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COMPETITIVENESS IN THE TELECOMMUNICATION SECTOR IN KENYA USING PORTERS FIVE FORCES MODEL

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ABSTRACT:

Purpose - The Telecommunication sector in Kenya is one of the main drivers of the Economy. This paper seeks to use Porter's Five Forces Model to empirically review the competitive structure of the industry and extract key insights for strategically marketing the key payers.

Design/methodology/approach - The paper empirically reviews important data from publications, published interviews, and Regulatory Authorities reports on the industry. Porter's five forces model is then used to analyze the competitiveness of the industry.

Findings – Porters five forces model offers both positive and negative impact to the players in the industry. Companies with less market share are affected the most as they struggle to match the market leaders. The impact of the five forces model is vital for the formulation of business competitive strategies by players in the telecommunication industry; however its limitations pose a research gap which warrant further empirical review or statistical field research.

Originality/value – This paper is the first to provide a comprehensive review of the competitiveness in the telecommunication industry in Kenya with the employment of porters five forces model. It is also one of the few proposed studies that can give valuable insight and guidelines for top mobile service provider managers to establish appropriate competitive and survival strategies effectively in Kenya. The paper not only validates theory with reality, but it also provides a reference for the academic as well as the business world.

Keyword (s): Telecommunications sector, Porters five forces model, Safaricom, Airtel, Telkom.

1.0 Introduction

Effective marketing strategy requires that firms understand their industry in order to establish good competitive strategies. Competition is one of the most inevitable issues in today's business world. Irrespective of a firm's size, it has competitors in the industry and the strategies of these competitors affect the process of formulating strategic plan for the company. Competitors represent a major determinant of corporate success, and failure of a company. To analyze industry competitiveness may lead to suboptimal performance in the business. It is crucial for firm's strategy formulation and implementation as well as competitive preparation (Man, Lau, & Chan, 2002).

As most of the managers acknowledge the importance of understanding their industry and competitors, there is a growing interest to use various competitive analysis techniques one of them being Michael Porters five forces model to help formulate and implement strategy (Sohel, Rahman, & Uddin, 2014). Michael Porter's Five Forces Model provides an ideal mechanism and framework to study the Kenyan telecommunications industry's competitive structure. The framework of the model covers every aspect of Kenya's Telecommunication sector and hence the results are more likely to give a true insight of the competitiveness within the sector.

1.1 Overview of Telecommunication Sector in Kenya

Electronic communications networks are widely regarded as the backbone of the information society critical to the growth of the economy (Stéphane Piot, 2018). A lot of changes have been experienced in the telecommunications sector worldwide in the past decade. Between 2008 and 2010, Information and Communication Technology (ICT) services became cheaper, the price of high-speed internet and that of mobile cellular services dropped, a transformation which has brought great benefit to consumers (Parkes & Teltscher, 2011).

Despite Kenya being ranked position 129 in the Global ICT Development Index (IDI) released in 2016 at the World Telecommunication Indicators Symposium, in Gaborone Botswana, In Africa, Kenya is still ranked position nine after Mauritius, Seychelles, South Africa, Cape Verde, Botswana, Ghana, Namibia and Gabon. Kenya boosts better mobile penetration in the East African region. The Communications Authority of Kenya (2015) reported that the total number of mobile subscriptions is at 34.79 million. Safaricom accounted for the lion's share of total wireless customers of 23.35 million which is 67.1%, followed by Airtel Kenya with a market share of 7.02 million which is 20.2% and Telkom Kenya (Orange) which is 3.77 million wireless users which is 10.8%. The market's only mobile virtual network operator (MVNO), Finserve Africa (Equitel), had signed up a total of 665,661 customers which is 1.9% of the total wireless sector. Mobile data subscriptions is at 18.68 million over the twelve-month period, with Safaricom accounting for 12.15 million of the total, followed by Airtel with 3.45 million, Telkom with 2.42 million and newcomer Finserve Africa (Equitel) with 665,661(Afande, 2015; Macharia, 2017).

2.0 Literature Review

A review of existing scholarly articles and books on porters five forces model enables to bring out the significance of the model as well as some of the weaknesses or challenge associated with its application in analyzing industry competitiveness with an aim of relating the same to Kenya's Telecommunication sector for the benefit of all the players in the sector and the also for the benefit of industry policy makers.

