CHRISTIAN SERVICE UNIVERSITY COLLEGE

DEPARTMENT OF MARKETING, LOGISTICS AND CORPORATE STRATEGY

EVALUATING THE PERFORMANCE OF VODAFONE GHANA IN THE TELECOMMUNICATION INDUSTRY IN GHANA.

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DECLARATION

We do hereby declare that except for references to other people's work, which we have duly acknowledged, this study is the result of our own research and initiative. It has neither in whole nor in part been represented elsewhere for another degree.

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Supervisor's Declaration

I hereby certify and declare that the preparation and presentation of this work was keenly supervised by me in accordance with the principles and guidelines of the university.

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DEDICATION

We dedicate this Project to The Almighty God for his Wisdom, Knowledge and Understanding. He has been the source of our strength throughout this program and on Hi wings only have we soared.

To our supervisor Dr. Stephen Banahene as well who has been affected in every way possible by this quest. God bless you.

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ABSTRACT

The telecommunication industry over the years have proven not only as an emerging economic sector but a rapidly growing sector with an immense impacts towards the revolution of the social and economic structures of Ghana. This has brought in its wake the introduction of telecommunication companies competing for the available markets in the local economy. Such stiff competitions have equally presented some challenges which have affected the corporate performance of the various telecommunication industries. This study therefore sought to evaluate the performance of Vodafone Ghana with respect to the regulatory frameworks, the extent of service coverage and market share, and customers' assessment of products and services. In doing this, a case study of Vodafone's branches in Accra and Kumasi were used in capturing all the major players of Vodafone Company including the management staff, customers and the vendors/retailers of sim cards and recharge vouchers. The study used the purposive and accidental sampling in the conduct of the study. The study revealed that 78 percent and 62 percent of customers (mobile phone and fixed line users) in Accra and Kumasi respectively responded that Vodafone's call completion rate is very high. This meant that most customers could make calls without any form of interruption. Vodafone's nationwide coverage as at December 2018 was 23.79% and share of mobile phone users in Accra and Kumasi for the 2017 to 2018 period increased by 29.6 percent and 34.7 percent respectively. Network coverage has improved by the increase in the number of cell sites from 180 in 1996 to 650 cell sites as at 2018 for Accra whilst that of Kumasi has also increased from 50 cell sites to 295 currently. Vodafone's products sale in Accra and Kumasi has been decreasing at the average rate of negative 7.6 percent. Ministry of Communication and the National Communications Authority should arise and take pragmatic steps to ensure that customers get value for their money.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Telecommunication is the transmission of signs, signals, messages, words, writings, images and sounds or information of any nature by wire, radio, optical or electromagnetic systems. The industry is broader than it was in the past. It encompasses multiple service providers, including telephone companies, cable system operators, Internet service providers, wireless carriers, and satellite operators. The industry today includes software-based applications with a communications emphasis and intermediate layers of software incorporated into end-to-end communication services. It also includes suppliers of telecommunications equipment and software products sold directly to consumers and also to service providers, as well as the telecommunications service providers.

The sense that the world is in the middle of a continuing telecommunication revolution has been strong since the 1960s when the television became one of the widely used media of communication. This period in history marked the realization that the world was becoming a global village (Salami and Usman, 2008).

The evolution and growth of the telecommunications industry over the past four decades has been responsible for the tremendous changes in the technology of human communication. Information and communication technologies currently pervade every facet of human existence; from community radios in almost all parts of the globe, to cellular phones in the hands of women and men in every community on earth, to computers in almost every medium to large organization (Melhem and Tandon, 2009).

The telecommunication industry has brought new opportunities for both knowledge sharing and knowledge gathering by all for different purposes. Advancement in telecommunication provides unlimited opportunities for socio-economic development and social engagement through new innovative thinking and tools. Thus, telecommunication services are utilised in various circles of human endeavour from business, academics, multi-national co-operations among others, with far reaching impacts and benefits.

Ghana's telecommunication landscape was revolutionalised following the deregulation of the sector in 1994 by government in the bid to attract investments and improve competition within the communication sector. This led to the proliferation of a number of private sector cellular network service providers in the country. The Ghana Government, during this period initiated and implemented a five year Accelerated Development Programme (ADP) with the objectives to ensure sustained improvement in the availability, reliability and quality of communication service and expand employment opportunities in the sector. Additionally, the programme sought to improve public access to telecom services in rural and urban area and to ensure that telecom tariffs are affordable, competitive and confer economic returns on telecom operators (Osiakwan, 2003)

Currently, the telecommunication industry in Ghana is private sector dominated with four major operators namely; MTN, AirtelTigo, Vodafone, and Glo. The competitive nature of the industry today, presents implications for telecommunication companies as far as corporate performance is concerned. Excellent corporate performance is not only a prerequisite for continued operation in the industry but also, a necessary condition for a particular company to assume a competitive edge, dominate or a capture a significant share of the total market.

Vodafone Ghana, formerly Ghana Telecom, is the national telecommunications company of Ghana. The company in Ghana operates under Vodafone Group Plc – one of the world's leading mobile telecommunications company, with a significant presence in Europe, the Middle East, Africa, Asia Pacific and the United States. As of April 2016, it had around 7,976,348 mobile voice subscribers, representing 21.92% of the Ghanaian market shares. On 3 July 2008 it was announced that Vodafone had agreed to acquire 70% of Ghana Telecom from the Ghanaian government at a cost of US$900 million and a total enterprise value of approximately US$1.3 billion. After the transaction closed, Vodafone had a 70% stake in the company, while the Ghanaian government retained a 30% stake. The acquisition was consummated on 17 August 2008. Vodafone had previously carried a heavy brand awareness campaign by painting thousands of building across the country with their well-known Vodafone colour and Logo.

Vodafone has over the years evolved in their operations in Ghana, and thus, has realized the need to serve every potential customer, and therefore has come up with broad range of products/services to serve customers better. And of these solutions are: Smart Business, Red Business, Ready-4-Work, Smart Business Data, Smart Connect, IOT, Dedicated Internet, Wide Area Network, Caller Ring Back Tunes, and Bulk SMS Solutions.

Against the background of issues presented and discussed above, this research seeks to assess the performance of Vodafone Ghana in terms of innovation on the part of management to develop competitive strategies that are responsive to the current market and to address effectively, the current challenges of the company in meeting the satisfaction of its customers.

1.2 Problem Statement

The Ghanaian telecommunication players have come under intense criticism over the years for a number of reasons. Concerns have been raised about the seemingly unregulated services provided by telecommunication companies and the poor nature of service delivery in the country. Critics have also questioned over subscription to telecommunication services without expansion of the capacity of service providers, high charge rates and the problem of poor interconnectivity among networks. The gravity of the problem was accentuated in October 2007 when the National Communications Authority (NCA) ordered two of Ghana's most popular mobile telephony network operators, MTN and Onetouch (now Vodafone Ghana) to halt the activation of new access lines until the networks of the two operators were appropriately dimensioned to take on additional capacity.

According to graphic.com.gh, the National Communications Authority (NCA) in 2018 sanctioned all four Mobile Network Operators (MNOs) for poor services rendered to consumers. The four networks were; AirtelTigo, Glo, MTN, and Vodafone. And they were fined for their non-compliance with various Quality of Service (QoS) requirements. The four were fined a total of GH¢34,065,000. AirtelTigo was to pay the highest amount of GH¢11,635,000, MTN GH¢9,080,000, Vodafone GH¢8,890,000 and Glo, GH¢4,460,000.The statement issued by the NCA said that it found from its regular QoS Monitoring in the first quarter of 2018 that there were some infractions of the Licence Key Performance Indicators (KPIs) which the telecommunication companies have been given.

The complains of consumers were also articulated in May 2010 when the Consumer Protection Agency (CPA), an advocacy group in Ghana, called for all cell phone users in the country to switch off their phones for six hours in protest against "poor services" by the cell phone operators. This action was intended to highlight the level of frustration consumers are going through in the use of their cell phones.

Early 2016, subscribers of Vodafone were up in arms against the company following difficulties with loading credit, making calls as well as unexplained credit deductions. The telecom operator after rectifying the disruption compensated its customers. (Vivian Kai, 2016)

Taking into consideration above problems facing the telecommunication industry in Ghana, this paper seeks to evaluate the performance of Vodafone Ghana in the telecommunication industry in Ghana.

