency distribution, standard deviation and factor analysis. Statistical analysis will help in making inferences about attributes of the entire population (universe) at a given time.

By performing a statistical analysis, a clear understanding of respondents' answers was obtained. This approach has been used successfully by others researchers for previous similar studies namely Hassan (2012), Karuga (2010) and Shikumo (2012).

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter represents the data analysis, results and interpretation of the study. The research data was collected from 12 Application Service Providers in Kenya and was analysed and presented in the form of tables, graphs and charts according to the research objectives and explanations provided.

4.2 Response Rate

The study respondents were drawn from ASPs in Kenya and out of 18 organizations that were selected as the study sample only 12 returned successfully completed questionnaires. This resulted in a response rate of 67% which was considered adequate for this study. This can be attributed to the fact that the researcher made persistent follow-ups through communications on email and telephone calls as well as personal visits to the respondents.

The 33% of the questionnaires that were not returned were due to lack of cooperation from the respondents because the researcher had been contracted to work for competitors. According to Mugenda O.M. & Mugenda A.G (1999) a response rate of 50% is adequate for statistical reporting. Therefore this study has a response rate more than 50% and it thus passes the threshold required for data analysis.

4.3 Size of the Organizations

Size plays an important role in the way the value chain is configured. Large sized organizations can leverage their resources and create dominant positions resulting in increased profitability. Large organizations have multiple departments cutting across its functional structures as well as operational structures. Their resources will most likely be centrally managed and required stricter controls to deploy

Small organisations can operate and optimize their resources to enjoy the benefits of a lean operation. Size has a bearing on the ability of an organization to manage change, promote learning and collaboration within the departments and ease of reconfiguring the value chain .The study sought to establish the size of the sampled organizations by asking the respondents to indicate the number of employees within their organization and the results are tabulated below.

Table 4.1: Distribution of the Firms by Size

Size	Frequency	Percent
1-25	6	50.0
26-50	1	8.3
>100	4	33.3
Total	11	91.7
Missing	1	8.3
Total	**12**	**100.0**

As shown in table 4.1 above, 50% of the ASPs surveyed were found to have staffing of between 1-25 employees .The study found that a significant 33.3% had over 100 employees. This indicates that both small and large organizations are able to thrive in this segment of telecommunication industry.

4.4 Years of Experience with the Organization

The duration of employment in an organization may be paramount in determining the level of experience and ability to answer questions satisfactorily. The study sought to establish the duration in years that the respondents had worked with their respective organizations and the results are shown in the table below

Table 4.2: The Years of Experience in the Organization

Years	Frequency	Percent
0-2	4	33.3
3-4	3	25.0
5-6	4	33.3
>10	1	8.3
Total	**12**	**100.0**

Mean= 2.33

As shown in Table 4.2 above 33.3% of the respondents had worked in their organization for a period of between 0-2 years, same to the percentage of those that had worked for 5-6 years. The results also show 3 respondents representing 25% of the sample had worked for 3-4 years and only 1 respondent had worked in his company for more than 10 years. The average duration in years was 2.33 and it can be interpreted to mean most of the employees had the relevant experience to understand most of the operations in their organizations and the industry as a whole. Most respondents were senior managers and this finding gives an indication that majority are likely to have worked in other firms prior to joining the current organizations and most organizations hire into management positions employees with more than 2.33 years industry experience.

4.5 Level of Competition

The study sought to find out the level of competition among application service providers in the telecommunication industry in Kenya. It weighed this based on five parameters very low, low, moderate, high and very high.

Table 4.3: Level of Competition

Level	Frequency	Percent
Very high	5	41.7
High	6	50.0
Moderate	1	8.3
Total	**12**	**100.0**

The study findings in table 4.3 above shows that 50.0% of the respondents agreed that the level of competition that was experienced was high and with 41.7 % indicating the level of competition was very high.

4.6 Management Approaches to Competitive Advantage

There are two approaches to competitive advantage according to the model advanced by Michael Porter namely cost leadership and differentiation. The respondents was asked to indicate what best described the management approaches of their respective organization to survive in this highly competitive industry and the results are shared in the below.

Table 4.4: Management Approaches to Beat Competition

Management Approach	Frequency	Percent
Differentiation	8	66.7
Cost leadership	4	33.3
Total	**12**	**100.0**

As shown in Table 4.4 above, we clearly see that most firms used differentiation strategy to gain competitive advantage as agreed by 66.7% of the respondents. Only 33.3% of the respondents embraced cost leadership in their firms.

