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Using Innovation in Organization as a Survival Strategy in a Highly Competitive Telecommunication Industry of Ghana: Prospects and Challenges: The Case of Vodafone Ghana Limited

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Abstract

The study investigated the prospect and challenges of how Vodafone Ghana is employing innovation as a survival strategy in the highly competitive telecommunication industry of Ghana. Amongst its specific objectives were analyzing the market performance of innovation products and services placed on the market by Vodafone Ghana as well as examining to importance innovation as a survival strategy in the telecom industry of Ghana. The study also identified challenges confronting Vodafone Ghana in using innovation strategy as a survival tool. The researcher adopted the onion research approach, which unfolds the various stages of research from the sampling, questionnaire design observations and interview as well as data management. In selecting the respondents, purposive sampling technique was employed. The questionnaire technique constituted the main research instrument although some face-to-face interviews were also carried out to straighten up some of the responses reflected on the questionnaire. The study findings noted that Vodafone Ghana parades such innovative products and services as broadband facilities and money transfers among others to compete in the local industry. These services were seen to be enhancing socio-economic systems because they facilitate money transfer to business fellows and relations as well as enable customers to talk much longer. On challenges negating innovation efforts at Vodafone, the study discovered that competitors often copy and expand the scope of new products thereby pre-empting benefits that accrue from research and development activities. Frequent internet failure also disrupts the benefit derivable from Vodafone innovative products and services. Recommendations were made to address these challenges.

Keywords: *Innovation, Prospects and challenges, Telecommunication, Ghana.*

Introduction

In the opinion of Kotler and Keller (2010), survival in a highly competitive service industry depends upon the creation of innovative products which can be marketed at reasonable prices. It is therefore not surprising that players in the Telecom Industry globally are coming up with new innovative products and services to brighten up their chances of survival in their various industries. Innovation therefore holds the key towards surviving in a highly competitive industry. According to Dodgson et al (2008), innovation is considered to be a vision, a concept, a strategy but also a solution. Thornhill (2006) also explains further that innovation refers to the outcome and practice of converting knowledge and ideas into novel entities that are valued by individuals and communities. Innovation involves acting on the creative ideas to make some specific and tangible difference in the domain in which the innovation occurs (Davila et al, 2006). Innovation is defined as the successful implementation of creative ideas within an organization. For a firm to grow in business and compete favorably with others, innovation is important. It can take many forms, but in every form, it tends to reduce unit costs and/or helps to expand market demand. Hauser et al (2006) revealed that, a major impact of innovation is to reduce unit costs of production and distribution. Hence it reduces prices and thereby improves competitive advantage. Thus, innovation increases comparative advantage of small countries in international trade that are rich in technological knowledge. Part of the problem in managing innovation is the way people think about it. Organizational innovations are difficult for numerous reasons. First, many innovations particularly technological innovations are unreliable and