2.1 Porters' Five Forces Model

The most significant and influential analytical tool for assessing the nature of competition in an industry according to many scholars is, Michael Porter's Five Forces Model (Jörgensen, 2008; Stonehouse & Snowdon, 2007). With the introduction of the Five Forces Model, Porter presented his arguments that competition in any industry is not only between explicit industry players which we refer to as rivals, market players, industry competitors or competing businesses but goes well beyond that. He presented a model which provides a view of all competitive forces which create pressures on prices, costs, the rate of investment and other strategies necessary to compete in the industry (Porter, 1979, 1985, 1989).

The model focuses on five forces that shape the competition within an industry: (a) the threat of new entry, (b) the threat of substitutes, (c) the bargaining power of buyers, (d) the bargaining power of suppliers, and (e) the extent of rivalry between competitors within an industry (C. Hill; Porter, 2008). On the basis of analyzing the five forces, Porter argues that an organization can develop a generic competitive strategy of differentiation or cost leadership, capable of delivering superior performance through an appropriate configuration and coordination of its value chain activities (Stonehouse & Snowdon, 2007).

2.2 Limitations of the Model

Even though (Porter, 2000), alluded to the fact that the model helps a company assess the potential profitability of a particular industry, (Mauri & Michaels, 1998; Rumelt, 1991) argue that the profitability does not depend on industry-wide factors; firm-specific factors such as unique endowment, individual competence, and strategies are more important to the profitability of the business. The Porter model also indicates that five forces apply equally to all firms in an industry but in reality the strength of those forces may vary from business to business in terms of size or strength of brand name (Stonehouse & Snowdon, 2007).

2.3 Application of Porters Five Forces Model in Kenya's Telecommunication Sector

To effectively analyze the competitiveness of the telecommunication sector in Kenya, each of the five forces identified by Michael Porter shall be analyzed separately. This is to ensure that a depth empirical review is undertaken. The Key players that form part of the units of analysis are the major mobile service providers. Thus; Safaricom public Limited, Aitel Limited, Finserve Africa (Equitel) and Telkom Limited and Essar mobile (Yu).

Threat of New Entrants in Telecommunication Sector

Porter argues that the threat of new entrants into an industry is related to the barriers
to entry that exist within the industry and geographic boundaries (E. Dobbs, 2014; Porter, 2008). In order to assess the threat of entry in the telecommunications sector of Kenya each of these barriers must be analyzed in the context of the relevant boundaries. Some of the important variables to be analyzed are;

Capital requirements: The biggest barrier to entry into the capital-intensive telecommunication sector is usually access to finance (Afande, 2015). To cover high fixed costs, serious contenders typically require a large amount of cash. When capital markets are generous, the threat of competitive entrants escalates. When financing opportunities are less readily available, the pace of entry slows down. In order to analyze the threat of new entrants based on the capital requirement, it is essential to evaluate the capital market and thus understand the availability of finance for this sector. It is an expensive business; contenders need to be large enough and produce sufficient cash flow to absorb the costs of expanding networks and services that become obsolete seemingly overnight (Farrell, 2007). A company like Safaricom has a huge capital base having made 180 million dollars since 2006 according to Singh (2009), a figure which was more than triple combined profits made by competitors, and with this the company is in a position to change transmission systems and upgrade frequently to the detriment of competitors.

Switching costs: Customer switching costs are fixed costs that buyers face when they change suppliers (Porter, 1985). In the telecommunication sector, it mainly depends on what kinds of cost consumers or buyers have to undertake if they switch from one provider to another. In the mobile telephone sector, this is generally dictated by regulations that may ensure telephone number portability, the fees charged for transfer and the ease of transfer, including swiftness of switching and the overall experience of switching to another provider (Afande, 2015; Nikbin, Ismail, Marimuthu, & Armesh, 2012). Some mobile service providers like Safaricom and Airtel, sell phones that can only accommodate one sim card, in other instances they do sell what is referred to as locked phones, phones that can only accept the service provider line. Such a scenario makes customer-switching costs high (Oteri, Kibet, & Ndung'u, 2015).