4.7 Collaboration

The study sought to establish the level of agreement that employees are required to support tasks in other departments. This question was meant to establish how closely employees worked as teams to achieve business goals and objectives.

Table 4.5: Level of Agreement of Employees Supporting Tasks in Other Departments

Level of agreement	Frequency	Percent
Strongly agree	8	66.7
Agree	3	25.0
Disagree	1	8.3
Total	**12**	**100.0**

As shown in table 4.5 above majority of the respondents 66.7% strongly agreed that employees were required to support tasks in other departments. 25.0% of the respondents agreed that employees in their firms supported tasks in other departments; only 8.3% did not experience interaction of employees from other departments.

4.8 Frequency of Interactions

The study sought to establish the number of departments that the organization employees interacted with in their day to day activities. The findings are shared in the table below.

Table 4.6: Frequency of Interactions

Departments	Frequency	Percent
0	1	8.3
1-2	1	8.3
3-4	6	50.0
5-6	2	16.7
>6	2	16.7
Total	**12**	**100.0**

Mean= 3.25.

Table 4.6 above shows that majority of the respondents representing at least 50% of the study participants indicated that there was employee interaction in between 3 to 4 departments. The average number of departments that employees interacted with according to the studied sample is 3.

4.9 Success of Cost Leadership Management Approach

The study sought to establish from the respondents the extent to which cost leadership factors listed below contributed to the success of their organization.

Table 4.7: The Extent to Which Listed Factors Contribute to the Success of Cost Leadership Approach by Management

Aspects of cost leadership	**Not at All**	**Less Extent**	**Neutral**	**Great Extent**	**Very Great Extent**	**Total**	**Mean**	**S.D**
Exclusive distribution	0	1	2	1	0	4	3.00	0.816
	0%	25%	50%	25%	0%	100%		
Effective Cost Controls	0	0	1	3	0	4	3.75	0.500
	0%	0%	25%	75%	0%	100%		
Preferential terms from suppliers	0	2	0	1	1	4	3.25	1.500
	0%	50%	0%	25%	25%	100%		
Efficiencies in operations	0	0	1	1	1	3	4.00	1.000
	0%	0%	33.3%	33.3%	33.3%	100%		
Deployment of advanced technology	0	0	0	2	2	4	4.50	0.577
	0%	0%	0%	50%	50%	100%		
Lean Operation	0	0	1	0	2	3	4.33	1.155
	0%	0%	33.3%	0%	66.7%	100%		

It is clear from the study findings that the respondents rated at least 100% great extent the factor deployment of advanced technology as the most significant factor leading to success of cost leadership among ASPs and with a mean of 4.50. The study revealed other important factors to be lean operation and efficiencies in operation with means of 4.33 and 4.0 respectively. Effective cost control mechanism emerged as the other important factor with a mean of 3.75 and a standard deviation of 0.500 indicating slight variation from the mean for the responses.

4.10 Success of Differentiation Management Approach

The study sought to establish from the respondents the extent to which factors listed below contributed to the success of differentiation approach by their organization.

Table 4.8: The Extent to which Listed Factors Contribute to the Success of Differentiation Approach by Management

Product Differentiation Factors	Not at All	Less Extent	Neutral	Great Extent	Very Great Extent	Total	Mean	S.D
Excellent customer services	0	0	0	1	7	8	4.88	0.354
	0%	0%	0%	12.5%	87.5%	100%		
Quality product & Services	0	0	1	1	6	8	4.63	0.744
	0%	0%	12.5%	12.5%	75%	100%		
Unique products	0	1	1	2	4	8	4.13	1.13
	0%	12.5%	12.5%	25%	50%	100%		
Lead in innovative products	0	0	1	1	6	8	4.63	0.744
	0%	0%	12.5%	12.5%	75%	100%		
Lead in Technology	0	0	1	2	5	8	4.50	0.756
	0%	0%	12.5%	25%	62.5%	100%		
Flexible product offering	0	0	0	2	5	8	4.71	0.488
	0%	0%	0%	28.6%	71.4%	100%		

As shown in table 4.8 above, the factor excellent customer service scored a mean of 4.88 which is interpreted to mean that most respondents at 87.5% believed that this factor influenced success to a very great extent .The small value of standard deviation indicates most of the responses were Very Great Extent. 75% of the study respondents rated very great extent the factors quality products and services and lead in innovative products .The means for this factors are 4.63 and S.D is 0.744 implying minimal variation from the mean and that most of the responses were very great extent.

