Porter's Five Forces and Competitive Advantage of Telecommunications Firms in Nigeria

[1] Victor A. Umoh, Ph.D [2]Esitime S. Umana [3] Martin A. Udoh
[1] Department of Business Administration, Obong University, Obong Ntak, Nigeria
[2] Department of Business Administration, Akwa Ibom State Polytechnic, Ikot Osurua, Nigeria
[3] Department of Business Management, University of Uyo, Uyo, Nigeria

DOI: https://doi.org/10.37745/ejlpscm.2013/vol11n14355 Published February 15, 2023

Umoh V.A., Umana E.S., Udoh M.A. (2023) Porter's Five Forces and Competitive Advantage of Telecommunications Firms in Nigeria, European Journal of Logistics, Purchasing and Supply Chain Management, Vol.11 No.1, pp.43-55

ABSTRACT: *This study was conducted to investigate Porter's Five Forces and Competitive Advantage of Telecommunications Firms in Nigeria. The survey research design was adopted in the study. The study had a population of 181 and was treated as census study. The primary instrument used in data collection was questionnaire. Two firms, Airtel and MTN were involved in the study. The study made use of the survey research design and achieved 61.38% response rate. Data analysis was done with multiple regression. The study revealed an adjusted R^2 of 0.723 which implies that about 72.3% of the variables of Porter's Five Forces studied when combined will account for about 72.3% changes in competitive advantage in telecommunications firms in Nigeria. Specifically, Buyers' Bargaining Power (Beta = 2.981, t= 4.785, P< 0.05); Current Rivalry (Beta = 1.003, t= 2.145, P< 0.05); Threat of Substitute (Beta = 1.064, t= 2.011, P< 0.05) and Threat of New Entrant (Beta = 3.138, t= 3.017, P< 0.05) were all significant in influencing competitive advantage among telecommunication firms in Nigeria. However, Suppliers Bargaining power (Beta = 1.372, t= 1.847, P> 0.05). had no significant influence. It was concluded that Buyers' Bargaining Power, Current Rivalry, Threat of Substitute and Threat of New Entrant were the key forces that influence competitive advantage among telecommunication firms in Nigeria, while Suppliers Bargaining power was weak and therefore, not capable of influencing competitive advantage among telecommunications firms in Nigeria. It was recommended that telecommunications companies in Nigeria should pay close attention to Buyers' Bargaining Power and strategize on satisfying customers, meeting their needs and retaining their patronage; continuously monitor their competitors, launch aggressive campaigns, provide loyalty programmes and provide appropriate strategic response, strategize on retaining their customers and making difficult for new telecommunications firms to birth in the country; should ensure that their actions and policies do not cause their customers to switch to other brands but influence customer loyalty, in order improve their competitive position.*

KEY WORDS: Porter's Five Forces, Competitive Advantage, Telecommunication Firms, Nigeria

INTRODUCTION

The contemporary business environment is characterized by increasing environmental volatility. In this regard, consumers' tastes, values and behaviors may change, government policy may change, economic situation may vary, technology may also change. Facing this reality, business organizations expectedly monitor their line of business and industry while making investment and business decisions with a view to delivering on their mission. More importantly, each business in an industry has to understand its industry, developments within the industry, key issues that underlay success with a view to responding with appropriate strategies that positions it to do well. The capacity to do this is depended on leveraging appropriate strategic management tools, one of which is the Porter's Five Forces.

Porter's five forces model posits a compelling view on how a firm can achieve competitive advantage in a particular industry through the use of five imperative forces of the industry. These five forces are perceived as variables that could affect the positioning of a firm in a particular industry. They are, Bargaining power of Buyers; Bargaining power of Sellers; Threat of Substitutes; Threat of Potential Entrants and; Threat of Existing Competition(Goyal, 2020).

Bargaining Power of Buyers is concerned with the powers exerted by buyers on the firm. In certain industries, buyers exhibit high bargaining power, such as if the industry has a small number of buyers who purchase large volumes, these are particularly powerful in industries with high fixed costs. Buyers are also powerful in instances where industry products are homogeneous, and when the buyers do not face high switching costs.

