



MOBILE SUBSCRIPTION, PENETRATION AND COVERAGE TRENDS IN KENYA'S TELECOMMUNICATION SECTOR: A CRITIQUE

MATHEW MFUKO* Student, Taita Taveta University

DR. KARIM OMIDO* Senior Lecturer, Taita Taveta University

ABSTRACT

In Kenya, the mobile subscription, penetration and coverages as well as the telecommunications markets in general continue to undergo transformations as a result of improved international connectivity, growing competition, and overall growth in the market. The objective of this paper is to discuss some of the current trends in the Kenya's telecommunication industry, and critically analyze the journal article "Oteri, Kibet & Ndung'u (2015), Mobile subscription, penetration and coverage trends in Kenya's telecommunication sector". The critique, therefore, focuses on the telecommunication industry of Kenya from the perspectives of contemporary strategic management, mainly looking into competitive advantage in the sector.

KEYWORDS: Telecommunication; Communication; Civilization; Trends; Cellular phone;

INTRODUCTION

In Kenya, the mobile penetration, subscription, as well as coverage and the general telecommunications markets continue to undergo notable changes in the advent of improved connectivity globally, increased competition, and rapid mobile market developments (BuddeComm, 2019). Moreover, the introduction of four fiber-optic global submarine cables recently has greatly reduced phone calls as well as internet access costs, thus making internet services affordable and available to more people today than before. However, the Kenya telecommunication regulator, Communications Authority of Kenya (CAK), has played a significant role in the reduction of interconnection tariffs and implemented several regulations whose objective is to develop the sector, which is now highly competitive. With growing levels of competition, the incumbent fixed-line telecom had a difficult time in the market, making the company reorganized among many people in 2018. By the start of 2019, the company signed a merger agreement with Airtel Kenya, but still retained a 49% share. This was a strategy to challenge Kenya's telecommunication company and market leader Safaricom, and its dominance. Today,



several competitors are coming up and starting both metropolitan and national fiber backbone networks, which are aimed at delivering affordable data bundles throughout the country. Studies show that due to the growth of fiber infra structure, the number of fiber broadband connections has increased by 94% in 2019, as compared to 2018. Therefore, this article discusses some of the current trends, especially the contemporary management issues as regards competitive advantage, in the Kenya's telecommunication industry, and will also critically analyze the journal article by Oteri, Kibet, and Ndung'u (2015) on mobile subscription, penetration and coverage trends in Kenya's telecommunication sector.

THE CONTEMPORARY STRATEGIC MANAGEMENT ISSUES IN THE TELECOMMUNICATION INDUSTRY IN KENYA

Some of the companies in the telecommunication sector of Kenya include Telkom Kenya, Safaricom, Bharti Airtel, Jamii Telecom, Access Kenya, Liquid Telecom, Kenya Data Networks (KDN), MTN, Finserve Africa (Equitel), SimbaNet, Africa Online, Internet Solutions Kenya, and Afsat Communications among others (BuddeComm, 2019). Among the current issues facing the industry includes the merger between Telkom Kenya and Airtel Kenya. In 2019, Airtel Networks Kenya Ltd and Telkom Kenya Ltd announced the signing of an agreement to merge the two companies and the resulting company would be Airtel-Telkom. As per the agreement, Telkom Kenya was to hold up to 49 percent shares of that merger. Another development is the 41% increase in international bandwidth in the year 2018. Moreover, in recent years, Safaricom has launched M-PESA Global payment service, and these global services have been extended to Tanzania, Afghanistan, and South Africa among other countries. Other notable developments include the government's proposal to increase mobile money transfer taxes and the start of mobile money interoperability among others. All of the developments discussed above are a clear indication that the telecommunication companies are taking different contemporary management measures to grow their competitive advantage.

Communication has been part of the human world since ancient times. The invention of telegraph in the 1830s and the telephone in 1876 marked the beginning and development of a new era in the telecommunications. For more than a hundred years, the public telegraphy was forced to exit the communications market (Lubrano, 2013). Moreover, other studies assert that over the years, communications have improved from manual to



automatic switching (Omae et al., 2013). Omae et al. (2013) further asserts that in Kenya, mobile penetration, subscription and coverage has witnessed huge developments and advancement since the setting of the first mobile operators in 1999. The objective of Oteri et al. (2015) was to study the current Kenyan telecommunication industry's condition as well as the trends in penetrations, subscriptions, and coverage since the setting of the first mobile operator in the country. The study also tried to predict the future of the telecommunication sector and gave a recommendation based on its outcome. While trying to bring out the need for the study, Oteri et al. (2015) explains that information communication technology is a very critical industry in Kenya, which has a critical role in the country's economy. However, the article reveals that scholars have not researched the trends of mobile subscriptions and penetration between 1999 and 2013. This necessitated the study, which was aimed at studying the trends of the Kenyan telecommunication industry and globally. Consequently, the article under review will enhance the understanding of the trends and predict the future of Kenya's telecommunications sector for a strategic response.