1.3 Research Objectives

The prime objective of the research is to evaluate the performance of Vodafone Ghana in the telecommunication industry in Ghana. The study sought to achieve the following specific objectives.

i. To assess Vodafone's products and services offered on the market

iii. To identify the extent of service coverage and the market share of Vodafone Ghana

iii. To examine the regulatory frameworks for the Telecommunication industry in Ghana

1.4 Research Questions

i. What are Vodafone's products and services offered on the market?

ii. What is the service coverage and the market share of Vodafone Ghana

iii. What are the regulatory frameworks for the Telecommunication industry in Ghana?

1.5 Significance of the Study

The core objective of this study to evaluate the actual performance of Vodafone Ghana in the telecommunication industry in Ghana, there are some significance of this study that should be highlighted which Vodafone as a company, the government, customers, and stakeholders in the telecommunication industry stand to benefit; and some of the significance of the study are as follows;

This will help to develop responsive approaches by way of policy-measures by the government to address the concerns of customers and service providers, and to also help to refine the existing telecommunication policy and regulatory frameworks.

The study seeks to provide the platform to developing comprehensive performance indicators/benchmarks that will ensure that quality service delivery becomes the hallmark of Vodafone Ghana Company.

Again, this paper will afford private sector must play a major role to achieve the policy objectives of Ghana as far access to telecommunication services and the contribution of the industry to the country's development agenda are concerned. It is therefore a contribution to help realize government's policy objective of ensuring that every citizen and resident of the country obtains high quality and affordable access to information and communication service and to harness the potential benefits of integrating and growing the wealth of indigenous social and technical knowledge to inform and sustain the socio-economic development of the country (NCA, 2003)

The study will provide a unique opportunity of presenting from empirical evidence the actual performance of the company, by identifying the challenges of the company, exposing its weaknesses and how these affects the quality of service delivery and consumer satisfaction. Management can therefore, based on these and together with the company's strength and opportunities develop responsive measures that can well position Vodafone to assume competitive advantage in Ghana's telecommunication industry and to provide satisfactory services to its customers.

The study finally, is a contribution to the wide range of literature and scholarly works in the field of studies and research as far as telecommunication is concerned thereby adding to the body of knowledge.

1.6 Scope of the study

In terms of scope, the study focused on Vodafone Ghana as it happens to be the oldest and one of the giant telecommunication companies that receives patronage from a significant percentage of subscribers in Ghana's telecommunication market. Geographically, Kumasi and Accra Metropolitan areas were considered as the research scope due to the proximity to the Ashanti region head office and also one of the researcher familiarity with the company as worker for five years, and finally, the study focuses on the management staff of Vodafone Ghana Company, retailers (Care for you Centres) and distributers as well as a cross-section of subscribers.

1.7 Organization of the study

The study was divided into five chapters. Chapter One covered the background of the study, problem statement, objectives, research questions, significance of the study, scope, and organisation of the study. Chapter two of the research contains a review of relevant related literature that provided the theoretical framework and backbone for empirical studies. The chapter therefore, presents and discusses relevant terms and pertinent issues on the development trends of Ghana's telecommunication industry, the regulatory and policy framework for the telecommunication industry in Ghana and a brief profile of Vodafone Ghana Company. The chapter also discusses issues bordering on organisation performance assessment to contribute to achieving the overall objectives of the study. Chapter Three focused on the research methodology. These included the study area, study population, sample size, sampling procedure, and selection of respondents. It also described the administration of the instruments for data collection as well as the proposed methods of data analysis. Chapter Four discussed the results and findings of the study and Finally the Chapter five handles the conclusions drawn from the findings, recommendation and suggestions for further studies.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature on relevant issues to provide a theoretical background for the research. The review presents and discusses issues on Ghana's Telecommunication industry. In essence, issues concerning the evolution and growth of the country's telecommunication industry and the policy and regulatory frameworks for the industry, product and services, market share, and network coverage of Vodafone Ghana and other issues have been captured in this chapter.

2.2 Telecommunication Defined

Telecommunication refers to the specific services that support the exchange of information over significant distances by electronic means. It includes the activities of providing telecommunications and related service activities (i.e. transmitting voice, data, text, sound and video). The transmission facilities that carry out these activities may be based on a single technology or a combination of technologies (International Telecommunication Union, 2010).

The term telecommunications was first used for wired telephony. Today, telecommunications are one of the most important of the contemporary ICTs. They include wired and wireless telephony; different mobile services, such as cellular telephones and paging; voice and data transmission; and Integrated Services Digital Networks (ISDN), which provide a very high quality of voice as well as high data communication rates.

2.2.1 Overview of the Global Telecommunications Industry worldwide

The Telecommunication industry has gone through some significant and revolutionary changes in the past two decades the world over. The industry used to be regarded as a natural monopoly before 1980s. In telecommunications industry this was mainly due to the exceptionally large infrastructure requirements of delivering the telephone services right into households. The monopolistic nature of the industry also meant that the provider could charge excessive prices and gain monopoly profits. Therefore, the need for price regulation also became apparent. It thus became commonplace, all over the world, to have a monopoly company owned by the state for providing telecommunication services (Bandaranayake, 2005).

Due to the problems in state owned enterprises, an essential need was seen to reform them. A combination of restructuring, privatization and establishing regulatory mechanisms were adopted in reforming these public enterprises (Kessides, 2004). The restructuring started in US in 1980s where the monopolist AT&T was dismantled into a number of smaller companies. Competition was introduced into long distance communications and then to local communications. Further, companies were allowed to operate in both broadcast and communications markets simultaneously. The next country to follow was UK with the opening up of their market which was the monopoly of British Telecom. Many countries in the European Union thereafter followed suit (Bressie et al, 2005).

Globally, the Telecommunication industry has become a vital revenue generation sector. For instance, at the end of 2008, worldwide mobile service revenues stood at USD 912.1 billion; outperforming the respective revenues generated by the pharmaceutical, IT hardware and semi-conductor sectors. While software and services generated more revenue than mobile services, mobile surpassed this sector in terms of year-on-year growth, and was the only industry of the aforementioned five to register double digit growth (of 17.4 percent) in terms of overall revenue between 2007 and 2008. It is estimated that by the end of 2008, worldwide mobile subscribers will total 4.6 billion (International Telecommunication Union, 2010).

2.2.2 Historical Development and Structure of Ghana’s Telecommunication Industry

The history of telecommunication in Ghana to the pre-colonial period when the first telegraph line in Ghana, (then the Gold Coast), was a ten mile link installed in 1881 between the castle of the colony’s then governor in Cape Coast and Elmina. In 1882, the first public telegraph line, stretching over a distance of 2.5 miles, was erected between Christianborg and Accra. The extension of telegraph services to the middle and northern parts of Ghana into the territory of the Ashantis was carried out in 1886. In order to improve communications in the southern part of the country, the first manual telephone exchange (70 lines) was installed in Accra in 1892. Twelve years later, in 1904, a second manual exchange consisting of 13 lines was installed in Cape Coast. Allotey and Felix, (2000)

Ghana’s telecommunication infrastructure was laid down and expanded by the colonial administration mainly to facilitate the economic, social, and political administration of the colony. Before the beginning of World War I in 1914, 170 telephone subscribers had been served in Ghana. By 1930, the number of telephone exchange lines in Ghana had grown to 1,560, linking the coastal region with the central and northern parts of the country. In 1953, the first automatic telephone exchange with 200 lines was installed in Accra to replace the manual one erected 63 years earlier. Three years later, in 1956, the trunk lines connecting Accra, Kumasi, Takoradi, and Tamale were upgraded through the installation of a 48- and 12-channel VHF network.

The attainment of independence by Ghana in 1957 brought new dynamism to the country's telecommunications development as a second new automatic exchange in Accra in 19 57. By the end of 1963, over 16,000 telephone subscribers and 32,000 rotary-type telephones were in use in Ghana. The management of Ghana’s telecommunication institutions was also transferred from Public Works Department to the post office following the enactment of the Post Office Ordinance in 1886 and later to the Post and Telecommunications Department until the early 1970s.

Satellite communication was not an integral part of the Ghanaian communications system until the early 1980s. The construction of a satellite earth station at Kuntunase in the Eastern region of Ghana in 1981, and related communication reforms of the early 1990s marked a dramatic shift towards greater use of satellite communications technology over the next two decades (Boateng, 2000).