Bargaining Power of Suppliers refers to power exerted by suppliers in the business. This force examines how easy it is for suppliers to upsurge their prices and therefore, affect cust'mers' bottom line. Suppliers exhibit high power, when they are few in number, offer differentiated products, and can credibly threaten to integrate forward in the industry (Goyal, 2020). Threat of New Entrants refers to the likelihood of new businesses coming into the industry. New Entrants, put pressure on incumbents to cut prices, and thus profitability. As a force, Threat of new entrants is concerned with determining how easy (or not) it is for a new business to enter a particular industry(Mugo,2020). The threat of substitutes is the competition that is created in the market by substitute products and when the buyer faces a choice between products that can potentially offer the same level of utility. It is the likelihood of customers can replace a firm's service or product with an alternative that fulfills the same needs as the service/product.

This force is especially threatening when buyers can easily find substitute products with attractive prices or better quality and when buyers can switch from one product or service to another with little cost (Nashiruddin, 2019).The threat of Existing Rivalry explains the degree to which rivalry drives down an industry's profit potential. Porter (2008) hinted that high rivalry will limit the profitability of an industry due to constant competition. Having a good knowledge of these five forces provides insights into the nature of competitive relations within a particular industry. It thus, positions a firm to strategize on how to achieve competitive advantage in its line of business.

Competitive advantage is an advantage over competitors gained by offering consumers greater value, either by means of lower prices or by providing greater benefits and services that justifies a higher price (Porter, 1985). Furthermore, Kang and Park (2017) opines that competitive advantage should cover the dimensions of cost, differentiation and focus among competing businesses. Competitive advantages is experienced by a firm when its actions in an industry or market create economic value and when few competing firms are engaging in similar actions(Ryu, 2018). Competitive advantage is assessed using a number of indicators, including efficiency, market coverage, market share and profitability (Mugo, 2020). Such assessment highlights how various/different firms are faring in a given industry in an economy. In Nigeria for instance, a firms competitive positioning may be established following this assessment.

Nigeria's Telecommunications sector has witnessed a revolution following its deregulation and liberalization in 2001. The policy of opening up the industry resulted in the birth of Telecommunications Multinationals; the major ones being MTN, Airtel and Etizalat. The birth of these telecommunications firms has also triggered stiff competitions among them. Porter (1990) opines that the potential for a firm to be profitable is negatively associated with increased competition, lower barriers to entry, a large number of substitutes, and increased bargaining power of customers and suppliers, hence the need to have suitable strategies.

At the global level, Porter's Five Forces model has been used by many scholars in different contexts(Indiatsy *et. al.* 2014;Nekmahmud and Rahman,2018). Gomera, Chinyamurindi and Mishi (2018) researched SMEs in South Africa relating the link between strategic planning and performance. the researchers observed that the five forces must form a core thread in the formation of any such strategic plans. Kawira (2017) investigated the effect of porter's five forces on strategy formulation at Standard Chartered Bank Kenya and discovered that the five forces were an integral part of the planning for the SACCOs. The maintained that the company would find it rather difficult to survive with paying attention to these forces. Similarly, Hussein and Muchemi (2019) in their survey of the relevance of the Five Forces Model to the Kenyan Mobile telephony Industry, it was revealed that the Five Forces are forces to reckon within the Kenyan mobile telephony. As noted by Valinejad & Rahmani (2018), the reviewed studies seem to suggest that these five forces should not be neglected, warning that failure to treat the forces strategically may create survival problem for firms in competitive sectors.

While a number of studies have been conducted with results indicating the usefulness of Porter's Five forces in different contexts, particularly in Africa, The researchers are not aware of any similar research in Nigeria, this is in spite of the growing influence of the telecommunications sector in the country's national economy with well over one hundred and fifty million subscribers! As expected, the telecommunications firms are in competition for patronage and therefore, would develop appropriate strategies to posit them effectively to gain more patronage in the industry. Thus, securing competitive advantage would naturally be a goal for these firms. It was on the basis of this premise that it was considered worthwhile to analyse the different contributions of Porter's five forces towards strategy development so as to establish their implications for the Telecommunications sector in Nigeria. It was hypothesized that Porter's Five Forces have no significant positive influence on strategy development in the telecommunications firms in Nigeria.