The study found out that flexible product offering to meets needs of the customer as agreed by 71.4% of respondents to a very great extent and scored a mean of 4.71 while 87.5% to at least great extent acknowledged that the factor Lead in Technology with a mean of 4.50 contributed to success of differentiation within their organizations. Again, the small values of standard deviation indicate that most responses concentrated around the mean value.

4.11 Competencies and Capabilities

The study sought to establish from the respondents key competencies and capabilities that ASPs were required to possess in order to run a successful operation. The respondents were required to rate on a scale of 1-10 each of the factors below and the results are shared on table 4.9.

Table 4.9: Competencies and Capabilities required for the Success of ASPs

Capability or Competence	Mean	Std. Deviation
Brand name recognition	7.75	2.527
Efficient utilization of organization resources	8.17	1.528
Efficient internal routines	7.82	1.601
Possession of patents to exclusive technology	6.09	3.780
Long term relationship with customers	8.50	1.508
Multi-skilled workforce	8.45	1.214
Resource development through trainings	7.27	2.284
Aggressive marketing	5.36	2.618
benchmarking practices with industry	6.64	2.803
Unmatched experience in the industry	6.64	2.580
Strategic location of business/dealers	6.00	3.300
Strategic partnership(Suppliers)	7.55	2.659

From the study findings on table 4.9 above, long term relationship with customers, multi-skilled workforce, efficient utilization of organization resource and efficient internal routines emerged as the highest rated competencies and capabilities with means of 8.50, 8.45, 8.17 and 7.82 respectively and standard deviations of 1.508, 1.214, 1.518 and 1.601 respectively. The relatively low values of standard deviation indicate minimal variance of the rating amongst the respondents and the means can be taken as good representations of the sample .Others include brand name recognition ,Strategic partnerships (with suppliers)and resource development through trainings with means of 7.75,7.55 and 7.27 with standard deviation of 2.527,2.659 and 2.284 respectively.

4.12 Customer Satisfaction

The respondents were asked to rate the below attributes as leading to customer satisfaction in their organizations on a scale of 1-10 and results are tabulated below

Table 4.10: Ratings of Various Attributes as Contributing to Customer Satisfaction

Customer satisfaction techniques	Mean	Std. Deviation
Meeting customer requirements in delivering services	8.17	2.758
Excellent customer service	8.25	1.712
Short lead time	8.25	1.603
High quality services	8.25	1.603

As shown in the above table 4.10, the mean of the ratings given to the 4 attributes by the respondents have been indicated. The ratings show that all the attributes were preferable in improving customer satisfaction. The attribute meeting customer requirements in delivering of services had a slightly lower rating, a mean of 8.17 and the highest standard deviation of 2.758. The rest of the attributes had the same average rating of 8.25; two of them had same S.D of 1.603 and the other S.D of 1.712.

4.13 Effectiveness in Customer Satisfaction

The study sought to determine the effectiveness in customer satisfaction by evaluating the frequency of occurrence of related actions such as customer surveys, customer complaints received and escalations to the management. This was measured against parameters always, most of the times, occasionally and never which were assigned scores of 1, 2, 3 and 4 respectively.

Table 4.11: Frequency of Occurrence of Actions Related to Customer Satisfaction

Action	Always	Most of the Time	Occasionally	Never	Total	Mean	SD
Customer surveys	3	0	8	1	12	2.58	0.996
	25%	0%	66.70%	8.30%	100%		
Customer complaints received	7	1	4	0	12	1.75	0.965
	58.30%	8.30%	33%	0%	100%		
Escalations to management	0	1	11	0	12	2.92	0.289
	0%	8.30%	91.70%	0%	100%		

The Table 4.11 above shows the frequency, percentages, mean and standard deviations of actions taken to achieve effective customer satisfaction. The mean on the action escalations to management is 2.92 implying the action is taken occasionally and has a small S.D at 0.289 indicating only slight variation of the responses from the mean. 91.7% of respondents agreed that customers occasionally escalated their complaints to the management and only 8.3% indicated these escalations happened most of the times.

66.7% of the respondents agreed that their organizations carried customer surveys occasionally, 25% agreed to be carrying the surveys always with only 8.3% agreeing to never carry out the customer satisfaction surveys. On receiving of customer complaints 58.3% indicated they had been receiving the complaints always with 33.3% receiving the complaints occasionally.