Unequal access to distribution channels: Distribution channels in the telecommunications industry range from self-owned distribution points to any type of shop and also to sales points with vending and automated machines (Oloko, Anene, Kiara, Kathambi, & Mutulu, 2014). Generally, these distribution points are of negligible value to telecommunications organizations and therefore have no impact on the threat to entry. However, if exclusive distribution rights existed at critical or highly dynamic distribution points, then unequal access to these points might constitute a restriction to the threat to new entrants. Olunga (2007) noted that incumbents in Kenya do not have exclusive distribution rights and the distribution channels are free to all. Recharge cards, for example, are sold widely at various retail outlets, with barber shops and laundry service centers as the non-mainstream telecom product outlets; these are not organized by the industry. Customers may not frequent these shops daily, but they do so at regular intervals. However in the mobile money transfer sector, there exclusivity is still thriving with products like Mpesa enjoying wider unshared agency network. The number and distribution of retail shops is also un even as some companies have more shops distributed country wide than others (Gitonga, 2016; Olunga, 2007). As an example, in Nairobi the number of retail centers and customer care shops is un evenly distributed with Telkom having 14 retail shops, Airtel has 8 while Safaricom has 26 (Chesula, 2018).

Unfavorable government regulations: National government may exert pressure on the freedom of the telecommunications sector in the name of security, consumer protection and other legal concerns. such restrictive government policies can create a significant barrier to entry (Gikandi & Bloor, 2010; Olunga, 2007). The Communications Authority of Kenya 2016 report indicated that the authority has begun a comprehensive review of the regulations governing the sector and it's proposing to impose retail price controls on perceived dominant operators. Such proposals will unduly impact the operators ability to respond to market forces and to compete fairly (Oloko et al., 2014).

Bargaining Power of Suppliers

If suppliers have more bargaining leverage against the firm, then they are more powerful and can dictate terms (Brown, Fee, & Thomas, 2009). The power of suppliers in the telecommunications industry in Kenya just like in the rest of the world is affected by two key elements: the power of the Network Equipment Providers (NEPs) also referred to as Communications Solutions Providers (CSPs) and the power of the workforce, or suppliers of labour (Hess & Coe, 2006; Ireland, 1999).

Network Equipment Providers (NEPs)/Communications Solution Providers (CSPs) are companies that provide communication solutions to service providers like fixed or mobile operators, as well as to enterprise customers. If you call somebody on your mobile phone, surf the internet, join a conference call or watch a video on demand through IPTV (internet protocol TV), these services are all NEP-enabled (Hawilo, Shami, Mirahmadi, & Asal, 2014). The power of these suppliers depends on a number of factors, namely: the level of concentration of the NEPs, whether or not they depend heavily on the telecommunication service providers for their revenues, the costs to the telecommunication service providers of switching NEPs and the level of differentiation of products (Brennan, 1997; A. Hill & Abdala, 1993). In Kenya most of the NEPs are small firms depending more on the main stream mobile service providers for revenue generation and this gives the main stream companies more bargaining power over them.

The power exerted by workforce (labour) suppliers is the second element; it is affected by the availability of a qualified and experienced telecommunications sector work-force and also by the consolidation in the regional labour market in the telecommunications sector (Doellgast, 2008). Some companies with good corporate image and stability are preferred by many of the labour suppliers, this therefore means that they will always attract the best employees in the market. It's also noted by one of the telecommunication company employee that the company's employees are not members of any trade union. This reduces their bargaining power over various issues with the company hence.

Bargaining Power of Buyer or Customer Power

Buyers of telecommunications services include both individual and corporate buyers. The most influential factors in their decision making are price sensitivity and the perceived quality of service (Brennan, 1997; Kim, Ryoo, & Jung, 2011). Price sensitivity is a function of the overall buying behavior of buyers in the market, the income of the buyers and the value that is accorded by these buyers to the products and services offered by the participants in the telecommunications industry (Inderst & Wey, 2003). In recent years we have witnessed price wars among the competitors in the telecommunications sector in Kenya. These they elude to the fact that most Kenyan consumers are price sensitive. However with the market share percentage remaining unchanged over the past years, the overall price sensitivity in telecommunications industry in the country might not be a determinant.