REVIEW OF LITERATURE

Porter's Five Forces Framework

Porter's Five forces model of competitive analysis illustrates the usage of Five competitive forces in explaining low profitability and viable entries to an industry (David, 2019). These Five forces are the threat of new entrants, buyer power, supplier power, threat of substitutes, and rivalry among the already established firms. The intensity of these forces highly determines the average expected level of profitability in an industry and their thorough understanding, both individually and in combination, is beneficial in deciding what industries to enter, and in assessing how a firm can improve its competitive position (Ole *et al*, 2019). Threat of new entrants determines how easy (or not) it is to enter a particular industry. If an industry is profitable and there are few barriers to enter, rivalry soon intensifies. When more organizations compete for the same market share, profits start to fall. It is essential for existing organizations to create high barriers to enter to deter new entrants (Ryu, 2018). Threat of new entrants is high when; Low amount of capital is required to enter a market, existing companies can do little to retaliate, existing firms do not possess patents, trademarks or do not have established brand reputation, there is no government regulation, customer switching costs are low (it doesn't cost a lot of money for a firm to switch to other industries), there is low customer loyalty, products are nearly identical, and economies of scale can be easily achieved (Porter, 2008).

Strong bargaining power allows suppliers to sell higher priced or low quality raw materials to their buyers. This directly affects the buying firms' profits because it has to pay more for materials. Suppliers have strong bargaining power when; There are few suppliers but many buyers, suppliers are large and threaten to forward integrate, few substitute raw materials exist, suppliers hold scarce resources, and cost of switching raw materials is especially high (Ayub, Kwendo & Liyayi, 2019). Buyers have the power to demand lower price or higher product quality from industry producers when their bargaining power is strong. Lower price means lower revenues for the producer, while higher quality products usually raise production costs. Both scenarios result in lower profits for producers (Ryu, 2018). There is also the threat of substitutes. This force is especially threatening when buyers can easily find substitute products with attractive prices or better quality and when buyers can switch from one product or service to another with little cost (Nashiruddin, 2019).Rivalry among existing competitors is the major determinant on how competitive and profitable an industry is. In competitive industry, firms have to compete aggressively for a market share, which results in low profits. Rivalry among competitors is intense when: There are many competitors, exit barriers are high, growth of industry is slow or negative, products are not differentiated and can be easily substituted, competitors are of equal size, and low customer loyalty (Ariffin & Sahid, 2019).

Competitive advantage

Competitive advantage is an advantage over competitors gained by offering consumers greater value, either by means of lower prices or by providing greater benefits and services that justifies a higher price (Porter, 1985). Nashiruddin (2019) observed that with increased competition in a sector, an industry's attractiveness is threatened as it reduces its profitability; on account of this,

Vol.11 No.1, pp.43-55, 2023
Print ISSN: 2054-0930 (Print)
Online ISSN: 2054-0949 (Online)

the author called for proactive formulation of strategies to address competition in the environment.A company assumes competitive advantage whenever it has an edge over its rivals in securing customers and defending against competitive forces, thus conferring on it a long term benefit of staying ahead of others in the industry(Asimakopoulos and Whalley, 2017).

METHODOLOGY

The survey research design was used in this study. The study had a population of 181 drawn from MTN and Airtel in the South Soth Zone of Nigeria and their Head Offices in Lagos. These two telecommunications firms were selected as they control about 66% of the telecommunications business in Nigeria. The study was a census. However, in order to improve generalization of findings, 20 additional managerial staff of MTN and Airtel were administered at their respective head offices. A total of 89 copies of the questionnaire were returned in useable form. This amounted to 61.38 response rate. The questionnaire instrument used in the study recorded an average Cronbach Alpha value of 0.77. The method of data analysis was regression model. The analysis was done at 5% significance level (p. value of 0.05).

$Y = f(X)$
Where Y= Dependent Variable
X =Independent Variable
$Y = a + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_{5} + e$ ……… i
Where,
Y= Dependent Variable (Competitive Advantage)
X = Porter' Five Forces
Where,
X1 = Bargaining Power of Buyers
X2= Bargaining Power of Sellers
X3 = Threat of New Entrants
X4 = Threat of Substitutes
X5 = Current Rivalry
a = Y intercept
$\beta_1\beta_2\beta 3$ $\beta 4$ = the regression coefficients of the four independent variables.
e = Error

Vol.11 No.1, pp.43-55, 2023
Print ISSN: 2054-0930 (Print)
Online ISSN: 2054-0949 (Online)

RESULTS/FINDINGS

Table 1: Demographic Characteristics of Respondents

Variables	Categories	Frequency	Percentage%
Sex	Male	46	51.69%
	Female	43	48.31
Age	21 – 30	17	19.10
	31 – 40	31	34.83
	41 – 50	22	24.72
	51 and above	19	21.35
Education	B.Sc/HND	43	48.31
	M.Sc/MBA	36	40.45
	Others	10	11.24
Length of service experience	Less than 1year	3	3.37
	1-4 years	26	29.21
	5-9 years	30	33.71
	10-14 years	18	20.23
	15 years and above	12	13.48