4.14 Active Management Follow-up on Escalations

The study sought to establish from the respondents the level of agreement to which management actively followed up with customers complaints when they had been escalated to them.

Table 4.12: Level of Agreement on Active Management Follow-up on the Resolution of Complaints

Response	Frequency	Percent
Strongly agree	6	50.0
Agree	6	50.0
Total	**12**	**100.0**

As evident in table 4.12 above all the respondents at least agreed that management actively followed up the resolution of customer complaints when reported to them. By escalating their complaints to management customers are guaranteed they will be resolved and it can be interpreted to mean that invoking escalation is effective in achieving customer satisfaction.

4.15 Deliberateness to Customer Satisfaction

The study also sought to establish from the respondents the level of agreement to which management had taken deliberate measures towards achieving customer satisfaction.

Table 4.13: Level of Agreement on Deliberate Measures towards Customer Satisfaction

Response	Frequency	Percent
Strongly agree	3	25.0
Agree	6	50.0
Neutral	3	25.0
Total	**12**	**100.0**

As shown in Table 4.13, 50% of the respondents agreed that their organization applied deliberate measures towards customer satisfaction, while 25% strongly agreed to have been applied the same. 25% of the respondents were neutral to whether their organizations applied such measures or not.

4.16 Challenges in Adopting Value Chain Models

The study also sought to establish from the respondents the challenges application service providers faced in adopting value chain models. To evaluate these challenges factor analysis was used. Challenges were first extracted depending on their Eigen values and then rotated. The extraction of factors was done using principal component analysis and components were extracted according to the Eigen values and the percentage of variance explained by such components. This was presented in the table 4.14 below:

Table 4.14: Factor Analysis on Challenges of ASPs in Adopting Value Chain Models

Component	Initial Eigenvalues		Extraction Sums of Squared Loadings
	Total	% of Variance	% of Variance
1	3.236	35.955	29.262
2	2.041	22.677	24.518
3	1.467	16.302	21.154
4	.948	10.531	
5	.476	5.286	
6	.448	4.974	
7	.167	1.858	
8	.141	1.569	
9	.076	.847	

Extraction Method: Principal Component Analysis.

The Eigen values associated with each factor represent the variance explained by the particular linear component. SPSS extracts all factors with Eigen values greater than 1, we are therefore left with 3 components which explain most of the variance.

Table 4.15: Rotated Component Matrix

Challenges	**Components**		
	1	2	3
Copying of product/service offering	-.007	.293	.881
Penetration of all channels	.124	-.025	.792
Price wars affect profitability	-.813	.145	-.073
High customer mobility	.162	.788	.135
Tough rules on investing in new technologies	-.213	.805	.042
Poaching of staff	.594	-.330	.437
Hiring of professional as opposed to training	.838	-.173	.291
High cost of operations	.433	-.821	.030
Unpredictable government policies hinder growth	-.803	-.136	.445

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

From the rotation component matrix in table 4.15 above, the challenges facing ASPs in the adoption of value chain models can be grouped into 3 components. The first component consist of hiring of professional as opposed to training, Poaching of staff and high cost of operations these were the challenges with highest loadings. The second component consists of tough rules on investing in technologies and high customer mobility since the loadings for these factors were 0.805 and 0.788 respectively.

The third component consists of copying of product/service offering, penetration of all channels and unpredictable government policies. The challenges can thus be grouped into three categories the first one is operational costs and human resource issues, the second is customer retention and technology introductions and lastly industry challenges.

4.17 Readiness to Embrace Change

The respondents were asked to indicate the extent to which they agreed to support the idea of effecting changes to the business routines, processes, structure and strategies.

Table 4.16: Embracing Changes to Routines, Processes, Structure and Strategies

Extent of Agreement	Frequency	Percent
Moderate	4	33.3
Great extent	4	33.3
Very great extent	4	33.3
Total	**12**	**100.0**

According to table 4.16 all the respondents were willing to embrace change of routines, processes, structure and strategies at least moderately, with equal percentage of 33.3% agreeing to embrace change to great extent and very great extent respectively.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter presents the summary of findings from the study; the conclusions and the recommendations made by the researcher upon carefully reviewing the findings as well as suggestions for further research are provided.