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imperfectly designed. The newer the technology, the more likely it is to have bugs, breakdown, and be awkward to use. This ‘‘hassle factor’’ can render even the most enthusiastic technophile frustrated and annoyed. Many innovations require would-be users to acquire new technical knowledge and skills. For many people, this may be tedious or stressful. Technological change is creating huge challenges and opportunities going forward. These changes require a different way of thinking and solving problem (Thornhill, 2006). According to Brucker (2006), innovation can take many forms from simple, incremental development of what is already there to radical development of totally new options. The challenge here is for firms to be aware of the extensive space within which innovation possibilities exist and to try and develop a strategic portfolio which covers this territory effectively, balancing risks and resources. According to Tidd et al. (2009) innovation contributes to achieving a competitive advantage in several aspects. The most important characteristics of innovations include: A strong relationship between market performance and new products. New products help maintain market shares and improve profitability. Growth also by means of non-price factors (design, quality, individualization, etc.). Ability to substitutes outdated products (shortening product lifecycles). In today’s dynamic and global competitive environment, Hesket (2007) argues that, innovation is becoming more pertinent, mainly due to three major trends: concentrated international competition, disjointed and challenging markets, and assorted and swiftly changing technologies. In many countries, Trott, (2003) also says that, the pace of change in telecommunication industry is dramatic. The services providers worldwide are becoming increasingly interrelated. Competitive advantage is essentially a position of superiority on the part of the firm in relation to its competition in any of the multitude of functions/activities performed by the firm (Karanja 2011). It means that a firm can gain a competitive advantage in several ways. Competitive advantage according to Bengtsson & Kock (2000) occurs when an organization acquires or develops an attribute or combination of attributes that allows it to outperform its competitors. In a service-oriented business, competitive edge is well achieved through innovation strategies which are value creating and are not simultaneously being implemented by any current or potential player. In the telecommunication industry globally, voice revenues have been the most significant segment of most telecom operators in the telecommunication industry. Conversely, with increasing saturation of voice and falling revenues, operators have embraced innovations and value-added services to counter this impact and improve their competitive advantage position in the market (Dodgson et al 2008). The telecommunication industry is evolving rapidly characterized by changing customer tastes and preferences, new technologies and new regulations. Many companies; however, have not undertaken to reshape their structures in ways that meet these new demands. As a result, the telecommunication firms fail to achieve their expansion plans leading to a low growth rate of the industry.

The telecommunication industry is among the pillar industries to the economic wellbeing of many countries today. For example, the Chinese and Indian economies are among the main economies that have benefitted from the expansive growth of the telecom industry in the last decade (Berry, 2010). Although a similar trend is emerging in the African continent, the telecommunication industry has not been able to achieve such economic transformation observed in Chinese and Indian economies. This, according to Dwivedi & Sharma (2011) has resulted to poor growth of most of these firms with some collapsing entirely the telecommunication industry is also highly volatile due to its high dependence on technology and the rapid growth rate it has been experiencing over the past few decades.

Telecommunications is broadly defined as the transmission of information by means of electromagnetic signals: over copper wires, coaxial cable, fiber-optic strands, or the airwaves. The major network owners that are the frontline in the broadband revolution historically provided four distinct consumer-facing products: home telephony, mobile telephony, cable television, and internet access (Bengtsson & Knock, 2002). In the residential market, these historical divisions are disappearing. Cable and telephone companies have each refashioned their networks to provide general-purpose high-speed data transmission capacity. Using ever-growing and improving networks, both now compete to provide the dominant "triple play":

telephony, television, and internet access. Municipalities and other new actors are building their own residential broadband networks, offering the same basic services (Veryzer & Bessont, 2002).

Karanja (2011) further explains that, cell phone companies are also racing to become broadband providers. Cell phones have become much more than just phones, and data is rapidly overtaking voice as the dominant source of revenue in the industry. Mobile services offer lower bandwidth than residential service, and as a result, cellular networks will not be able to support robust wireless video for any substantial fraction of their users, and will not be able to support the same kind of "triple play" as residential broadband. But what mobile networks lack in speed, they make up for in ubiquity. Many analysts see the rise of mobile broadband as the most important and dynamic area in telecommunications in the short and medium term (Klein et al, 2001). Barnes (1993) explains further that, *telecommunications provides a technological foundation for societal communications*. Communication plays a central role in the fundamental operations of a society from business to government to families (Dodgson et al, 2008). In fact, communication among people is the essence of what distinguishes an organization, community, or society from a collection of individuals. Telecommunications plays an increasingly vital role in enabling the participation and development of people in communities and nations disadvantaged by geography, whether in rural areas in the United States or in developing nations in the global society and economy. *Telecommunication, according to Rycrof & Kash (1999) provides vital infrastructure for national security.* From natural disaster recovery, to homeland security, to communication of vital intelligence, to continued military superiority, telecommunications play a pivotal role. Studies abound in the academia on how telecommunication companies have employed innovation in revolutionizing their product portfolio as a survival strategy. Unfortunately, most of the existing research materials have been oriented in the Asian and western context thereby rendering them inappropriate for addressing issues in developing economies like Ghana. The study therefore attempts to fill this gap.