According to Osiakwan (2003), Ghana was one of the African countries who in the late 1990's were in the forefront of the liberalisation of the telecommunications sector to attract investments and improve competition within the communication sector. The communications sector was deregulated in 1994 when the government initiated the implementation of the Accelerated Development Programme (ADP) -- a five year programme for the restructuring of the communication industry. The ADP Programme ended in 2000 with the following achievements: teledensity increasing from 0.34 lines for 1000 inhabitants in 1994 to 1.16 lines in 2000; public phones per 1000 inhabitants increasing from 0.001 in 1994 to 0.16 in 2000; creation of the National Communications Authority (NCA) in 1996; liberalization of the communication sector; and the partial privatization of Ghana Telecom with Government maintaining 70% share. These were achieved primarily through the entrance of new telecommunication companies following the deregulation and privatization of the sector

2.2.3 Structure of the Telecommunication Market in Ghana

The main elements of the current and emerging market structure of the telecommunication industry in Ghana as contained in the National Telecommunication Policy can be captured under five major market segments.

2.2.3.1 International Telecommunication Segment

The international market segment of Ghana consists of telecommunication facilities and services which carry communications signals across the country's international borders. These include licensed gateway operators with official authorisation to maintain physical gateway connections to internal destinations. There are two such licensed gateway operators namely, Ghana Telecom (now Vodafone Ghana) and Westel. Others in this segment include SAT-3 access, Private licensed VSAT systems and unlicensed international bypass services. The latter refer to unauthorised service providers utilising new technologies to connect international voice calls to the local public network, bypassing the gateway facilities and charges of licensed international operators.

2.2.3.2 Domestic Public Telephone Services

This segment of Ghana's telecommunication market includes all facilities and services that connect to telephone calls between users within Ghana. This segment consists of fixed wireless networks, wireless mobile networks and Public telephone and tele-centers.

2.2.3.3 Dedicated Transmission Network

The dedicated transmission network segment of the countries telecommunication market includes all forms of point-point transmission networks which connect to two or more dedicated locations. These are used to provide wholesale capacity for use by other public network operators, for private, closed-user-group communication services or for public signal distribution.

2.2.3.4 Internet Services

This category consists of services that link end users to the internet and its various applications such as e-mail and web. Internet services do not by themselves involve installation of physical telecommunication networks but typically rely on use of other existing networks, through either dial-up or dedicated connections.

2.2.3.5 Broadcasting Systems

Operators under this segment of the market include public radio and television stations; operated by publicly-owned statutory bodies, commercial radio and television stations and community radio and television stations.

A number of telecom value added providers have emerged with the liberalisation of the telecommunication sector. Notable among them are the Mobile Phone Operators most of which were licensed before the establishment of the NCA. Millicom Ghana Limited began its operations in 1992/93 with Mobitel as its network name. Celltel started its operation in 1995 with a network name “Celltel” which was later changed to “Kasapa”. Scancom also entered the market in the same year using a network name “Spacefon”. In 2001, Ghana Telecom introduced its mobile phone services under a network name “One Touch”, now Vodafone.

The three larger operators are now, MTN, TIGO and Vodafone, accounting for about 95 per cent concentration ratio (Ahortor, 2003).

Aside the mobile phone providers, there are internet and public data providers of which Network Computer Systems (NCS), Africa Online, Internet Ghana Ltd and Ghana classifieds are the leading companies among 46 internet services providers that are licensed to operate. They have a combined subscriber base of about 150,000. Other value added providers are the public pagers that include City Pagers, American Telecom Systems, Punch Communications Ltd and Page One Communications Ltd (ISSER, 2003).

Data from the National Communications Authority ending August 2008, indicated that out of a total of 10,242,916 mobile phone subscribers in the country, MTN has 5,539,065, representing 52 per cent of the market; TiGO following half way with 2,668,316 subscribers; followed by GT/Vodafone with 1,648,544 subscribers; whiles Kasapa trails far behind with about 386,991 subscribers (Dowuona, 2009).

2.3 Policy and Regulatory Frameworks for the Telecommunication Industry in Ghana

2.3.1 National Telecommunication Policy

Following widespread liberalisation in basic telecommunication services in 1994, the government of Ghana, ten years later in 2004, formulated a comprehensive national communication policy with the vision of building upon developments that have been facilitated by the former in the telecommunication sector. The purpose is to define the framework within which Ghana’s Telecommunication sector will evolve towards its set vision. Specific objectives that the policy aims to promote include:

Universal access for all communities and population groups in Ghana to telephone, internet and multimedia services by 2010; national penetration of universal telecommunication service to reach 25% of the population, including 10% in rural areas by 2010; connection of all schools, medical clinics, Government offices and public and community broadcasting stations to advanced telecommunication services; fully open private and competitive market for all telecommunication services; streamlined, efficient and effective regulation of the telecommunication industry on a fully transparent, technologically neutral and competitively balanced basis; affordable prices for telecommunication services particularly for low income citizens; profitable investment opportunities for businesses in all segment of the market; and Ghana shall be seen as a first-class hub for international telecommunication and information industry investment, jobs and development and a leader in the transformation of Africa towards full participation in the information society.

The achievement of these policy goals and objective depends on the performance of the private sector since Ghana’s telecommunication industry is dominated by private telecom service providing companies.

2.3.2 Ministry of Communications

The Ministry is primarily responsible for the definition and elaboration of Government policy regarding telecommunications. In this regard, the Ministry is charged with the responsibility to periodically review the effectiveness and success of the present policy on telecommunication and consider amendments and updates as appropriate.

Again, the Ministry has the responsibility to participate in a consultative capacity in all National Communications Authority public regulatory proceedings in an open and transparent manner. It is the mandate of the Ministry of Communication to monitor development of the telecommunication sector, and progress toward achieving the objectives of the national policy and to represent the Government of the Republic of Ghana in all international negotiations and proceedings relating to the country’s telecommunication policies.

2.3.3 The National Communication Authority

As the telecommunication sector in Ghana underwent privatization and liberalization, there was the need to assign the regulatory roles to an independent body that will oversee the development of the sector. Consequently, the National Communications Authority Act (Act 524) was promulgated in 1996 for the establishment of the NCA.

Ghana's regulator, the NCA, has operated for years with scanty financial resources and no management board. Spectrum management has been messy; mobile operators were allowed to offer services using "authorizations" rather than formal licenses with clearly defined service obligations (Guy, 2002).

The NCA according to the National Communication Policy have the primary responsibility of regulating the telecommunication sector and implementing the terms of the National Transportation policy among the roles of the Authority as contained in the National Transportation Policy are:

a. Issuing of licences, establishing terms and conditions;
b. Regulation of competition including interconnection;
c. Allocation of scarce resources including management of the frequency spectrum;
d. Implementation of Universal Access Policy;
e. Tariff regulation consistent with Ministry Policy;
f. Consumer protection;
g. Technical standards, quality of service oversight; and
h. Monitoring of operators activity, performance and compliance.

2.4 Assessing Organizational Performance of Corporate Entities

Performance has been seen as getting the job done or producing the result for a set aim or objective. In a broader sense, it refers to the accomplishments of an agency, program, or employee relative to stated goals and objectives. It involves the translation of a company's mission and strategy into a comprehensive set of proven targets and goals through strategic leadership by management.

The overall performance of an organization therefore is dependent on management's ability to meet its stated goals with an acceptable outlay of resources while ensuring sustainability over the long term. Good performance therefore means getting the work done effectively and efficiently.

2.4.1 Profile of Vodafone Ghana

Vodafone Ghana, a subsidiary of Vodafone is the world's largest mobile telecommunications group, with equity interests in 26 countries and Partner Networks in over 40 additional countries. As of 31 March, 2008, Vodafone had approximately 260 million proportionate customers worldwide (Vodafone Annual Report, 2010).

Vodafone Ghana, formerly Ghana Telecom, is the national telecom company of Ghana. Vodafone Ghana, originally the Post and Telecommunications Department of the Civil Service, went through several transformations before being renamed Ghana Telecom in 1996. It was divested first to a consortium called G-Comm Limited led by Telekom Malaysia and was later managed by a Norwegian management services company known as Telenor Management Partners (TMP).