5.2 Summary of the Findings

The study had three objectives namely; to determine the key competencies and capabilities that can be attributed to the success of Applications Service Providers in Kenya, to establish effectiveness of optimizing value chains to create competitive advantage in these companies and to identify challenges that ASPs in Kenya face in adopting value chain models.

The study established that the most significant competencies and capabilities were establishment of long term relationship with customers, possession of a multi-skilled workforce, efficient utilization of organizations resources and efficient internal routines. These properties touch on the way the activities and processes are internally organized and are usually developed over time and not easy to replicate. These capabilities lead firms to build competitive advantage that is not easy to copy and which results in increased profitability in the long run.

Other competencies and capabilities required by ASPs in Kenya to be successful were brand name recognition, strategic partnerships and resource developments through trainings. ASPs should therefore work to build strong brands and this can be achieved through offering quality services, excellent customer service and fair pricing of the firm products and services. Developing strategic alliances with suppliers lead to firms benefiting from preferential terms of price, support for products and services. These benefits when extended to customers result in improved customer satisfaction and that indirectly contributes to increased profitability of the ASP firms. Training of staff results in developing skilled work force and enhances their ability to execute different tasks more efficiently thereby improving lead times for service or product deliveries.

The study established that the level of competition was high and this requires ASPs to review their strategies and reconfigure their value chains in order to remain competitive. Differentiation strategy emerged as the management approach adopted by majority of the ASP firms to survive in this highly competitive industry. Excellent customer service, delivery of quality products & services, flexible product offering and leading both in innovation and technology emerged as the key drivers for this strategy. For those organizations that adopted cost leadership strategy, deployment of advanced technology, effective cost control mechanism, lean operation and efficiencies in operation were confirmed as the key drivers.

The respondents in this study rated the following factors very highly as leading to customer satisfaction. These were excellent customer service, short lead time, high quality services and meeting the customer requirements in delivering services. ASPs seeking to achieve competitive advantage through customer satisfaction must therefore develop competencies and capabilities around these areas.

The study established that most of the firms had between 1-25 employees followed by those with over 100 employees. This finding indicates that both large and smaller sized companies thrive in this industry. Majority of the respondents agreed that employees within their departments supported accomplishment of tasks in other departments and this revealed the existence of collaboration between the departments. Teamwork and collaboration helps to achieve inter organizational learning and transfer of skills among the interacting teams.

The study established that employees interacted and supported tasks in 3-4 departments in their organizations. Considering that majority of the firms had between 1-25 employees, this confirms that most ASPs were effective in optimizing the dynamic capability of collaboration within their value chains.

The researcher confirmed from the respondents that most firms conducted customer surveys, and that the firms always received complaints but only occasionally were these complaints escalated to the management. There was total agreement that management followed up the resolution of complaints when escalated to them and half of the respondents agreed that their organizations took deliberate measures towards customer satisfaction. These findings indicate that the value chain was optimized on the aspects customer satisfaction and that it was effective for most ASPs in Kenya.

The study identified several challenges that ASPs in Kenya face in adopting value chain models. Poaching of experienced by competitors, failure to internally train staff but instead preferring to hire experienced staff ,tough rules on investing in new technologies, high customer mobility , imitation of product /service offering, failure by the businesses to penetrate all possible channels and unpredictable government policies.

5.3 Conclusion

The study concluded that to succeed as an applications service provider in Kenya, an organization is required to possess the following competencies and capabilities; be able to maintain long term relationship with customers, possess multi-skilled workforce, practice efficient utilization of the organization resources and have efficient internal routines. In addition the firm should adopt differentiation strategy as the management approach to survive the existing high level of competition.

The differentiation strategy to be adopted by ASP firms should have the following drivers; maintaining excellent customer service, providing customers with quality products & service, ensuring the organization leads in technology as well as innovation. The organization should also possess the ability to achieve customer satisfaction by putting in place deliberate measures that ensure excellent customer service, short lead time for delivery of services and high quality services. It should be appreciated that management has an active role to play is resolution of complaints especially when they are escalated.

The telecommunication industry and especially the space that application service providers operate has its own challenges. It is important for firms to devise strategies to circumvent these challenges and ensure they do not hurt their quest for profitability or superior performance.

5.4 Recommendation

There is evidence to suggest that differentiation was the strategy employed by ASPs in Kenya to be successful. There was general consensus that excellent service and by extension customer satisfaction rated highly as key focus areas and most managers were aware of what they needed to do to achieve customer satisfaction and this should be central to any strategies adopted by ASPs.