The negligibility of switching costs for buyers is also a critical factor when investigating the power of the buyer. Due to highly differentiated products and services by a company like Safaricom, for example, the cost of switching from Mpesa to Airtel money or T-kash is too high in terms of convenience since only Safaricoms Mpesa among the mobile money service providers has a countrywide agent network. In such a scenario buyer power is reduced (Keter, 2015).

Threat of Substitutes

A substitute is a product or service that performs the same function as firms product but by different means (Porter, 2008). The main substitutes in the wider telecommunications industry in Kenya are calling cards, internationally or foreign-managed VoIP services, satellite internet, satellite phones and NGNs. Local competitor services for both Voice and data are also a threat for the rate of growth of competitor firms. The Communications Authority of Kenya report 2017 indicated that the customer base for Airtel grew at a higher rate compared to Safaricom this in itself is an indication of how substitute products can affect a company's market share and growth rate.
Substitutes offer the greatest threat when they can provide buyers with better service at lower costs through changes that improve the value of their products or services. The unlicensed provision of international phone calls using VoIP is not clearly regulated in Kenya (Wachira, 2010), Demand for low-cost international calls is high and scrupulous traders have been taking advantage of unclear regulations to meet rising demand. Calls through Skype, Vibe, Duo, and other popular VoIP internet sites, have increased as cyber cafes and phones can access (Barasa, 2010; Njeri, 2017).

Competitive Industry Rivalry

Michael Porter's fifth force is competitive rivalry, which may be defined as the efforts that industry players or existing competitors make in order to sustain and improve their market share, revenue, profitability and image. High rivalry limits the profitability of an industry (E. Dobbs, 2014). In the telecommunications sector, all aspects of rivalry, including price discounting, introduction of new products, service improvements and advertising campaigns play an important role (Kandie, 2001; Nikbin et al., 2012). According to Porter, the degree of rivalry depends on the intensity as well as the basis of competition (Porter, 2008). Some of the variables used to analyze competitive rivalry are explained below.
Industry concentration and size competitors: The number of competitors is important as all the telecommunication firms in the sector have to share the same market. The size of network and coverage determines the size of market share. Those firms with limited coverage will hence have small market share and less influence (Porter & Van der Linde, 1995). Kenya has only one Virtual Network Operator (VNO) Equitel which has way below one percent market share, its influence is insignificant. According to Porter, Ketels, and Delgado (2007) the financial strength of the industry players gives an important indication of their power and hence their ability to pressure their rivals. With only four registered but three active network operators in the country, thus, Safaricom, Airtel, Telkom and the in active Essar (YU), this is an indication that the concentration in the mobile operator sector is low, resulting in a relatively low competitive pressure. However, in the case of including NEP and CSPs then the number grows increasing competitive pressure in the sector.
Rate of industry growth: Analyzing the rate of industry growth both present and prospective is important in determining the sectors competitiveness. All services in the industry which include; fixed and mobile, voice and internet communication service, must be analyzed individually. Growth related to actual growth in buyers willing to buy services provided by the sector and the growth in potential buyers who were not able to acquire the product or service due to lack of information or lack of reach of the industry product or service provider must also be determined. In this industry, the rate of the

industry's growth is monitored mainly through the penetration rates of individual services provided in the market (Mozer, Wolniewicz, Grimes, Johnson, & Kaushansky, 2000). According to the Communications Authority of Kenya 2012, Mobile phone penetration in the country is currently standing at 88 percent. The penetration rates on internet hit 112.7 percent which means that growth in consumers of these telecommunication services is increasing day by day and has yet to be exhausted and is therefore guaranteed. As such, there is growth in the market and the competition is not about sharing the same market but is about reaching out to newer customers and growing the market itself (Mburu, 2012). Mobile average revenue per user (ARPU) has increased by 40% in the last 6 years, Fixed broadband lines and voice (over broadband) lines are growing, but market is still in its growth state (Stéphane Piot, 2018).

Exit barriers: Exit barriers may arise in the telecommunications business because of its very nature: the extensive networks, specialized assets and agreements for providing services with regard to contractual and general commitments (Li & Whalley, 2002). Exit barriers may result in extensive competitive pressures as excess capacity remains in use and the overall market profitability suffers because of the under-performing of the industry players (Harrigan, 1985).