Vodafone (formerly Ghana Telecom) is the number 3 mobile operator and the leading fixed line and broadband operator in Ghana. As of 31 March 2008, it had 1.4 million mobile customers, equivalent to a mobile market share of approximately 17 percent, and operated 379,000 fixed and 15,000 broadband lines.

In 2006, the Company had around 400,000 customers for fixed and mobile telephony and internet services. On July 3rd 2008, the sale of the company for $900m to Vodafone group was announced. After the transaction closed, Vodafone had a 70 percent stake in the company, while the Ghanaian government will retain a 30 percent stake. On 16th April 2009, the company was rebranded as Vodafone Ghana, since then Vodafone has been operating in Ghana in a competitive manner among its peers in the Ghanaian telecommunication industry.

2.4.2 Services Provided by Vodafone Ghana

Prepaid and post-paid Mobile service: Vodafone mobile prepaid service gives customers the flexibility to pay per second and upfront for all Vodafone services used. This means that consumers do not pay for services at the end of the month. With this service by Vodafone, it is convenient and easy for customers to stay active around the clock with handy top-up options through prepaid top-up cards from any of the company's outlets all over Ghana and Vodafone Credit Transfer from a retail points or from friends and family who are already on the Vodafone network.

The post-paid mobile service allows customers to enjoy the convenience of uninterrupted mobile service, without the worry of topping up or running out of credit. With the Vodafone mobile post-paid plan customers can have access to all of Vodafone's mobile services and simply pay at the end of the month.

Internet: Vodafone offers a variety of technologies and packages to make subscribers' choice of how to connect to the Internet very possible. There are products that are tailored for every kind of user – from the young professional to home or corporate users. Packages range from fixed broadband to mobile broadband solutions catering for different user requirements. Also Vodafone Ghana has improved on it internet speed over the years, just recently 4G Lite internet license is given to Vodafone Ghana to satisfy its customers with high internet speed.

Vodafone's Dialup flat-rate (per minute) Internet access package is available for customers who use the Internet for no more than a few hours a month. With this service, subscribers pay a fixed rate per minute. As such, for postpaid customers, the Internet usage is billed as part of the normal monthly telephone bill. The company also has internet cafes that provide internet services to the public irrespective of the mobile network of which they are subscribers.

Vodafone Broadband: Vodafone Broadband is delivered using ADSL, a tested and proven technology which enables landlines not only to make and receive voice calls but also to access the internet. Vodafone Mobile Broadband gives customers internet access on y PC or laptop – whether at every location in the country.

Fixed Line: Vodafone fixed line offers voice and e data services and products at competitive rates on prepaid and post-paid consumption terms. Vodafone fixed line is accessible throughout Ghana either on the company's traditional fixed line or mobile desk phones.

Fixed Line Calling Card: This service by Vodafone makes it possible for customers to make national or international calls from any Vodafone fixed line with the credit on the fixed line calling card.

2.4.3 Network Coverage and Market Share of Vodafone Ghana

Telecommunication companies have areas within which customers have access to their network services. Cell sites located a various vantage points broadcast network services within a particular radius of its location. Hence, areas within the radius will have network coverage. These areas determine the extent of network coverage of the telecommunication company. The network coverage therefore refers to the area covered by a particular telecommunication company in terms of service for a particular product usually mobile service of any telecommunication company.

The network coverage is a factor in knowing the likely market share of the company. In that, when the network coverage of a telecommunication industry excludes an area, it limits the ability of people in such areas to subscribe to the services of that company. This thus limits the ability of the company to increase its customer base so as to increase its market share.

This section therefore assesses the performance of Vodafone Ghana by considering the areas of network coverage of the company, the market share of the company in Ghana and their products offered on the Ghanaian market.

Network Coverage the coverage of Vodafone's fixed line service is throughout Ghana. The mobile phone service on the other hand had its initial coverage in Accra, Kumasi and Obuasi when Vodafone, then known as Ghana Telecom (GT) started its mobile phone network service operations in 1996. Between 2000 and 2007, the company increased its nationwide coverage to 60 percent which included all the regional capitals, 80 percent of the nation's Metropolitan, Municipal and District (MMDA) capitals and their major towns. In 2010, mobile phone network coverage by Vodafone has increased to 85 percent to include all the MMDA capitals except some capitals of newly created districts such as Wa East District. The remaining 15 percent includes the villages and towns in most of the newly created districts.

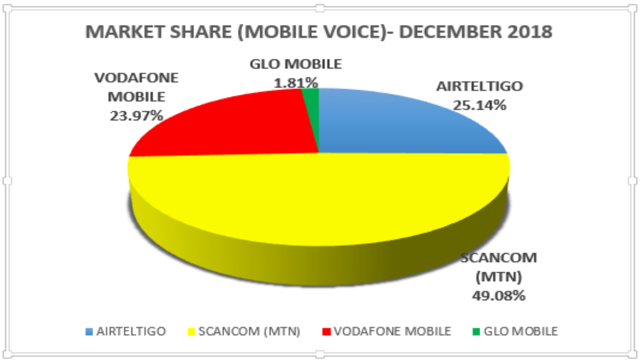
As at 1996, the company had a total of 350 cell sites which served areas in Accra, Kumasi and Obuasi. The number of cell sites increased to 1950 between 2000 and 2007 to serve all regional and district capitals as well the major towns in these districts. After the acquisition of GT by Vodafone Ghana in 2007, the number of cell sites has been increased to 2100 to improve coverage to most villages and small communities in all the ten regions of Ghana.

The number of cell sites in Accra has increased from 180 in 1996 when the then GT started its mobile phone network operations to 750 cell sites as at 2017. Similarly, the number of cell sites in Kumasi has also been increased from 50 cell sites to a present number of 395. This has engineered the capacity of Vodafone to have complete network coverage not only in Kumasi and Accra but almost every part of the country.

The market share here refers to the total number of active subscribers of Vodafone Ghana. The nationwide market share of Vodafone Ghana as at 2010 was 14 percent of the total active subscribers of mobile phone users in Ghana. According to the Marketing Department of the Company, as at 2010 there are approximately 6 million and 3.5 million mobile phone users in Accra and Kumasi respectively .

Market share is the percentage of a market accounted for by a specific business entity. This may be defined in terms of total customers, total units or revenue (Boundless 2014). This is one of the critical performance indicators of many sales organisations. The use of this measure of business performance has the advantage of being less dependent on macro-environmental variables like exchange rate of the country. Managers of many companies constantly monitor the effects of their marketing strategies on the market share of competitors. The measure gives indication of how well the firm is doing. Kumar, *et al*. (2011) note that market orientation performance link is strong and positive with subjective measures of performance. Therefore the use of subjective statements of performance by asking managers to give their perspective on the market share of Vodafone Ghana was in order and anticipates showing similar strong correlation. The NCA publication of the market shares of all operators in the telecommunication sector was useful for this section. (See the chart below).

Figure 1: Market Share



Source: National Communications Authority, Ghana 2018.

According the 2018 report by the NCA, at the end of December 2018, the total number of mobile voice subscriptions was 40,934,875. This represents a percentage increase of 1.19% from November 2018's figure of 40,454,055. The total penetration rate for the month under review was 138.88%.

MTN's voice subscriptions for the period was 20,092,798 representing a percentage increase of 1.68% from November 2018's figure of 19,759,948. MTN's market share for the month under review was 49.08%.

Vodafone's mobile voice subscriptions increased from 9,606, 427 as at the end of November 2018 to 9,813,234 as at the end of December 2018. This represents a percentage increase of 2.15%. Vodafone's market share for December 2018 was 23.97%.

AirtelTigo's voice subscriptions decreased from 10,342,271 as at the end of November 2018 to 10,289,491 as at the end of December 2018 indicating a percentage decrease of -0.51%. Their market share for the month under review was 25.14% as compared to 25.57% in November 2018.

Voice subscriptions of Glo decreased from 745,409 as at the end of November 2018 to 739,352 at the end of December 2018. With a percentage decrease of -0.81%, their total market share for the month under review was 1.81%.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

The main objective of this study is to critically evaluate the performance of Vodafone Ghana in the telecommunication industry in Ghana. This chapter therefore considers and presents the methodology chosen and used for the study. The chapter focuses on the research design, study area, sampling procedure, selection of respondents, description of the instruments implemented for data collection and how data would be analyzed. According to Yin, 2003, a research methodology defines what the activity of research is, how to proceed, how to measure progress, and what constitutes success. Kumekpor (2002) also defines it as the methods, procedures and techniques used in an attempt to discover what we want to know.