The researcher recommends a value chain model that embraces both the differentiation strategy and customer satisfaction.ASP will be required to possess the identified key competencies and capabilities and be alive to the fact the operating environment is dynamic. Collaboration among employees from different departments was evidently present and should be enhanced and used as base to build competitive advantage.

Customer surveys play a significant role in providing feedback to organizations and this research recommends that they should be carried our frequently. Organization need to build internal escalation mechanisms to resolve complaints as it is evident that involvement of management guarantees their resolution. The willingness of respondents to embrace change points to the level of awareness of the dynamic nature of the operating environment and management of ASPs should take advantage of this and implement changes to processes, routines and structure to improve the organization’s overall competitive position.

Human resources departments need to be strengthened to encourage staff retention by allocating more resources. This will aid circumvent the challenges of poaching by competitors and support the requirement to train staff as opposed to hiring few experienced professionals usually at a premium. This will improve the skills and motivate the staff and result in improved productivity and profitability.

Study recommends that regulatory organization should ensure that the necessary laws are put in place to protect intellectual property and curb imitation. This will address the challenge of copying /imitation of product introductions. Government is required to adopt long term policies that curb its unpredictable nature as evidenced in the research. Stability encourages economic growth and expansion of the economy which has a positive impact on telecommunication industry, this study recommends that the government adopts long term policies that ensure stability as opposed to the current and unpredictable nature evidenced in this research. In addition, it is recommended that government provides incentives that ensure reduced cost of operation and that encourage players to introduce new technologies.

5.5 Limitations of the Study

The study largely relied on primary data collected using questionnaires and is limited to responses received. The study assumes that the data obtained was credible. Some organizations were not very receptive to the survey as they thought the researcher had been contracted to work for a competitor despite the introduction letter being attached to the questionnaire. Getting feedback from other companies was difficult since some of the respondents said completing the questionnaire was against the company policy. As a result the researcher did not get feedback from 6 organizations targeted for the survey and hence data was collected from 12 organizations only.

5.6 Area for Further Research

This study is a cross-sectional survey for applications of service provider and there is need to carry out a case study especially for the market leaders and establish similarities and differences that may exist.

This study can also be replicated after sometime to discover if the findings observed will still be relevant and highlight any major shifts in reference to this study.

Study limited itself to competitive advantage and value chain analysis of ASPs in Kenya. Other researchers could target other segments of the telecommunications industry such as network facility providers and content service providers.

5.7 Implication on Policy, Theory and Practice

The government through different agencies formulates and implements policies that affect operation of businesses in different industries. Parliament defines the legal framework to guide and regulate telecommunication companies with input from the industry regulator CCK. This study indicates there is need to provide incentives to investors in this industry and address relevant challenges such imitations of product/service introductions by enacting appropriate intellectual property laws and anti-competitive practice law. Therefore government and other policy makers will make use of the findings to develop an enabling environment that encourages the ASP industry to prosper.

On theory, there are presently two widely accepted models that guide value chain analysis, the porter's model that is primarily focused on profitability through either cost leadership or differentiation and the Hines model that is focused on customer satisfaction. The ultimate goal of both is to gain competitive advantage and return highest possible profitability to the organization. This study finds that a hybrid value chain model that has differentiation strategy at its core and where all activities undertaken are aimed at achieving customer satisfaction as the one that has the greatest impact to profitability and the most appropriate. The value chain is established to be effective when optimized.

Conducting value chain analysis is a critical element for the success of organizations. Key ingredients for success are identified in this process and coupled with appropriate strategies organizations can achieve competitive advantage they yearn for. It is important to protect and guard this advantaged positions from competitors for the continued organizations prosperity. ASPs need to encourage team work between staff of different departments and as such cohesion and collaboration results in improved productivity and hence profitability. Efficient internal routines and procedures maintain efficiencies in the utilization of organizations' resources are critical to the success of ASPs. Lastly management of ASPs need to appreciate the significance of the human resource role in achieving competitive advantage through skills development, training and employee retention.

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APPENDICES

Appendix 1: Letter of Introduction

UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS
MBA PROGRAMME

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

P.O. Box 30197
Nairobi, Kenya

DATE 05.09.2013.

TO WHOM IT MAY CONCERN

The bearer of this letter MUENDO WELLINGTONE MULWA

Registration No. D61/71253/2008

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

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

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

Thank you.

UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS
05 SEP 2013
MBA OFFICE
P.O. Box 30197 – 00100, NAIROBI

PATRICK NYABUTO
MBA ADMINISTRATOR
SCHOOL OF BUSINESS

Appendix II: Questionnaire

A Survey on Value Chain Analysis and Competitiveness of Applications Service Providers in the Telecommunications Industry in Kenya

INTRODUCTION

This survey conducted using this questionnaire seeks to establish linkages between value chain analysis and competitiveness within Application Service Provider firms in Kenya. It will seek to understand the challenges ASPs face in adopting value chain models, identify key competencies and capabilities required to succeed in the industry.

INSTRUCTIONS

1. Please complete the questionnaire by considering each question thoughtfully and honestly.
2. Your answers will be treated with the highest degree of confidentiality and data collected from this research will be used solely for academic purposes and will reported in aggregate.
3. If you have any questions related to this survey , please direct them to Wellingtone Muendo , of P.O Box 1906-00100, Nairobi, Kenya .Tel +254720544710 or Email:wmulwa@yahoo.com

Appendix II continued

QUESTIONS

1. Please indicate

   Name (Optional)…………………...

   Organization (Optional)…………………………………..…...................

   Job Title……………….……………………………..…................................

2. Please indicate what best describes your department

☐ Customer Service	☐ Finance & Administration
☐ IT & Networks	☐ Human Resource
☐ Marketing and Sales	☐ Operations
☐ Procurement	☐ Research & Design
☐ Service Delivery	☐ Other (Specify)……………………..

3. Please indicate the duration in years that you have worked in your organization

☐ 0 – 2	☐ 3 –4	☐ 5– 6
☐ 7 – 8	☐ 9 –10	☐ Over 10

4. Please indicate the approximate number of employees in your organization

☐ 1– 25	☐ 26 –50	☐ 51 – 75
☐ 76- 100	☐ Over 100	

5. Employees within our department are required to support accomplishment of activities in other departments. To what extent do you agree with this statement?

   ☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

Appendix II continued

6. If you disagree with the statement in question (5) ,please indicate the reason(check all that apply)

☐Our department does not provide but receives support from other departments.

☐Our department is structured to work independently to achieve the set targets and usually requires little or no support from other departments.

☐Skills and competencies of the department employees cannot be deployed in other departments

☐Other

(Please specify)…………………………………………………………......

7. How many other departments do you interact with in carrying out your duties?

☐ 0 – 2 ☐ 3–4

☐ 5 – 6 ☐ Over 6

8. How would you best describe the frequency of these interactions?

☐Always ☐Most of the time ☐Occasionally ☐Never

9. What would best describe the management approach to survive in this competitive industry? (Cost leadership requires an organization to produce or deliver services at the least cost while differentiation involves producing or delivering unique products that customers are willing to pay more)

☐ Cost Leadership ☐ Differentiation

Appendix II continued

10. If your answer to question (9) above is cost leadership, to what extent do the factors below contribute to the success of this approach in your organization?

Key: (1) Not at all (2) Less Extent (3) Neutral

(4) Great Extent (5) Very Great Extent

	1	2	3	4	5
a. Exclusive distribution network	☐	☐	☐	☐	☐
b. Effective cost control mechanisms	☐	☐	☐	☐	☐
c. Preferential terms from suppliers	☐	☐	☐	☐	☐
d. Efficiencies in operation	☐	☐	☐	☐	☐
e. Deployment of advanced technology	☐	☐	☐	☐	☐
f. Lean operation	☐	☐	☐	☐	☐
g. Other(Please Specify)………………….	☐	☐	☐	☐	☐

11. If your answer to question (9) is differentiation, to what extent do the factors below contribute to the success of this approach in your organization?

Key: (1) Not at all (2) Less Extent (3) Neutral

(4) Great Extent (5) Very Great Extent

	1	2	3	4	5
a. Excellent customer service	☐	☐	☐	☐	☐
b. Quality products & services	☐	☐	☐	☐	☐
c. Unique products	☐	☐	☐	☐	☐
d. Lead in Innovative products & services	☐	☐	☐	☐	☐
e. Lead in Technology	☐	☐	☐	☐	☐
f. Flexible product offering to meet needs of customers	☐	☐	☐	☐	☐
g. Other (Please Specify)………………….	☐	☐	☐	☐	☐