Source: Field Data (2022)

Table 1 is an analysis of the demographic characteristics of respondents that took part in the study. From the table, the gender distribution shows that out of the 89 respondents who returned their copies of questionnaire in useable form, 46 of them were male representing 51.69% while 43 people were female representing 48.31%. It also indicates that 17 respondents were between 21 – 30 years representing 19.10%, 31 of the respondents were between the age of 31 – 40 years representing 34.83%, also 22 respondents were between 41 – 50 years representing 24.72% while 19 of the respondents were aged 50 and above representing 21.35%. It can be deduced that 43 respondents had HND/BSC representing 48.31% and 36 respondents had master degree representing 40.45%. Also, 10 respondents indicated they had other qualifications, this represented 11.24%. The table also shows the number of respondents that had work experience of less than 1year as 3 representing 3.37%; 26 respondents had worked for between1-4 years, representing 29.21%; 30 respondents had worked between 5-9 years of experience representing 33.71%; 18 of the respondents had worked between 10-14 years of experience representing 20.23% and 12 of them had worked for at least 15 years and above representing 13.48%.

H_0: Porter's Five Forces have no significant positive influence on competitive advantage of Telecommunications Firms in Nigeria

H_i: Porter's Five Forces have a significant positive influence on competitive advantage of Telecommunications Firms in Nigeria

Vol.11 No.1, pp.43-55, 2023
Print ISSN: 2054-0930 (Print)
Online ISSN: 2054-0949 (Online)

Table. 2: **Multiple-Regression Analysis Result on the influence of Porter's Five Forces on Competitive Advantage of Telecommunications Firms in Nigeria**

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.896[a]	.803	.723	4.11142

Goodness of Fit[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	116.226	5	301.323	52.135	.001[b]
	Residual	431.033	87	.207		
	Total	547.259	88			

Coefficients[a]

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	T	Sig.
1	(Constant)	2.163	.352		1.033	.000
	BPB	2.981	.623	1.696	4.785	.000
	EXR	1.003	.468	1.413	2.143	.000
	TNE	3.138	1.040	3.381	3.017	.001
	BPS	1.372	.743	.671	1.847	.000
	TST	1.064	.529	.096	2.011	.000

a. Dependent Variable: Competitive Advantage
b.Predictors: (Constant), Bargaining Power of Buyer, Bargaining Power of Suppliers, Existing Rivalry, Threat of New Entrant, Threat of substitutes
Source: Researchers' Computation(2022)

Table 2 presents the influence of **Porter's** Five Forces on competitive advantage in Telecommunications Firms in Nigeria. In the table, variables of Porter's Five Forces, namely, Buyers' Bargaining Power, Suppliers Bargaining Power, Current Rivalry, Threat of Substitute and Threat of New Entrant combined to influence competitive advantage in Telecommunications Firms in Nigeria. The generalized model summary showed an adjusted R^2 of 0.723 which implies that about 72.3% of the variables of Porter's Five Forces studied when combined will account for about 72.3% changes in competitive advantage in telecommunications firms in Nigeria. The model also showed significant goodness of fit (p-value <0.05), this shows that when combined, there would be a linear relationship as stated in the model. Buyers' Bargaining Power (BPB), Current Rivalry (EXR), Threat of Substitute(TST) and Threat of New Entrant (TNE) were all significant. However, Suppliers Bargaining power(BPS), was not significant. In line with these results, the null hypothesis which was that Porter's Five Forces have no significant positive influence on competitive advantage in telecommunications firms in Nigeria is partly accepted.