3.2 Research Design

In order to achieve the primary objective of the study, which is to critically evaluate the performance of Vodafone Ghana in the telecommunication industry in Ghana, the case study approach was employed for the study. Hence, Accra and Kumasi Metropolitan areas were selected as the areas for the study. According to Emory (1985), a research design represents a plan, structure, and strategy of investigation conceived so as to obtain answers to research questions and to control variance.

A case study approach therefore, is a comprehensive enquiry into part of a subject with similar attributes to the entire subject under study to obtain an understanding of the whole subject. Case studies are frequently regarded as using both quantitative and qualitative research and a combination of both approaches (Bryman, 2004). It was adopted more so because of the similar operational environment and style of Vodafone's operation in these two metropolitan areas. The advantages of using a case study approach include: obtaining a deeper understanding of the issue being studied irrespective of how complex the issue is; revealing the inter-relationships which exist between groups, policy measures, processes and other factors which the study may focus on and its adaptability to various research objectives. In particular it enables a quick understanding of complex issues, therefore providing foundation for further studies into subjects, using other research designs. A case study is also known for its flexibility – being adaptable to various study objectives.

3.3 Study Area

The study focused on Vodafone Ghana as it happens to be the oldest and one of the giant telecommunication companies that receives patronage from a significant percentage of subscribers in Ghana's telecommunication market. Geographically, Kumasi Metropolitan area were considered as the research scope due to the proximity to the Ashanti region head office and also one of the researcher familiarity with the company as worker for five years, and finally, the study focuses on the management staff of Vodafone Ghana Company, retailers (Care for you Centres) and distributers as well as a cross-section of subscribers.

Ghana telecommunication industry has been through a lot. Martin, Gladys and Larissa, traced the history of telecommunication in Ghana to the pre-colonial period when the first telegraph line in Ghana, (then the Gold Coast), was a ten mile link installed in 1881 between the castle of the colony's then governor in Cape Coast and Elmina. In 1882, the first public telegraph line, stretching over a distance of 2.5 miles, was erected between Christianborg and Accra. The extension of telegraph services to the middle and northern parts of Ghana into the territory of the Ashantis was carried out in 1886. In order to improve communications in the southern part of the country, the first manual telephone exchange (70 lines) was installed in Accra in 1892. Twelve years later, in 1904, a second manual exchange consisting of 13 lines was installed in Cape Coast. Ghana’s telecommunication infrastructure was laid down and expanded by the colonial administration mainly to facilitate the economic, social, and political administration of the colony.

Before the beginning of World War I in 1914, 170 telephone subscribers had been served in Ghana. By 1930, the number of telephone exchange lines in Ghana had grown to 1,560, linking the coastal region with the central and northern parts of the country. In 1953, the first automatic telephone exchange with 200 lines was installed in Accra to replace the manual one erected 63 years earlier. Three years later, in 1956, the trunk lines connecting Accra, Kumasi, Takoradi, and Tamale were upgraded through the installation of a 48- and 12-channel VHF network. The attainment of independence by Ghana in 1957 brought new dynamism to the country's telecommunications development as a second new automatic exchange in Accra in 19 57.

By the end of 1963, over 16,000 telephone subscribers and 32,000 rotary-type telephones were in use in Ghana. The management of Ghana’s telecommunication institutions was also transferred from Public Works Department to the post office following the enactment of the Post Office Ordinance in 1886 and later to the Post and Telecommunications Department until the early 1970s. Satellite communication was not an integral part of the Ghanaian communications system until the early 1980s. The construction of a satellite earth station at Kuntunase in the Eastern region of Ghana in 1981, and related communication reforms of the early 1990s marked a dramatic shift towards greater use of satellite communications technology over the next two decades (Boateng, 2000).According to Osiakwan (2003), Ghana was one of the African countries who in the late 1990’s were in the forefront of the liberalisation of the telecommunications sector to attract investments and improve competition within the communication sector. The communications sector was deregulated in 1994 when the government initiated the implementation of the Accelerated Development Programme (ADP) -- a five year programme for the restructuring of the communication industry. The ADP Programme ended in 2000 with the following achievements: teledensity increasing from 0.34 lines for 1000 inhabitants in 1994 to 1.16 lines in 2000; public phones per 1000 inhabitants increasing from 0.001 in 1994 to 0.16 in 2000; creation of the National Communications Authority (NCA) in 1996; liberalization of the communication sector; and the partial privatization of Ghana Telecom with Government maintaining 70% share. These were achieved primarily through the entrance of new telecommunication companies following the deregulation and privatization of the sector.

3.4 Selection of Respondents

As stated by Kinsey (1999). Large samples give more results but it is not necessary to sample the entire population to achieve reliable results. A total of 100 customers were sampled for interview with 50 customers selected from each metropolis, 25 management staff each, and 25 vendors also from each metropolis making a total of 200 respondents used for the study. The accidental sampling method was used since the location of these customers was unknown. Hence, the customers who visited the various customer care centers in these areas were sampled for the interviewed.

3.5 Data Sources

The study made an extensive use of both primary and secondary sources of information from the management staff of Vodafone, customers and retailers/vendors of the company. The primary sources of data included information that was gathered from the field. The secondary sources of data included Vodafone Ghana Limited annual reports and brochures. Data on the profile and operations of the Vodafone Ghana, resource base of the company, technological advancement as well as operational challenges and administrative responses of the company were gathered from management and staff of Vodafone Ghana. In addition, customers were asked questions bothering on the quality of service provided by Vodafone Ghana, types of products and services provided. The vendors provided data centered on the sale of Vodafone's products. The type of data and their sources used in gathering them are deliberated as follows;

3.5.1 Primary Data

Primary data is defined as raw data collected on source which has not been exposed to processing was collect Primary data was sought from students on their experiences and perception of the counselling and administrative heads as well. The study adopted questionnaire as the main instruments for collecting the primary data needed to answer the research questions.

3.5.2 Questionnaires

Questionnaires are the main tool used in the work because it provides easy access for data needed. The questionnaire was carefully design to avoid ambiguity, bias and long and boring sentences.

As defines by Kotler and Keller (2009) a questionnaire is a set of questions presented to respondents. Due to its flexibility and ability to produce quick results questionnaires are by far the most common research instrument used to collect primary data. It was divided into various sections the items on the questionnaire were either closed-ended or open-ended based on what the researcher expected from the question. Close-ended questions were used to seek for answers with no explanations whereas open-ended questions were used in situations where the researcher needed to make further enquiries in areas where close-ended questions fell short.

3.5.3 Secondary Data

The secondary data were obtained from reviewing journals and literature relevant to the subject matter of this research. This category of data was mainly in quantitative form. Secondary data for the study comprised extract from literature concerning telecommunication industry (Ghana and worldwide) and the performance of Vodafone Ghana. Access to the data was not a problem as these were published annually in the print and electronic media for public use. The researcher benefited in so many ways from the use of this type of material for the study. First this was less expensive to collect, in terms of time and money. It afforded the researchers the opportunity to collect high quality data which would not have been of the same quality if the researchers were to collect it in its primary form. Saunders et al, (2007) quote Stewart and Kamins (1993) as stating that secondary data are likely to be of higher quality than could be obtained by collecting pragmatic data. The electronic search site: www.google.com was employed extensively for up-to-date materials on the topic.

3.5.4 Data Analysis

The data was analyzed using both descriptive and analytical approaches. This involved the use of Statistical Package for Social Sciences (SPSS). It enabled the researchers to come out with the final findings of the research. The secondary data obtained were scrutinized to determine their suitability, reliability, adequacy and accuracy before presentation. The primary data (responses from interviews and questionnaires administered) were presented by the same statistical tool (SPSS). To obtain quality data, responses were crosschecked in the field. Thus, the responses were filtered and cleaned to avoid inconsistencies and discrepancies thereby ensuring quality of data collected. Responses provided to the open-ended questions which were also coded before imputing them into the SPSS programme. The results from the analysis were presented in frequency tables . Presentation of the data on these statistical tools made the analysis very easy. These statistical tools conveyed the meaning of the figures captured and as such made the analysis straight forward.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION OF RESULTS

4.1 Introduction

The purpose of this chapter is to analyse the data gathered from the field in order to evaluate the performance of Vodafone Ghana with Kumasi and Accra as the case study areas. Data collected were analysed with respect to evaluating the company's performance. Hence, issues discussed included Policy and Regulatory Frameworks as well as functions of mandatory bodies for the Telecommunication Industry in Ghana, products and services offering and the Vodafone Ghana network coverage and market share.