Innovation as a survival strategy in the telecom industry

In both developed and developing countries, Johnson & Scholes (2008) innovation strategies have been heralded as one of the juggernauts in propelling organizations, especially the telecom industry, to higher levels of profitability and customer retention. Innovation is regarded as a key business process that companies are using to achieve competitive advantage. Innovations are currently a fundamental prerequisite of competitiveness notably in the service industries like telecom and banking (Oke & Goffin, 2001). Successful companies in the telecom industry are currently the ones that implements innovative strategies, invests in research, development and innovations. The basic precondition for the creation and uses of innovation in the telecom enterprise is a well formulated and implemented innovative strategy.

Letangule & Letting (2012) sees innovation as a strategy for determining long-term fundamental business objectives and determines the activities and resources for achieving these goals. According to him the innovation strategy must be based on variation, long term, systematism, the time factor and the concentration of resources and activities. Dodgson et al, (2008) defines an innovation strategy as a plan that helps firms decide in a cumulative and sustainable manner, about the type of innovation that best match corporate objectives, guides decisions on how resources are to be used to meet a firm's objectives for innovation and thereby deliver value and build competitive advantage.

In a business environment where innovation provides distinctive and sustainable competitive advantages, innovation strategy is the basis for the firm's overall strategy. Innovation strategy, according to Porter & Kramer (2006) involves analysis of firms' business, market, and technological environments and consideration of what resources they have to draw upon. It involves making choices about innovation in uncertain and ambiguous circumstances, with diverse strategies for different levels of uncertainty. Innovation strategy entails building innovative capabilities firms need, to meld skills and resources to analyze, select, and deliver innovation to enhance organizational performance. It requires consideration of how new initiatives fit with firms' existing portfolio and how innovation strategy complements overall

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corporate strategy. It is concerned with integrating all the areas of MTI into a coherent whole (Thornhill, 2006).

Porter (1980) argues that, an innovation strategy guides decision on how resources are used to meet a firm's objectives for innovation and thereby deliver value and build competitive advantage. Its crafting is supported by a number of innovative capabilities that steer the configuration and reconfiguration of a firm's resources. According to Solomo et al (2008), it entails judgments about which kinds of innovation processes are most appropriate for the firm's circumstances and ambitions. An innovation strategy identifies the technologies and markets the firm should best develop and exploit to create and capture value. It does so within the limits of the resources available to the firm to support current and future innovation efforts and its evolving corporate strategy, organization and culture (Kim & Mauborgne, 1999).

Davila et al (2006), further indicates that, innovation strategy is different to mainstream business strategy because it needs to comprehensively accommodate uncertainty. As such, many common approaches to business strategy are inappropriate for innovative businesses. Some uncertainty is always present in strategic management of incremental innovation, but is a major strategic factor in radical innovation.

Elements of innovation strategy

Brucker (2006) mentioned that, there are four interrelated elements involved in innovation strategy namely enacted strategy itself, resources available for innovation, innovation capacity and innovation process used to deliver result. The enacted strategy itself including its targets and 'fits' with overall company strategy, existing innovation efforts, and the context in which, it operates. The identified targets are the technologies and markets that managers believe will create and deliver best values for their firms (Porter & Krainer, 2006). The resources available for innovation are the assets a firm owns and to which it has preferential and secured access. The innovation capabilities guide and enable those resources to be assessed, configured and reconfigured. The innovation processes used to deliver results are the combinations of management and organization around R&D, new product and service development, operations, and commercialization that deliver innovation (Berry, 2000).

Innovation strategy helps to focus attention on how these resources, capabilities, and processes are best developed and deployed to meet corporate objectives (Dodgson et al., 2008). There are often more opportunities for innovation than resources available, and choices have to be made. Choices should be linked to the anticipated economic benefits and the ability to appropriate returns from innovation. They need to fit with the overall corporate strategy, deciding whether or not innovation targets complement the firm's available resources and existing innovation portfolio and whether ambitions match its organizational structure and culture (Barnes, 1993). The choices made should include attention to issues of timing; whether, for example, a firm aims to be a proactive innovator or to be a reactive follower. These decisions help to prioritize resource allocation, providing a focus for marshalling and integrating different components of innovation processes and guiding them towards specific markets and customers within the competitive environment (Klein et al, 2001).