DISCUSSION OF FINDINGS

In this study, Porter's Five Forces and Competitive Advantage were investigated in the Telecommunications sector of Nigeria in order to reveal the implications such would have for strategic response among telecommunications firms in Nigeria. The outcome of this study is in line with some other researches. For instance, Rahman (2019) studied the Bangladeshi smart-phone industry using the 5 forces model and discovered that the forces had various effects on the industry. Also, it was found that the strongest force on the Bangladeshi market for smart-phones was rivalry among competitors while there was moderate power for consumers as well as the threat of new entrants. Malhotra and Batra (2019) studied the Indian market with the aim of establishing customer's competing strategies in the telecom service sector. By collecting data from working employees in the telecommunication industry, the scholars focused on reasons why customers switch service providers. Through exploratory factor analysis, the study tested Porter's 5 forces. They concluded through their results that the major rival firms have to maintain a strong relationship with the customers by offering heavy incentives such as lucrative offers to friends and families. In this way, the consumers have a strong pull on the market which the suppliers cannot ignore. The study also concluded that it is through this power that customers are able to influence the switching or none-switching to new providers or supliers of their telecom services. Kawira (2017) examined the effect of porter's five forces on strategy formulation at Standard Chartered Bank Kenya. It was revealed that intensity of rivalry among companies makes companies to craft strategies to achieve market share. It was also found that rivalry among existing competitors enhances new product introduction. Kulmia (2014) analyzed the competitiveness of the supermarket industry in Kenya using Porters Five Forces model. Findings of the study showed that entrants in the industry, current level of competitive rivalry, threat of substitutes, bargaining power of consumers and bargaining power of suppliers positively and significantly influenced competitiveness within the supermarket industry in Kenya. Mathooko and Ogutu (2015) conducted a study to establish the extent to which Porter's five competitive forces framework, among other factors drive the choice of response strategies adopted by public universities in Kenya. The study found out that Porter's framework influenced the choice of response strategies adopted by the public universities to a great extent, the most influence being the threat of new entrants.

Furthermore, Marshall (2018) asserts that Porter's five forces shape the industry structure regardless of whether a firm plans for them or not. Thus, the author concludes that through careful understanding of the forces, firms can enhance its focused position in the market. Again, Benjamin (2018) has defined Porter's 5 forces as the industrial framework proposed by Porter (1980) for analysing business competition using 5 specific measures including rivalry among the market firms, threat of substitutes, consumer bargaining power, supplier pricing power and entry barriers to that market. Mugo(2020) has stressed the need for firms to focus on gaining competitive advantage to enable them respond to, and compete effectively in their industry. Again, it has been observed that the survival of organizations in competitive business environments requires appropriate strategic response through developing competitive strategies(Mugo. 2020)

Porters' Five Forces and Competitive Advantage of Telecommunications Firms in Nigeria: Implications for strategic response The result of test of hypothesis in this study indicates that Buyers' Bargaining Power has a significant influence on competitive advantage of telecommunication firms in Nigeria. The implication here is that buyers exert strong bargaining power which determines competitive advantage of telecommunications firms in Nigeria since they are large in number, switching costs to other supplier are low, there are many substitutes and the buyers are price sensitive . In this case, buyers have the power to demand lower price or higher product quality from industry players as their bargaining power is strong . Thus, a telecommunications firm will do well and achieve competitive advantage given that it strategizes on satisfying customers, meeting their needs and retaining their patronage. The firm will also be ahead of others by offering affordable and competitive product pricing particularly to price sensitive customers Therefore, it becomes beneficial to rework business strategies in order improve firms' competitive position (Ole *et al*, 2019; Okolo, 2019).

The result of test of hypothesis in the study suggested that suppliers' bargaining power was insignificant in Nigeria. In a way this implies that the telecommunications firms' bargaining power in Nigeria is low hence cannot be used to predict competitive advantage of telecommunications firms in Nigeria. This means that suppliers cannot sell higher priced or low quality materials to their buyers. As there are substitutes, the power of suppliers is reduced in significantly. Moreso, as switching cost is not so high for buyers, it is disadvantageous for suppliers to make decisions that would worsen its position in the market. Rather, suppliers should respond by offering competitive pricing, products of very high quality, service that meet and satisfy customers' expectations. Therefore, any telecommunications firm that targets achieving competitive advantage in the country should respond by making decisions that are informed by these realities.

Furthermore, outcome of test of hypothesis showed that current rivalry had a significant influence on competitive advantage of telecommunication firms in Nigeria. This indicated that as a force, current rivalry had an important influence on competitive advantage of telecommunication firms in Nigeria. Thus, the outcome seem to suggest that current competition among telecommunications firms is an influential force and a major determinant on how competitive and profitable the industry is. Thus, as telecommunications firms compete among themselves aggressively, they do that for the sake of securing market share. In Nigeria, such rivalry is intense as there are many competitors, exit barriers are high, products are not differentiated and can be easily substituted, competitors are of equal size and with low customer loyalty. In order to have competitive advantage, telecommunications firms should continuously monitor their competitors, launch aggressive campaigns, provide loyalty programmes, improve upon its service quality, offer aggressive pricing and delivery, upgrade its facilities and position itself to respond to customers' issues and complaints in a timely fashion.