As regards topicality, Oteri et al. (2015), argue that communication has been critical to human since long time ago. Moreover, the study also suggests that the start of a practical telegraph as well as telephone, brought about greater developments in the era of electrical telecommunications. However, the study explains that the greatest developments in consumer experience occurred after the mobile phone and the Internet were developed. Regardless of the developments, scholars have not fully studied the trends of mobile subscriptions and penetrations from 1999-2013. This implies that the study is very critical in helping the companies in the telecommunication industry to predict their future and understand the trends for strategic responses. Moreover, the topic originality is not questionable based on the fact that no similar studies, when the research was conducted, had been conducted in Kenya concerning mobile subscriptions, penetrations, and coverage trends in the telecommunication industry. Some studies have indicated that the telecommunications sector in Kenya has been evolving and has also undergone rapid changes, which implies that the industry's competition has intensified in both data and voice service provision (Arasa & Gathinji, 2014). The research by Arasa and Gathinji (2014) necessitates this study and also indicates its originality and importance in the Kenyan



telecommunications sector. The study, therefore, becomes necessary to the management of telecommunication organizations especially in forecasting the trends in mobile subscriptions within the country, effective planning, and thus understanding the trends in mobile penetrations thus enabling firms to take the correct strategic directions as far as competition is concerned. Lastly, the objective of the study has been clearly stated and addressed throughout the article.

Moving to the literature review, it is one of the most significant sections in research. It adds value to a certain area of knowledge. A literature review is a survey of scholarly articles, previous studies and other systematic sources that relate to the topic of research, the field of study as well as theories. The literature review familiarizes a scholar with the extent of knowledge in a certain sector of study (Dima & Meghisan-Toma, 2018). Furthermore, literature involves the past studies in the field as well as scientific journal articles among others. A good, adequate, and relevant literature scrutinizes and identifies gaps in certain areas of study. While examining literature, Oteri et al. (2015) has argued that the number of mobile subscribers indicate the vibrancy of the telecommunication industry in Kenya. Consequently, the authors examine more literature and clearly brings out the research gap, which is an implication that the study is relevant to the current issues that were facing the industry then. The study utilized some old references, which points out to inadequacy in citing recent and relevant literature sources. Consequently, the authors examined limited literature, which further increases the level of inadequacy in reviewing literature. However, the literature is coherent, clear, and systematic in its organization and presentation. In view of the above, it is important to note that poor literature mixes studies from different decades without acknowledging chronological developments in the area of study (Kanthawongs & Kanthawongs, 2012). Additionally, the reason why one can say that literature review is poor is the fact that it does not have up-to-date and accurate bibliography, which adheres to recognized guidelines. Moreover, the literature fails to consider theories related to the topic under investigation. Furthermore, the article does not have a conceptual framework, which is an indication that, regardless of some degree in relevancy and adequacy of the literature, there is a lot that has not been addressed, and therefore, fails to adequately qualify as a standard literature review for a journal article.



As far as materials and methods are concerned, the article by Oteri et al. (2015) covers a 15-year period from 1999-2013. The study analyzed literature from secondary sources such as e-journals, websites, and e-books. The data was mainly collected from the CAK. Regarding the secondary sources, several yearly reports from various telecommunication companies as well as articles published in newspapers were carefully studied to come up with the needed information. It should be noted that secondary sources are always vital in generating new insights by analyzing literature (Johnston, 2017). Moreover, the study suggests that the analysis of secondary sources is critical for any research work, and results in unexpected discoveries. However, other studies such as that of Quinlan et al. (2019) have argued differently that secondary sources may have inappropriate data. Most secondary sources provide a researcher with a vast amount of information, though may be inappropriate. Vartanian (2010) also explains that secondary sources have a lack of control over data quality. This is an indication that secondary sources though appropriate in this study, may have some limitations.

On the issue of repeatability, this study is repeatable based on chronological methodologies, which result in meaningful conclusions. This is an indication that the obtained results are reliable based on the use of repeated analyses, control experiments, and samples.