Within organizations, Rycroft, & Kash (1999) there is a fundamental tension between the need for creativity and the need for stability. On the one hand, companies require stability and static routines to accomplish daily tasks efficiently and quickly. This, according to Barret et al, (2003) enables the organization to compete in today's world. For example, the processing of millions of cheque by a bank daily, or the delivery of food by multiples to retail outlets all over the country, demands high level of efficiency and control. On the other hand, companies also need to develop new ideas and new products to be competitive for the future. Hence, they need to nurture a creative environment where ideas can be tested and developed. This poses one of the most fundamental problems for management today (Tidd et al 1997).

In the view of Dittrich & Duysters, (2007), the ways in which firms manage the tension between the need to be creative and efficient is termed strategy, and is concerned with the long-term direction of an organization. Strategic decisions are normally about trying to achieve some advantage for the organization over competition. It is the matching of the resources and activities of an organization to the environment in which it operates. This is sometimes known as the search for strategic fit. Strategic fit is developing strategy by identifying opportunities in the business environment and adapting resources and competences so as to take advantage of these. Strategy is the need to make a choice. It enables organization to properly respond to change (Howells, 2000).

Competitive advantage

Competitive advantage, in the opinion of Karanja (2011) is essentially a position of superiority on the part of the firm in relation to its competition in any of the multitude of functions/activities performed by the firm. It means that a firm can gain a competitive advantage in several ways. For example, some firms may be superior in production, some in Research and Development and some others in marketing. Firm have to figure out how they can perform a particular function or group of functions, either, in a superior way, or in a distinctive way, relative to competition. The superiority or distinction has to be of value to the customer (Brucker, 2006).

The most widespread theory explaining sources of competitive advantage is the "Resource-Based View" (RBV). According to this theory, the two main sources of sustainable competitive advantage are assets and capabilities (Porter & Kramer, 2006). Assets are the resource endowments the business has accumulated, and capabilities are the glue that keeps these assets together and enables them to be deployed advantageously. Capabilities differ from assets in that they cannot be given a monetary value, as can tangible plant and equipment, and are so deeply embedded in the organizational routines and practices that they cannot be traded or imitated. According to Porter (1980), competitive advantage can be viewed as the ability gained through attributes and resources to perform at a higher level than others in the same industry. He postulated that a firm must decide whether to attempt to gain competitive advantage by producing at a lower cost than its rivals or differentiate its products and services and sell them at a premium price.

Competitive advantage according to Bengtsson & Kock (2000) occurs when an organization acquires or develops an attribute or combination of attributes that allows it to outperform its competitors. In a service-oriented business, competitive edge is well achieved through innovation strategies which are value creating and are not simultaneously being implemented by any current or potential player. Solomo et al (2008) reckons that successfully implemented innovation strategies will lift a firm to superior performance by facilitating the firm with competitive advantage to outperform current or potential players. To gain competitive advantage through innovativeness and value addition, the business strategy of a firm has to be formulated in a way that optimally manipulates the various resources over which it has direct control. Over time, companies have invested considerable time and effort in developing innovative products and services that work for their consumers. They often consider adopting innovative strategic tools to address the challenge of improving service quality, increasing productivity and competitive advantage (Houser et al, 2006).

In the telecommunication industry globally, Dodgson et al (2008) explains that, voice revenues have been the most significant segment of most telecom operators in the telecommunication industry. Conversely, with increasing saturation of voice and falling revenues, operators have embraced innovations and value-added services to counter this impact and improve their competitive advantage position in the market. According to Letangule & Letting, (2012), the telecommunication industry on the other hand is entering a new transition period. This has been brought about by the market for voice component in the mobile telecommunications almost reaching maturity, existing price wars and the introduction of mobile number portability. In response, the industry is shifting its strategic focus not only in attracting new customers, but is also gearing towards retaining existing customers through innovative strategies that enhance their competitive advantage (Howells, 2000).