Again, Threat of new entrants was found to record a significant influence on competitive advantage on telecommunications firms in Nigeria. This result suggested that Threat of new entrants may be used in determining competitive advantage of telecommunication firms in Nigeria. This is so because, there is low customer loyalty, products are nearly identical, and economies of scale can be easily achieved. Essentially, existing firms in the telecommunications sector in Nigeria should continue to retain its customers through affordable prices, quality service and positive brand image.

Also, the test of hypothesis indicated that Threat of Substitute indicated a significant influence on competitive advantage of telecommunications firms in Nigeria. This means that Threat of Substitute can make an important contribution to determining competitive advantage in the telecommunication sector in Nigeria. This implies that the force has created a competition in the market through substitute products as the buyer faces a choice between products that can potentially offer the same level of utility. Thus, in the case of Nigeria, the Threat of substitutes is high as the buyer has lower switching costs.

This force is especially threatening when buyers can easily find substitute products with attractive prices or better quality and when buyers can switch from one product or service to another with little cost (Nashiruddin, 2019). Telecommunications' firms have to ensure that their actions and policies do not cause their customers to switch to other brands; quality service delivery and capacity to attend to customers' queries on time should be prioritized. Firms' strategies should target customer loyalty and reward programmes.

CONCLUSION AND RECOMMENDATIONS

This study focused on the influence of Porter's Five forces on competitive advantage in the telecommunications sector in Nigeria using Airtel and MTN. Findings of test of study's hypotheses indicated that Buyers' Bargaining Power, Current Rivalry, Threat of Substitute and Threat of New Entrant were all significant in influencing competitive advantage among telecommunication firms in Nigeria. However, Suppliers Bargaining power, had no significant influence on telecommunications firms' competitive advantage in Nigeria. It could thus be concluded that Buyers' Bargaining Power, Current Rivalry, Threat of Substitute and Threat of New Entrant were the key forces that influence competitive advantage among telecommunication firms in Nigeria, while Suppliers Bargaining power was weak and therefore, not capable of influencing competitive advantage among telecommunications firms in Nigeria. The findings of this study can guide Management of companies in the telecommunications industry in Nigeria on the strategic responses to address competition in the sector with a view to achieving and sustaining competitive advantage. There is need for an expanded study that covers other telecommunications firms in the country and in all zones of the country to justify generalization of these research findings.

In line with the findings of this study, the following recommendations are made:

i. It is recommended that telecommunications companies in Nigeria should pay close attention to Buyers' Bargaining Power and strategize on satisfying customers, meeting their needs and retaining their patronage in order improve their competitive position.

ii. It is recommended that telecommunications companies in Nigeria should be aware of current rivalry in the sector. In order to have competitive advantage, telecommunications firms should continuously monitor their competitors, launch aggressive campaigns, provide loyalty programmes and provide appropriate strategic response.

iii. It is recommended that telecommunications companies in Nigeria should pay attention to Threat of new entrants and to strategize on retaining their customers and making difficult for new telecommunications firms to birth in the country.

iv. It is recommended that telecommunications companies in Nigeria should consider Threat of Substitute as an important force that determines competitive advantage in the sector hence should ensure that their actions and policies do not cause their customers to switch to other brands but influence customer loyalty.

References

Ariffin, A. S., & Sahid, M. L. I. (2018). Competitiveness analysis of ASEAN automotive industry: a comparison between Malaysia and Thailand. *Journal of Science, Technology and Innovation Policy*, *3*(2):18-29.

Asimakopoulos, G., & Whalley, J. (2017). Market leadership, technological progress and relative performance in the mobile telecommunications industry. *Technological forecasting and social change*, *1(3):* 57-67.

Ayub, S. E., Kwendo, E., & Liyayi, C. S. (2019). Effect of Differentiation Strategies on the Performance of Mobile Phone Service Providers in Kenya. *International Journal of Multidisciplinary and Current research*, *7*(4):28-39.

Benjamin, S. (2018). Exploration to Exploitation: An industry analysis of suborbital space tourism. *New Space*, *6*(1): 87-98.

David, A. M. (2019). Porter's competitive strategies influence on performance of mobile telecommunication companies in Kenya. *International Journal of Scientific Research and Management*, *7*(2): 14-22.