4.2 Background and Characteristics of Respondents

The background characteristics of respondents as referred to in this section deals with the presentation on the overview and number of respondents interviewed for the study. There are three main categories of respondents interviewed in both Accra and Kumasi for this study. These categories of respondents involved the management staff of Vodafone, customers of Vodafone and the vendors of sim cards and recharge vouchers. The 50 customers and 50 vendors responded to questions that aided in analyzing the issues related to the network coverage and market share of the company in both study areas. And also, the management and staff sampled under the survey were located at Vodafone offices in Accra and Kumasi. In all, 50 management and 50 supporting staff members were selected and interviewed and responded to questionnaires.

Table 1: Demography

Sex of staff who responded					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	55	55.0	64.0	55.0
	female	45	45.0	36.0	100.0
	Total	100	100.0	100.0	

Source: field work, 2019

The sampled management and supporting staff were made up of 55 percent males and 45 percent females. While females commaded 61 percent lead of the customers with remaining 39 percent being males. And this is a clear picture of females more interested in Vodafone especially the vendors.

Table 2: Age category of customers who responded

Age range of customers					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	19-19	30	60.0	60.0	60.0
	20-55	15	30.0	30.0	90.0
	Over 55 Years	5	10.0	10.0	100.0
	Total	50	100.0	100.0	

Source: field work, 2019

The table above table revealed that, customers within an age range of 20 to 55 years were 20 percent, where those within 16 to 19 years were 60 percent and the remaining 4 percent being over 56 years. All the respondents could read and write with the least educational attainment being a Senior High School student.

Table 3: Table showing how long customers have been using Vodafone

How long have you been using Vodafone?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than a year	15	30.0	30.0	30.0
	1-2 years	10	20.0	20.0	50.0
	3- 4 year	12	24.0	24.0	74.0
	more than 5years	13	26.0	26.0	100.0
	Total	50	100.0	100.0	

Source: **field work, 2019**

In response to this question of how long customers have been using Vodafone services, 30 percent responded that they have been using Vodafone for less than a years, 26 percent indicated they have been using Vodafone services for more than 5 years. 24 percent made it known that, they have been using Vodafone' services from 2-3 years, whiles 20 percent said they have been using 32odafone's services from 1-2 years. This revelation is a clear sign of people showing interest in Vodafone Ghana since the larger percentage customers have been using Vodafone for less than a year.

Table 4: Working experience of Staff of Vodafone

How long have been working with Vodafone ?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-3 years	55	55.0	55.0	55.0
	3-5 years	26	26.0	26.0	81.0
	5 years and above	19	19.0	16.0	100.0
	Total	100	100.0	100.0	

Source: field work, 2019

The study revealed that, 55 percent of staff members have over 5years working experience with Vodafone Ghana while, 26 percent have been working with the company for the past 3- 5 years and the remaining 16 percent having worked for less than 3 years with Vodafone Ghana. Meanwhile the study also revealed that, 30 percent of the customers approached has less between 1-3 years experience with Vodafone, 30 percent also has 3-5 years experience while 40 percent more than 5 years experience with the company.

A. Assessment of Vodafone's Products And Services Offered On The Market.

The main aim of this objective is to find out how customers think about the products/services Vodafone Ghana offering on the market, and whether or not they are satisfied. This objective is therefore divided into two sections, that is, services and products.

I. Vodafone Ghana Services

This section takes assessment targeted at the services offered by Vodafone Ghana on the Ghanaian market. Let consider the following;

Table 5: Table showing services customers have been patronizing?

Which of these services have you been patronizing?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Mobile user	30	60.0	60.0	60.0
	Internet user	15	30.0	30.0	90.0
	Fixed line user	5	10.0	10.0	100.0
	Total	50	100.0	100.0	

Source: field work, 2019

The table above reveals that, 60 percent mobile uers, 15 percent happens to Internet users, and only 5 percent 10 percent are Fixed line users. A conclusion can therefore be drawn from this results that, mobile users or subscribers forms that majority of Vodafone Ghana's total market share

Table 6: Table showing what inform the choice of customers in using Vodafone

What informed the choice of using Vodafone?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Better internet Service	13	26.0	26.0	26.0
	affordable call rates	20	40.0	40.0	66.0
	wider network coverage	10	20.0	20.0	86.0
	call clearness.	7	14.0	14.0	100.0
	Total	50	100.0	100.0	

Source: field work, 2019

People have various reason why they patronize services from theses telecommunication companies, according to the above table, we summarized the reasons into four main factors that inform the choice of patronage. The table revealed that, 40 percent uses Vodafone because of their affordable call rate, 26 percent use Vodafone because of their better internet services, 20 percent use Vodafone because they have wider network coverage and for that even in rural areas they can still access their services, and finally, 14 percent use Vodafone because of call clearness. It can therefore be concluded that, the larger percentage of Vodafone customers perceive their call rate to be affordable.

Table 7: Table showing other mobile network customers use in addition to Vodafone.

Which other mobile network to do you use?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MTN	25	50.0	50.0	50.0
	AirtelTigo	19	38.0	38.0	88.0
	Glo	6	12.0	12.0	100.0
	Total	50	100.0	100.0	

Source: **field work, 2019**

It is very common in our part of the world to see a mobile subscriber using two or more different network. The table above revealed that, 50 percent of the customers use MTN alongside Vodafone, 38 percent use AitelTigo plus Vodafone, and fianally 12 percent of the customers who responded to this question uses Glo plus Vodafone. It comes as a no surprise to see MTN taking the larger percentage here because it the leading and largest telecommunication in Ghana in terms of market share. And AiteTigo did well by being the second largest option to customers who are using other network(s) plus Vodafone, and this could be attributed to their recent merger and the huge sensitization programmes and advertisement that followed.

II. Vodafone's Products

This is an assessment targeted at the various product offered by Vodafone Ghana. Aside the internet, sim cards, and call credit cards, Vodafone is well known for the sales of electronics. The aim of this objective is to look at all these products offered by Vodafone Ghana

Let consider the following results;

Table 8: Table showing whether or not vendors have difficulty in getting vodafone's product to sell

Do you have any difficulty getting vodafone's product to sell?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	6	12.0	12.0	12.0
	No	38	76.0	76.0	88.0
	Sometimes	6	12.0	12.0	100.0
	Total	50	100.0	100.0	

Source: field work, 2019

Vendors who sell assorted product of these telecommunication companies are not almost everywhere on our street. 76 percent of these vendors said they do not have any difficult getting products of Vodafone to sell, 12 percent said they have difficulty getting the product to sell and finally, another 12 percent said they sometimes have difficulty getting the products to sell.

Table 9: Table showing complaint(s) vendor receive from customers who sell Vodafone's products

What kind of complaint(s) do you receive from customers who buy any of Vodafone's products from you?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	wrongful deductions	16	32.0	32.0	32.0
	Expensive Internet	18	36.0	36.0	68.0
	Network Instability	12	24.0	24.0	92.0
	Other	4	8.0	8.0	100.0
	Total	50	100.0	100.0	

Source: field work, 2019

Since the customers mostly and can easily interact with the vendors at almost everywhere on the street, they do receive some complaints from these customers who buy from them. 36 percent said customers usually complain about expensive internet charges, 32 percent said customers complain about wrongful deductions, 24 percent indicated customers complain about network instabilities and 8 percent said customers complain about other unspecified reasons

Table 10. Vodafone Products and the Annual Quantity Sold for Accra and Kumasi

Vodafone Products / Quantity Sold	Quantity Sold in GH¢ (Accra)			Quantity Sold GH¢ (Kumasi)		
	2016	2017	2018	2016	2017	2018
Sim Cards	43,300	33,000	21,000	20,300	16,000	24,000
Recharge Vouchers	455,330	571,000	622,000	385,330	424, 000	412,000
Computers	71,000	65,000	99,100	34,000	36,000	44,000
USB Modems	19,000	22,000	25,000	21,000	31,000	33,000
Total	**588,630**	**691,000**	**767,100**	**460,630**	**507,000**	**513,000**

Source: field work, 2019

As indicated in Table above, the sale of Vodafone's products in Accra and Kumasi has been increasing but at a decreasing rate. In Accra, the total quantity of items sold as presented in the Table increased by 11 percent for the 2017 to 2018 period which was smaller than the 2016 to 2017 percentage increase of 17.4 percent. That of Kumasi was not different. The rate of increase in Kumasi for the 2017 to 2018 period was 1.2 percent which was approximately 10 times smaller than the 2016 to 2017 rate of 10 percent. It could therefore be inferred that, though the company's performance in terms of it sale of products had increased for the periods under consideration; the rate of increase has decreased by an average rate of 7.6 percent in both Accra and Kumasi.