In Kenya, government-owned players like Telkom Kenya keep the commitment to staying in the business very high, as the reasons for staying in business are not solely profitability but also political and economic reasons like employment creation and infrastructural investments at play. Some mobile service providers have been licensed to operate telecommunication networks and services as a package, including fixed and mobile telephone, internet and other services. Operators may therefore have to stay in one area of telecommunications service provision despite earning low or negative returns. Exit barriers are significant because players make

huge investments in networks and network equipment and firms are committed to

operating through to the end of their license periods and seek renewals to safeguard their investments despite the low returns for some players (Kavale, 2012). Those which can't keep the pace apply for dissolution none the less, a case of Essar (YU) mobile (Kavale, 2012).

Price competition: As noted before, in Kenya's telecommunications industry, the products and services offered are similar. The services provided by the network operators and service providers and VNOs are perishable; this is because every minute that people are not talking or utilizing the available bandwidth for internet or broadband, the service is unrecoverable in terms of returns for the operating organization. Price competition in the Kenyan telecommunication sector is high (Muturi, Wadawi, & Owino, 2014). However, the Communications Authority of Kenya and the Competition Authority regulations have often intervened to control competitive price cuts. Price wars were highly experienced between 2010 and 2012 when Airtel by then trading as Zain cut calling rates by 5 percent prompting Safaricom and Telkom Orange to follow suit (Arasa & Gathinji, 2014). In addition the reduction in mobile termination rates in August 2010 led to an immediate reduction in retail prices, allowing smaller operators to compete with dominant operators (Christoph, 2012).

Competition on innovation dimension and marketing: Competition in the telecommunications industry also involves product and service features, support services and brand image and can be investigated by analyzing the differentiation and targeting strategies of the service providers, product and service features and also other facets of the various product and service offerings. Moreover, it is natural that companies are much more likely to achieve superior profitability and earn above-average profits if they are able to find a unique way of delivering superior value to customers (Njuguna, 2012). Gitonga (2016), notes that contact centers are no doubt a marketing tool that all the telecommunications companies use to portray efficiency in customer care. Comparative marketing strategies have also been employed to enhance competitive rivalry (Maina, 2016). Innovative products and services like Mpesa are vital in enhancing market competitiveness (Mohamed & Atheru, 2017). All the firms in the industry are engaging in corporate social responsibility as a way of enhancing good image either as a proactive or reactive strategy (Ezenwa, 2016).

Familiarity among rivals: According to Rajasekar and Al Raee (2013) Telecommunications companies often compete through diverse approaches, but if the competitors do not understand these approaches well, the rivalry may be intensified. One important sign of this may be the copy-cat approach to pricing and product or service offerings, as this is indicative of a lack of differentiation and target marketing and shows instead more aggression in the effort to undermine or destroy the rivals' efforts in marketing and product differentiation. For example, in Kenya rival companies have copied most services and service codes introduced by Safaricom. One of them being "*544#" a code used to buy data from all the active three mobile service providers. According to Letting and Muthoni (2013) there is a lot of copycat marketing strategy in Kenya. Among all the service providers there is considerable matching in the product and price packaging and also similar market tactics. All of them practice content localization even though Safaricom has been more effective in this marketing tactic thus the process of adapting a product or service to a particular language, culture, and desired local "look-and-feel" in localizing a product, in addition to idiomatic language translation (Shannon, 2000).

3.0 Conclusion and future direction

Porters' five forces model is a powerful tool that helps managers in the telecommunication sector to explain why the business is weak in some areas and why it is better in others. By carefully interpreting the results of the model, a firm can start defining the ideal competitive strategy. The model offers not only a valuable starting point for strategic analysis (Johnson, Scholes, & Whittington, 2011), but it also has some limitations. To be able to ascertain the actual verifiable results of competition within the telecommunication industry, researchers have to undertake statistical analysis with this model in this field. They can push this model down from the theoretical frame to the practical arena and encourage the firms to use this in the competitive analysis of their own firms and its competitors. It's also important to expand future analysis to determine other factors not mentioned in this concept paper but vital in the five forces model. To prove that other factors other than the five forces determine profitability and overall performance in industries poses a research gap as well and hence further research is recommended.

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