Gomera, S., Chinyamurindi, W. T., & Mishi, S. (2018). Relationship between strategic planning and financial performance: The case of small, micro-and medium-scale businesses in the Buffalo City Metropolitan. *South African Journal of Economic and Management Sciences*, *21*(1): 1-9.

Goyal, A.(2020). A Critical Analysis of Porter's 5 Forces Model of Competitive Advantage Journal of Emerging Technologies and Innovative Research, 7(7):149-152.

Hussein, S. S., & Muchemi, A. (2019). Michael Porters five forces on performance of savings and credit cooperative societies in Nairobi City County, Kenya. *International Academic Journal of Human Resource and Business Administration*, *3*(7): 14-35.

Indiatsy C. M., Mwangi, M. S., Mandere, E. N., Bichanga, J. M., & George, G. E. (2014). The Application of Porter's Five Forces Model on Organization Performance: A Case of Cooperative Bank of Kenya Ltd. *European Journal of Business and Managemen*t. 6(16): 75-86.

Išoraitė, M. (2018). The competitive advantages theoretical aspects. *Ecoforum Journal*, *7*(1).

Kang, D., & Park, M. J. (2017). Competitive prospects of graduate program on the integration of ICT superiority, higher education, and international aid. *Telematics and Informatics*, *34*(8): 25-37.

Kawira, B. (2017). *Effect of porter's five forces on strategy formulation at Standard Chartered Bank Kenya*. Unpublished Dissertation Report. United States International University – Africa

Kulmia, A. M. (2014). *A study competitiveness of the supermarket industry in Kenya using Porters Five Forces model.* Unpublished Dissertation Report. United States International University – Africa

Malhotra, G., & Batra, S. K. (2019). Customer-Switching Behaviour for Telecom Service Provider. *International Journal of Business and Economics, 4*(2): 1-17.

Marshall, S. J. (2018). Strategic Planning as Sense-Making. In *Shaping the University of the Future* Springer, Singapore., pp. 413-436

Mathooko F. M. and Ogutu M., (2015). "Porter's five competitive forces framework and other factors that influence the choice of response strategies adopted by public universities in Kenya", *International Journal of Educational Management*, 29(3):334 – 354.

Mugo, P.(2020). Porter's Five Forces influence on Competitive Advantage in Telecommunication Industry in Kenya . *European Journal of Business and Strategic Management, 5(20): 30-39.*

Nashiruddin, M. I. (2019). Creating Competitive Advantage in the Turbulent Business Environment: Lesson Learned from Indonesia Telecommunication. *Buletin Pos dan Telekomunikasi*, *17*(1),:31-46.

Nekmahmud, M., & Rahman, S. (2018). Measuring the Competitiveness Factors in Telecommunication Markets. In *Competitiveness in Emerging Markets* Springer, Cham, pp. 339-372.

Novikov, S. V. (2018). Strategic analysis of the development of high-technology manufacturing facilities. *Russian Engineering Research*, *38*(3):198-200.

Okolo, V. O. (2019). Impact of corporate social responsibility strategies on consumer patronage of telecommunication industry: an MTN experience in Enugu state. *Problems and perspectives in management*, 17(1): 216-229.

Ole, Kulet, J. L., Wanyoike, D. M., & Koima, J. K. (2019). Effects of best product strategic positioning on organizational performance in telecommunication industry. *Kenya. The Strategic Journal of Business & Change Management*, *6*(1): 387-400.

Porter, M. E. (1980). Competitive Strategy: Techniques for analyzing industries and Competitors, New York. Free Press.

Porter, M.E. (1985). *Competitive advantage*. New York: Free press.

Porter, M.E. (2008). The five competitive forces that shape strategy. *Harvard Business Review*. 86-104.

Rahman, M. S. (2019). An Analysis of Smart-Phone Industry in Bangladesh Using Porter's Five Forces Model. *Open Access Library Journal*, *6*(9): 1-12.

Ryu, M. H. (2018). The Value Co-Creation Strategy for Telecommunication Carriers: Focusing on the Assessment of Potential Strategic Alliance Partners. *Procedia Computer Science*, *13(9):* 338-346.

Valinejad, F., & Rahmani, D. (2018). Sustainability risk management in the supply chain of telecommunication companies: A case study. *Journal of Cleaner Production, 20(3):* 53-67.