Table 11: Table showing Contribution of Vodafone's Sim and Recharge Cards to Annual (2010) Sales of Vendors

What proportion of your annual income is from the sale of Vodafone's sim cards and recharge vouchers?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid					
	0 - 20 %	1	2.0	2.0	6.0
	21 – 40 %	10	20.0	20.0	26.0
	41 – 60 %	14	28.0	28.0	54.0
	61 – 80 %	6	12.0	12.0	66.0
	81 – 100 %	3	6.0	6.0	72.0
	Other	14	28.0	28.0	100.0
	Total	50	100.0	100.0	

Source: field work, 2019

The research sought further to know from Sim and recharge cards vendors as to what proportion of their annual sales is made from the sale of Vodafone's Sim cards and recharge vouchers. The non-response recorded for both years under consideration were those vendors who did not operate during these years. For the year 2017, an average of 42 percent of vendors out of the 35 vendors who responded indicated that, 21 to 60 percent of their annual sales is made from the sale of Vodafone's Sim cards and recharge vouchers. In 2018, 81 percent of vendors interviewed out of the 48 vendors who responded, indicated that less than 40 percent of their annual sales were from the sale Vodafone's Sim cards and recharge vouchers.

C. Extent Of Service Coverage And The Market Share Of Vodafone Ghana

Telecommunication companies have areas within which customers have access to their network services. Cell sites located a various vantage points broadcast network services within a particular radius of its location. Hence, areas within the radius will have network coverage. These areas determine the extent of network coverage of the telecommunication company. The network coverage therefore refers to the area covered by a particular telecommunication company in terms of service for a particular product usually mobile service of any telecommunication company.

The network coverage is a factor in knowing the likely market share of the company. In that, when the network coverage of a telecommunication industry excludes an area, it limits the ability company, the market share of the company in Ghana and their products offered on the Ghanaian market

Table 12: Table showing Vodafone's Percentage Share of Mobile Phone Users in Accra and Kumasi only.

Vodafone's Percentage Share of Mobile Phone Users		
Years	Accra % of market share in terms of mobile users	Kumasi % of market share in terms of mobile users
2016	21	18
2017	27	23
2018	35	31

Source: field work, 2019

The market share here refers to the total number of active subscribers of Vodafone Ghana. The nationwide market share of Vodafone Ghana as at 2018 was 23.97 Vodafone's market share for the year 2018 in Accra and Kumasi as shown in table above was 35 percent and 31 percent respectively of the total number of active mobile phone users in their respective regions .According to the 2018 report by the NCA, at the end of December 2018, the total number of mobile voice subscriptions was 40,934,875. Vodafone's mobile voice subscriptions increased from 9,606, 427 as at the end of November 2018 to 9,813,234 as at the end of December 2018. This represents a percentage increase of 2.15%. Vodafone's market share for December 2018 was 23.97%.

The 34.7 percentage increase of Vodafone's share of mobile phone users in Kumasi for the 2017 to 2018 period was higher than that of the 2016 to 2017 figure of 27.8 percent. That of Accra for 2017 to 2018 was 29.6 percent increase which was also higher than the 2016 to 2017 figure of 28.6 percent. These percentage increases have been attributed to the extensive advertising and other maximum customer satisfaction oriented marketing strategies embarked on by the company for the 2017 to 2018 period.

4.3 Network Coverage of Vodafone Ghana

The coverage of Vodafone's fixed line service is throughout Ghana. The mobile phone service on the other hand had its initial coverage in Accra, Kumasi and Obuasi when Vodafone, then known as Ghana Telecom (GT) started its mobile phone network service operations in 1996. Between 2000 and 2007, the company increased its nationwide coverage to 60 percent which included all the regional capitals, 80 percent of the nation's Metropolitan, Municipal and District (MMDA) capitals and their major towns. In 2010, mobile phone network coverage by Vodafone has increased to 85 percent to include all the MMDA capitals except some capitals of newly created districts such as Wa East District. The remaining 15 percent includes the villages and towns in most of the newly created districts.

As at 1996, the company had a total of 350 cell sites which served areas in Accra, Kumasi and Obuasi. The number of cell sites increased to 1950 between 2000 and 2007 to serve all regional and district capitals as well the major towns in these districts. After the acquisition of GT by Vodafone Ghana in 2007, the number of cell sites has been increased to 2100 to improve coverage to most villages and small communities in all the ten regions of Ghana.

The number of cell sites in Accra has increased from 180 in 1996 when the then GT started its mobile phone network operations to 650 cell sites as at 2018. Similarly, the number of cell sites in Kumasi has also been increased from 50 cell sites to a present number of 295. This has engineered the capacity of Vodafone to have complete network coverage in all parts of Accra and Kumasi.

Table 13: Table showing the usage of Vodafone and other Networks in both Kumasi and Accra

Usage of Vodafone and other Networks				
Network Usage		**Accra**	**Kumasi**	
No. of Respondents	Number	Percentage	Number	Percentage
Vodafone Alone	21	42	31	62
Vodafone and Other Networks	29	58	19	38
Total	**50**	**100**	**50**	**100**

Source: field work, 2019

As shown in table above, out of the total number of Vodafone respondents interviewed in both Accra and Kumasi, 52 percent used only the Vodafone network. Reasons such as poor network services at certain times of the day as well as relatively high call and internet prices were cited as the nexus of factors resulting in the use of Vodafone and other networks as well as the thought of changing from Vodafone to other network entirely. The market share of Vodafone in terms of the number of its subscribers as well as the monetary gains of the company is and will thus be affected if steps are not taken to address such customer concerns

D. Assessment of Policy and Regulatory Frameworks as well as functions of mandatory bodies for the Telecommunication Industry in Ghana.

The table below summarizes the comprehensive national communication policy with the vision of building upon developments that have been facilitated by the former in the telecommunication sector and also the functions and responsibilities of Ministry of Communications and The National Communication Authority.

The National Telecommunication Policy	**Ministry of Communications (FUNCTIONS)**	**The National Communication Authority (FUNCTIONS)**
Universal access for all communities and population groups in Ghana to telephone, internet and multimedia services by 2010;	The Ministry is primarily responsible for the definition and elaboration of Government policy regarding telecommunications	Issuing of licences, establishing terms and conditions
National penetration of universal telecommunication service to reach 25% of the population, including	National penetration of universal telecommunication service to reach 25% of the population, including	Tariff regulation consistent with Ministry Policy and Consumer protection
10% in rural areas	telecommunication and consider amendments and updates as appropriate	
Connection of all schools, medical clinics, Government offices and public and community	the Ministry has the responsibility to participate in a consultative capacity in all National Communications Authority public regulatory proceedings in an open and transparent manner	Allocation of scarce resources including management of the frequency spectrum;
Fully open private and competitive market for all telecommunication services;	It is the mandate of the Ministry of Communication to monitor development of	Implementation of Universal Access Policy, Monitoring of operators activity, performance and compliance.
Streamlined, efficient and effective regulation of the telecommunication industry on a fully transparent, technologically neutral and competitively balanced basis	the telecommunication sector, and progress toward achieving the objectives of the national policy	
Affordable prices for telecommunication services particularly for low income citizens		Regulation of competition including interconnection;
Source: National Communications Authority, Ghana 2018		

CHAPTER 5

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents summary of objectives and the findings for the study. Conclusions from the results and discussions are drawn and presented. Also, Recommendations to improve upon the performance of Vodafone Ghana in the telecommunication industry in Ghana are included in this chapter as well.