Innovation is not simply developing new technologies into new products or services, but in many cases involves finding new models for doing business in the face of change. It often entails changing the rules of the game (Brucker, 2006). Modern businesses are increasingly engaging in constant competition with rivals with a goal to survive on the market and must therefore formulate well aligned strategies in order to meet

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customer demands and a significant form of growth. It is in this aspect that executives of these firms regularly consider how they can improve their competitive edge by means of developing and putting into practice various business strategies (Davila et al, 2006).

The study set out to examine the prospects and challenges of how Vodafone is using innovation as a survival strategy in the highly competitive telecommunication industry of Ghana. Other specific objectives included analyzing market performance of innovative products and services placed by Vodafone Ghana as well as looking at the importance and effects of using innovation as a survival strategy in the telecom industry in addition to identifying challenges facing Vodafone Ghana in its innovative effort. The study concludes that Vodafone is seriously competing in the local market with such innovative products and services which facilitate money transfer, enabling friends and relations on to talk much longer on phone, promoting business to increase profit curve as well as providing avenues for sound social integration. These innovative products have the effect of ensuring easy access to other network services, makes services affordable to all in addition to penetrating wider areas of the country for customers to extend their scope of communication and other social responsibilities. Innovative products also assist subscribers to function more properly internationally. Despite these prospects in Vodafone’s innovative exploits, the company is challenged by price war, frequent copying of its innovative products and services by peers without protection, changing customer taste which makes it pump its fortune in research and development as well as frequent disruption in internet connectivity. Generally, Vodafone is really doing well in coming up with more innovative products and services and its strategy is seriously assisting in its marketing efforts thereby achieving revenue targets. Its recent “one for three” unique sales promotion exercises is effectively catching up with the people with the results that customers are switching over at an alarming rate. This presupposes that, if management stays on course with such innovative products and services, it wouldn’t have difficulty, not only surviving, but also will be a force to reckon with in the highly competitive telecom industry of Ghana.

Challenges confronting innovation practices in the telecom industry

According to Dodgson et al (2008), innovation is considered to be a vision, a concept, a strategy but also a solution. In this context one can assume that, innovation projects in order to become a fact and to achieve their purpose need an idea that helps reaching a certain aim either economic, social or organizational. Perceived in most of the cases as an exclusive concept, innovation can be approached only by some companies. Innovation represents the core renewal process in any organization (Heskett, 2007). And unless businesses, notably members in the telecom industry are prepared to work continuously at renewing what it offers and how it creates and delivers that offering, there is a good chance that it will not survive in today’s turbulent environment. Even if firms recognize and accept the need for continuous innovation, they may find difficulties in framing an appropriate innovation agenda. With limited resources they may risk putting scarce eggs into too few or the wrong baskets (Howells 2000).

According to Brucker (2006), innovation in the telecom industry can take many forms from simple, incremental development of what is already there to radical development of totally new options. It can range from changes in what is offered product or service through to the ways in which that offering is created and delivered (process innovation) (Trott, 2003). It can reflect the positioning of a particular offering for example; putting a well-established product into a new market represents a powerful source of innovation. And it can involve rethinking the underlying mental models associated with a particular product or service. The challenge here is for firms to be aware of the extensive space within which innovation possibilities exist and to try and develop a strategic portfolio which covers this territory effectively, balancing risks and resources (Hauser et al (2006).

Part of the problem in managing innovation is the way people think about it. Whilst the term is in common usage, the meaning people attach to it and hence the way in which they behave can vary widely. For example, there is often considerable confusion between ‘invention’ and ‘innovation’. The former is essentially about the moment of creative insight which first opens up a new possibility the discovery of a new compound, the observation of a new phenomenon, the recognition of an unmet market needs, etc (Barret et al. 2003).