Furthermore, repeatable research is the closeness of agreement between independent test results, which are obtained using a similar method, similar material, and also in the same settings. The methodologies used by Oteri et al. (2015) suggest that data collection utilized a well-structured questionnaire, which implies that the study can be replicated and repeated in similar studies but in different fields of research. This is an indication that repeating the study would give similar results, and thus repeatable. Moreover, the research conducted by Oteri et al. (2015) is repeatable and the secondary sources can be analyzed, which suggests that the study is relevant and reliable. However, the study does not indicate that there were any ethical considerations put in place while collecting data. Ethics in research are very crucial since they eradicate conflict in research (Vartanian, 2010), something which the article fails to do.

On results and discussion, the content analysis technique was adopted to analyze the data. For this study, Microsoft Excel Spreadsheet and MATLAB were used. Both methods are very critical in creating various sets of data and are important in data storage, which indicates



that the data analysis was done correctly hence validating the study. The study found out that the highest variation among mobile subscribers was between 2009 and 2010 and this was attributed to the growth of Orange which at a very high rate. Moreover, the study indicates that from 2012 to 2013 there was an increase in subscriptions by 3.6% due to sim-card registration in Kenya. These results have appeared to be consistent with the growth of the industry then, as more people in Kenya acquired telephone lines and also could frequently use the SMS and voice call service. This is further as a result of different strategies adopted by Safaricom and Celtel (now Airtel) where each company tried to outdo the other. Therefore, the results fill the knowledge gap in the area of study, and thus can be said to have met its objectives. Furthermore, it is noted that penetration rates had also been growing since the first two companies Safaricom and Celtel started taking different strategic directions to remain competitive. In 2014, the rate of subscription increased and the total number of mobile subscriptions reached 32.2 million. Moreover, both mobile coverage and penetration also increased steadily.

Graphs, tables, and images are common ways of illustrating relationships in data sets. The graphs, tables, and images in Oteri et al. (2015) have well-informed titles and are of high-quality, which is a characteristic of good data sets. Moreover, there is no sign of data error, contain sufficient data and have no sign of editing or manipulation. This makes the data presented in terms of graphs, images, and data tables more presentable and acceptable. Looking at the reference list, one can conclude that it is accurate. However, the references fail to show any format, and most references do not indicate the year of publication, which implies that most of these references were incomplete. Regarding the adequacy of the references, the article utilized limited sources, which however relevant seem to be limited. Lastly, the study has a critical balance of its references, which can encourage readers to study more to gain more knowledge in the area, authors did not reference themselves hence no overreliance, and thus the article can be said to be reliable and unbiased.

CONCLUSION

Oteri et al. (2015) note that there has been rapid development of the Kenya's telecommunication industry, especially the use of mobile telephony. This critique has considered all of the relevant sections of the article including the introduction, literature review, methodology, discussion, and references as well as the tables, images, and graphs.



Therefore, the critique is extensive, and has thus did not only bring out the strengths of the journal article, but also highlighted on some of its major weaknesses. Based on the critical analysis, it is evident that, though it has some shortcomings, it is still relevant and critical to understanding mobile subscriptions, penetration, and coverage trends in the telecommunications industry of Kenya.

REFERENCES

- Arasa, R., & Gathinji, L. (2014). The relationship between competitive strategies and firm performance: A case of mobile telecommunication companies in Kenya. *International Journal of Economics, Commerce and Management*, 11(9): 1-15.
- BuddeComm (2019). Kenya - Telecoms, Mobile and Broadband - Statistics and Analyses. Retrieved on January 27th 2020 from:
<https://www.budde.com.au/Research/Kenya-Telecoms-Mobile-and-Broadband-Statistics-and-Analyses>
- Johnston, M. P. (2017). Secondary data analysis: A method of which the time has come. *Qualitative and Quantitative Methods in Libraries*, 3(3): 619-626.
- Lubrano, A. (2013). *The telegraph: How technology innovation caused social change*. Routledge.
- Omae, M. O., Ndung'u, E. N., & Kibet, P. L. (2013). A Survey of Internal and External Challenges Experienced by Kenya's Telecommunication Industry. *International Journal of Scientific & Engineering Research*, 4(6): 1732-1744.
- Quinlan, C., Babin, B., Carr, J., & Griffin, M. (2019). *Business research methods*. South Western Cengage.
- Vartanian, T. P. (2010). *Secondary data analysis*. Oxford University Press.
- Kanthawongs, P., & Kanthawongs, P. (2012, June). An exploratory research of students' attitude toward hybrid instruction model in Thailand. In *IABE-2012 Venice-Summer Conference* (p. 298).
- Dima, A. M., & Meghisan-Toma, G. M. (2018, May). Research on implementing education for sustainable development. In *Proceedings of the international conference on business excellence* (Vol. 12, No. 1, pp. 300-310). Sciendo.