Appendix II continued

12. In addition to your answers to question 9&10 or 11, how would you rate (on a scale of 1-10) the below factors in attributing to the success of your organization?

    a. Brand name recognition in the market (Rate ……………)
    b. Efficient utilization of organization's resources (Rate ……………)
    c. Efficient internal routines and processes (Rate ……………)
    d. Possession of patents to exclusive technology (Rate ……………)
    e. Long-term relationship with customers (Rate ……………)
    f. Multi-skilled workforce (Rate ……………)
    g. Resource development through trainings (Rate ……………)
    h. Aggressive Marketing (Rate ……………)
    i. Benchmarking practices with Industry (Rate ……………)
    j. Unmatched experience in the industry (Rate ……………)
    k. Strategic Location of the business or Dealers (Rate ……………)
    l. Strategic partnerships(e.g. Suppliers, Customers) (Please specify)…………………..……... (Rate ……………)
    m. Other (Please specify)………………………. (Rate ……………)

13. Does your organization conduct customer satisfaction surveys?

    ☐ Always ☐ Most of the time ☐ Occasionally ☐ Never

14. How would you rate (on a scale of 1-10), the below attributes as leading to customer's satisfaction in your organization?

    a. Meeting customer requirements in delivering services (Rate …………)
    b. Excellent customer service (Rate ………....)

Appendix II continued

c. Short lead time for delivery of products and services (Rate ……………)

d. High quality services (Rate ………..….)

e. Other

(Please specify)………………………..………………………………

15. Has your organization undertaken any deliberate measures towards customer satisfaction against above attributes?

☐ Strongly Agree ☐Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

16. Do you ever get customer complaints reported?

☐ Always ☐ Most of the time ☐ Occasionally ☐ Never

17. Do your customers ever escalate their complaints to the management?

☐ Always ☐ Most of the time ☐ Occasionally ☐ Never

18. Do you agree that management actively follows up the resolution of complaints when they have been escalated to them?

☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

19. What is the level of competition within the ASPs industry?

☐Very Low ☐ Low ☐Moderate ☐High ☐Very High

Appendix II continued

20. Do you agree that competitors copy your product introductions or service offerings and make own follow up launches?

☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

21. Our business is not able to penetrate all possible channels and reach all customers. To what extent do you agree to this statement?

☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

22. If you agree to question (21) indicate the reason

☐……………………..…………………………………...

23. Price wars launched by our competitors affect our organization's profitability. To what extent do you agree to this statement?

☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

24. Our business is affected by high customer mobility between providers. To what extent do you agree to this statement?

☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

25. Our organization has very tough rules of adopting and investing in new technologies. To what extent do you agree to this statement?

☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

Appendix II continued

26. Poaching of experienced staff by competitors affects our business performance and profitability. To what extent do you agree to this statement?

☐ Strongly Agree ☐Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

27. My organization does not invest heavily in training its employees as it sees this as an avoidable cost and prefers to hire few experienced professionals. To what extent do you agree with this statement?

☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

28. High cost of operations such as bandwidth costs, acquisition of advanced technology affects the overall profitability of ASP businesses. To what extent do you agree with this statement?

☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

29. Unpredictable government policies hinder growth in the industry. To what extent do you agree with this statement?

☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

30. In your opinion, would you support the idea of effecting changes to the business routines, processes, structure and strategies?

☐Not at all ☐ Less extent ☐Moderate ☐Great Extent ☐Very great Extent

Thank you very much for your time and participation.

Appendix III: List of ASPs Surveyed for this Research

	Company Name	Box Number-Code	City
1	Access Kenya Group Limited	43588-00100	Nairobi
2	Adtel Phone Co. Limited	25636-00603	Nairobi
3	Bandwidth& Cloud Services Ltd	856-00606	Nairobi
4	Emerging Markets Comm(K) Ltd	61752-00200	Nairobi
5	Gateway Telecommunications(K) Ltd	100560-00101	Nairobi
6	Iway Africa Kenya Limited	27554-00506	Nairobi
7	Jamii Telecom Limited	47419-00100	Nairobi
8	Kenya Data Networks	62499-00200	Nairobi
9	NairobiNet (K) Limited	61758-00200	Nairobi
10	Sahanet Africa Limited	16827-00100	Nairobi
11	SITA	47339-00100	Nairobi
12	Telkom Kenya Limited	30301-00100	Nairobi

Source: Communications Commission of Kenya (2012). *Register of Telecommunications Licensees*.