But whilst this is essential to start the process off, invention is not enough. Taking that brilliant idea through, on an often-painful journey to become something which is widely used involves many more steps and a lot of resources and problem-solving on the way. History is littered with forgotten names which bear testament to the danger of confusing the two. Spengler invented the vacuum sweeper but Hoover brought it through to commercial reality. Howe developed the first sewing machine but Singer is the name associate with the product because he took it from invention to widespread acceptance (Trott, 2003).

The problem is not just a confusion of invention and innovation. Other limits to our mental models include the view that innovation is all about science and technology creating new opportunities what is sometimes called the 'technology push' model. It has elements of truth about it but on its own it is a weak basis for managing innovation plenty of great technological possibilities fail to find markets and never make it as innovations (Brucker, 2006). Similarly, the view that 'necessity is the Mother of invention' may sound persuasive but a totally marketing led approach to innovation may miss some important tricks. The emergence of the Walkman family of products within Sony took place despite strong marketing input to suggest there was no demand for this kind of product (Porter & Kramer, 2006).

Organizational innovations are difficult for numerous reasons. First, many innovations particularly technological innovations are unreliable and imperfectly designed. The newer the technology, the more likely it is to have bugs, breakdown, and be awkward to use. This ''hassle factor'' can render even the most enthusiastic technophile frustrated and annoyed. In their review of the literature on computerized-technology implementation, Dodgson et al (2008) reported that 61% of the qualitative studies they reviewed documented the negative consequences of low technology quality and availability on employee satisfaction and innovation use.

Many innovations require would-be users to acquire new technical knowledge and skills. For many people, this may be tedious or stressful. In an individual-level study of project engineers' implementation of information-technology innovations, Barnes (1993) found that innovation complexity the extent to which the new technology was more complicated than the technology it replaced was significantly negatively related to user satisfaction and the speed required to become competent in using the innovation. The decision to adopt and implement an innovation is typically made by those higher in the hierarchy than the innovation's targeted users. Targeted users, however, often have great comfort in the status quo and great skepticism regarding the merits of the innovation (Thornhill, 2006).

According to Houser et al (2006), many team and organizational innovations require individuals to change their roles, routines, and norms. Innovation implementation may require individuals who have previously worked quite independently to coordinate their activities and share information. It may also disrupt the status hierarchy, requiring individuals who have previously worked as boss and subordinates to now work as peers (Klein et al 2001). Effective innovation implementation often requires hefty investments of time and money in technology start-up, training, user support, monitoring, meetings, and evaluation. Thus, even the most beneficial innovation is likely to result in poorer team and/or organizational performance in the short run (Tidd et al, 1997).

Funding continues to be one of the key challenges to coming up to more innovative products and services. The fact that some researches aimed that unearthing innovation product often leads to fiasco, make some management members skeptical in voting funds for research endeavours aimed at coming out with innovative products (Sullivan 2009). Besides funding another challenge to innovation account, to Kwawukume (2016) lies in anti-competitive activities which often reduce the fortunes that should accrue to being innovation.

Anti-competition activities cripple innovative efforts especially where competitions come up with analogous products that sell at much cheaper prices. A case point, according to Kwawukume (2016) resulted in internet Ghana suing Vodafone for losses it incurred due to anti-competitive practices. It all happened when, often a collaborating effort to come out with Digital Subscriber Line (DSL) Vodafone launched an

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off-shoot product namely DSL Broadband 4u and that not only did they price their product to undercut internet Ghana in the DSL service but also offered it free to the public. Vodafone therefore started poaching client of internet Ghana and resorted to subterfuge in interrupting the services of internet Ghana to its clients and when complaints came, they offered them the option of Broadband 4U.

Numbers that internet Ghana submitted to Vodafone for connection to the DSL service, the statement said were deliberately delayed. In the suit Internet Ghana pointed out that as a result of the conduct of Vodafone, the company suffered seriously and made losses and suffered from anticipated clients that were poached by Vodafone. Sometimes the industry regulator's directives allow stifle innovative efforts. According to Verloop (2004) in an attempt to protect some industry players, come out with directives that weaken efforts it funding research to come up with innovative products.