5.2 Summary of Major Findings

This section discusses the summary of the major findings of the data analysed in the previous chapter. These summarized findings relates to the performance of the Vodafone Company in Ghana's telecommunication industry with Accra and Kumasi branches of Vodafone serving as case studies.

5.2.1 Policy and Regulatory Frameworks as well as functions of mandatory bodies.

National Telecommunication Policy: The NTP was formulated to; Streamlined, efficient and effective regulation of the telecommunication industry on a fully transparent, technologically neutral and competitively balanced basis, ensure affordable prices for telecommunication services particularly for low income citizens. Connection of all schools, medical clinics, government offices and public and community. Fully open private and competitive market for all telecommunication services.

Ministry of Communication: The Ministry is primarily responsible for the definition and elaboration of Government policy regarding telecommunications, to periodically review the effectiveness or success of the present policy on telecommunication and consider amendments and updates as appropriate. And finally, it is the mandate of the Ministry of

Communication to monitor development of the telecommunication sector, and progress toward achieving the objectives of the national policy.

The National Communication Authority: The findings revealed the following functions to be performed by the NCA; Issuing of licences, establishing terms and conditions, Tariff regulation consistent with Ministry Policy and Consumer protection, Allocation of scarce resources including management of the frequency spectrum, Implementation of Universal Access Policy, and Monitoring of operators activity, performance and compliance.

5.2.2 Assessment Of Vodafone's Products and Services Offered on the Market

The study revealed that 78 percent and 62 percent of customers (mobile phone and fixed line users) in Accra and Kumasi respectively responded that Vodafone's call completion rate is very high. This meant that most customers could make calls without any form of interruption (network failure). However, call interruptions according to Vodafone's staff were experienced by customers in areas where the company is still trying to extend and improve its network coverage.

All respondents (with the exception of those who used the fixed line only) in both Accra and Kumasi responded positively that sending and receiving text messages has not been a problem as far as their use of Vodafone's network is concerned

On the reasons why customers use Vodafone, the findings revealed that, 40 percent uses of customers uses Vodafone because their affordable call rate.

The sale of Vodafone's products in Accra and Kumasi has been increasing but at a decreasing rate of an average rate of 7.6 percent in both Accra and Kumasi. This has been attributed to the stiff competition being offered by the other telecommunication industries in terms of affordable prices of their products and services.

42 percent of vendors out of the 35 vendors who responded indicated that, 21 to 60 percent of their annual sales were made from the sale of Vodafone's Sim cards and recharge vouchers. In 2018, 81 percent of vendors interviewed out of the 48 vendors who responded, indicated that less than 40 percent of their annual sales were from the sale Vodafone's Sim cards and recharge vouchers.

5.2.3 Services Coverage And Market Share of Vodafone

In terms of network coverage, the number of cell sites in Accra has increased from 180 in 1996 when the then GT started its mobile phone network operations to 700 cell sites as at 2018.

Similarly, the number of cell sites in Kumasi has also been increased from 50 cell sites to a present number of 295. This has engineered the capacity of Vodafone to have complete network coverage in all parts of Accra and Kumasi.

As at 2018, there are approximately 8.4 million. And 23.79% of total market share nationwide, according to the NCA report.

Vodafone's market share for the year 2018 in Accra and Kumasi was 35 percent and 31 percent respectively of the total number of active mobile phone users in their respective regions.

Vodafone's share of mobile phone users in Accra and Kumasi for the 2017 to 2018 period increased by 29.6 percent and 34.7 percent. These percentage increases have been attributed to the extensive advertising and other maximum customer satisfaction oriented marketing strategies embarked on by the company for the 2017 to 2018 period.

5.3 Recommendations

1. In spite of the level of satisfaction expressed by some customers of Vodafone, industry regulators such as the Ministry of Communication and the National Communications Authority should arise and take pragmatic steps to ensure that customers get value for their money spent on the products and services offered by these telecommunication companies by encouraging and sensitizing mobile companies to focus their attention and resources on service quality dimensions for which customers are not satisfied whiles paying little attention on other trivial dimensions.
2. Vodafone Ghana should consider as very important, the likelihood of customers switching to other networks due to dissatisfaction with certain services especially the internet service which is popularly alleged by many users. It is thus recommended that, the company in addition to its current introduction of the 4G network should aim at securing its customers by offering not only a high speed and reliable internet service but an affordable one.
3. Management of Vodafone Ghana and the other telecommunication companies must understand that generally their customer satisfaction is only equal to and not better than expected, and that they ought to work towards exceeding the expectation and desired service quality of their customers. This is with respect to charges on products and services as well as network stability and reliability.
4. Finally, in the event of taking decisions, it is best that the views of all categories of workers and department be taken into consideration. Encouraging a much participatory form of decision-making which considers the views of all persons

especially that of the lower rank officers is a necessity in improving on the performance of the company.

5.4 Conclusion

A good telecommunication system has proven to be part of the factors in accelerating the development of a nation. Vodafone Ghana's contribution to the successes chalked by Ghana's telecommunication industry cannot be underestimated. That notwithstanding, the improvement of the company's performance remains a major factor in not only competing favourably in the telecommunication market, but also, in augmenting the companies contribution to the socio-economic development of the nation.

Evaluating the performance of the company in the telecommunication industry as the focus of this study has revealed some findings. These findings as discussed have provided the necessary platform in making recommendations in improving on the performance of Vodafone Ghana in the telecommunication industry in Ghana.

Suggestion for further studies

The study aimed at evaluating the performance of Vodafone Ghana in the Telecommunication industry of Ghana. It is suggested by the researchers that, future research be conducted in this same study area in comparison with other telecommunication companies so as to truly evaluate the strengths and weakness of each telecommunication company.

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APPENDICE

TOPIC: EVALUATING THE PERFORMANCE OF VODAFONE GHANA IN THE TELECOMMUNICATION INDUSTRY IN GHANA

Kindly be informed that the information you will give will be used for academic purposes only and will be held in an uttermost confidence. Kindly select, tick [ ], select or write in the following space provided.

QUESTIONNAIRE FOR CUSTOMERS

1. Age 16-19 [ ] 20-55 [ ] Over 55 Years
2. How long have you been using this network? a. less than a year b. 1-2 years c. 3-4 year d. more than 5years
3. What informed the choice of this network?

   a. Better internet Service b. affordable call rates c. wider network coverage d. call clearness.
4. Which other mobile network to do use? a . MTN b. TigoAirtel c. Glo
5. Which of these services have you been patronizing? a . Fixed line user b.Mobile user c. Internet user

QUESTIONNAIRE FOR RETAILERS /VENDORS

6. Do you have any difficulty getting Vodafone's products to sell?

   a . Yes b. No c. Sometimes
7. What kind of complaint(s) do you receive from customers who buy any of Vodafone's products from you?
   a. Wrongful deductions. b. Expensive Internet Call/ Charges c. Network Instability d. Other

8. What proportion of your annual income is from the sale of Vodafone's sim cards and recharge vouchers? a. 0 - 20 % b. 21 – 40 % c. 41 – 60 % d. 61 – 80 % e. 81 – 100 % f. Other 15

QUESTIONNAIRE FOR STAFF OF VODAFONE GHANA

9. How long have been working with Vodafone ?

   a. 1-3 years b. 3-5 years c. above 5 years

10. How informed is management about the needs of customers?

    a. Very informed b) Informed c) Not quite informed d) Not Informed

11. What is the quantity of products sold (in GH¢) for the past three years ?

    (Please complete the table)

Item	Quantity Sold in **GH¢**		
	2016	2017	2018
Sim cards			
Recharge Vouchers			
Computers			
Moderm			

12. Vodafone's Percentage Share of Mobile Phone Users (Please complete the table)

Years	Accra % of market share in terms of mobile users	Kumasi % of market share in terms of mobile users
2016		
2017		
2018		

13. Policy and Regulatory Frameworks as well as functions of mandatory bodies for the Telecommunication Industry in Ghana

Kindly complete the table below;

The National Telecommunication Policy OBJECTIVES	Ministry of Communications (FUNCTIONS)	The National Communication Authority (FUNCTIONS)

In your opinion, what do you think should be done by the ministry of communications and the national communication authority in improving the performance of vodafone Ghana's performance and the Ghana telecommunication industry at large?

……………………………………………………………………………………………

……………………………………………………………………………………………

THANK YOU.