According to Deloitte (2012), the telecommunication industry is among the pillar industries to the economic wellbeing of many countries today. The Chinese telecommunication industry in 2011, for example, contributed about 16 percent of the total Chinese Gross Domestic Product (GDP) as compared to 9% contributed by the Ghana telecommunication industry for the same period (Chhibber, 2012). Research has established that the telecommunication industry is not only a major contributor to the economic growth of countries, but also it is a main growth pillar for other industries. In fact, many developing nations have experienced increased growth in their economies due to the impact of this sector. For example, the Chinese and Indian economies are among the main economies that have benefitted from the expansive growth of the telecom industry in the last decade (Berry, 2010).

Although a similar trend is emerging in the African continent, the telecommunication industry has not been able to achieve such economic transformation observed in Chinese and Indian economies. In the east African region, for instance, growth of the telecom industry has not been as rapid as anticipated. In addition, most of the telecom firms in this region are multinational industries which employ growth strategies of the origin countries. This, according to Dwivedi & Sharma (2011) has resulted to poor growth of most of these firms with some collapsing entirely the telecommunication industry is also highly volatile due to its high dependence on technology and the rapid growth rate it has been experiencing over the past few decades.

Klein et al (2011), further laments that, the number of people depending on telecom services has been increasing rapidly since the inception of mobile phones thus depicting the significance of the telecom sector in the economy. Despite this increase in demand, the telecommunication sector has not been able to match the growth rates achieved in the Chinese and Indian economies (Oke & Goffin, 2011). The telecommunication industry is evolving rapidly characterized by changing customer tastes and preferences, new technologies and new regulations. Many companies; however, have not undertaken to reshape their structures in ways that meet these new demands. As a result, the telecommunication firms fail to achieve their expansion plans leading to a low growth rate of the industry (Davila et al, 2006).

Recommendations

In the light of the challenges uncovered associated with Vodafone's employment of innovative strategies to survive in the local competitive telecom industry of Ghana, the following recommendations are mandatory.

- **National communication authority legislating to protect product and service innovation:** The study noted that innovative efforts by Vodafone in respect of coming up with new products and services are often frustrated by competitors who usually copy and expand the scope of new products thereby pre-empting benefits accruing from such innovative activities. This means the company in most cases does not benefit from innovative activities. It is hereby recommended that the industry regulator i.e. the National Communication Authority influences a legislative instrument to be established aimed at protecting innovative products and services from being pirated by other competitors in the industry. This way, innovative products and services can be patented under such legislation to enable companies' benefit from the fruits of investing so much in their research and development efforts.

- **Addressing the issue of frequent break in transmission:** The study also uncovered the fact that on a number of occasions subscribers of Vodafone experience internet disruption leading to loss of service and funds in most commercial entities. Other to this is the finding that internet connectivity is sometimes so slow that business and other social activities are hampered. This problem can be resolved if Vodafone continuously upgrades its telecommunication equipment in line with state-of-the-art machinery. Currently, the main leader in the industry i.e. MTN is operating on the fourth generation (4G) equipment while Vodafone continues to rely on third generation apparatus. An improvement in its equipment will definitely help in minimizing the challenges that often emanate from the frequent breakdown in network service.
- Strengthening Quality Control Department to keep up with change customers' taste: It came out from the study that another challenge bedeviling innovative efforts at Vodafone lies with frequent change in customers' taste as a result of activities of competitors. This often leads to the setting aside of products and services that are in the process of being commissioned thereby incurring serious loses. It is hereby recommended that since customers' taste cannot be predicted, it is management's duty to sufficiently strengthen its quality control departments with more skills developing activities as well as acquisition of more modern equipment's. This way, adequate environmental scanning can be conducted to investigate competitors' offerings in order to come up with products and services that will stand the test of time. Well-equipped quality control department also helps in establishing strong collaborative bonds with the research and development department so that together the company will benefit from the fruits of its innovative activities.

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