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# **Influence of Value-Added Service Strategies on Performance of Telecommunication Firms in Kenya: A Literature Based Review**

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## **Abstract**

Some of the telecommunications firms in Kenya are experiencing a relative decline in Average Revenue per User resulting in overreliance on voice, short message serve and internet services as major source of revenue. This situation reveals that income from conventional voice services will not be enough for the mobile telecom service providers to survive. To overcome this, telecommunications firms are engaging in value added strategies as a source of new revenue and differentiation strategies. The study determines the influence of Value-Added Services Strategies on Performance of Telecommunication Firms in Kenya. The paper employs a desk study review methodology. A critical review of empirical literature is conducted to identify main thematic concepts of the paper. Telecom providers invest in value added strategies to be able to cross-sell additional mobile services and enlarge their share-of-wallet with the consumer. This way, the provider does not only get more revenue from its customers, but also creates value added to products and services offered. Some of the value added services impacting the telecommunication sector include e-commerce, social value added services, interactive voice response services, business process outsourcing, mobile money transfer and enterprise value added service. In Kenya, the mobile money services have been significant in enhancing performance of telecom companies. It is concluded that there are many benefits associated with adoption of value added service strategies in the telecommunication industry. By demonstrating the linkage to other core services, the benefits of value added strategies need to be enhanced through research and development. Research and development shall promote the innovation of products and services that are specifically tailored to meet customer needs. Service and product improvement must emanate from customers' views and preferences. Considering the sum of resources invested into value added services systems, it is essential to ensure that the services meet customers' needs and quality standards. In order to achieve this goal, and based on the findings, this study recommends that a proactive awareness programme should be developed and implemented to educate customers on the available value added services and how this will

benefit them, as well as business partners on the potential of value added services in enriching their revenue growth, over and above cost reduction, operational efficiency and customer base growth and retention.

**Key words:** *Communication based value-added strategies, Application based value added strategies, Performance of Telecommunication Firms, Kenya.*

## 1. INTRODUCTION

The telecommunication firms are a significant contributor of Kenya's gross domestic product contributing to a tune of up to 10% to Gross Domestic Product (KNBS, 2016). According to a report by the World Bank (2010), Telecommunications revenue (% GDP) in Kenya was reported to be 9.9008%. However, majority of telecommunication firms in Kenya have remained stagnated and unable to grow into large and profitable telecommunication companies. In some cases, the telecommunication companies are unable to survive to their third birthday and often collapse at tender age. In 2016, the overall performance of telecommunication firms was 7%, however, the overall performance declined sharply to 4% in 2017. In 2018, the overall performance of telecommunication firms again dropped slightly to 3.5% (KNBS, 2019). The declining performance of telecommunication firms undermines the total contribution of to the growth of Kenyan Gross Domestic product.

As a result of declining performance, telecommunication firms in Kenya are heavily investing considerable amount of time and resources in developing value added services (VASs) as strategy to enhance performance. Value added services strategies are aimed at improving service quality, attracting new customers while retaining the existing, enhancing the nature of products and services (Možný, 2017). Value added services can be based on its impact into those sustaining the current competitive marketplace by enhancing existing products or services valued by customers and those that disrupt the marketplace by fundamentally altering ways customers think about product or service performance (Srikanjanarak, Omar & Ramayah, 2013). Telecom providers invest in these strategic initiatives to be able to cross-sell additional mobile services and enlarge their share-of-wallet with the consumer. This way, the provider does not only get more revenue from its customers, but also creates value added to products and services offered.

The Safaricom Mpesa service was a value added strategy to the voice services. The Mpesa services tremendously expanded Safaricom customer base. The introduction of 'Vuka 2 Tariff' by Airtel Company enabled the telecom company to improve expand its market share from 14.4% in 2016 to 31.3% in 2018 minimize the gap between it and close rival Safaricom. This situation reveals that income from conventional voice services are not enough for the mobile telecom service providers to survive and therefore, in addition to the conventional voice services, value added services becomes the new opportunity for service providers to increase profits. The adventure into e-commerce is another value added service strategy to enhance performance. Safaricom Limited introduced the "Masoko" shopping platform to tap the benefits arising from online commerce. Through the use of value added service strategy, the company is presently reengineering the way in which it conducts its business and markets its products and services. In this case, value added is a strategic resource that facilitates major changes in competitive

behavior, marketing and customer management (Oktavianto & Hudrasyah, 2013). At heart, value added services enables a firm to achieve strategic advantages hence improved performance. Other telecommunication firms including internet service providers have been on the look to enhance performance through value added strategies that include Electronic data interchange, voice mail and online information and database retrieval (Rodiati, 2010).

Value added services are considered the most important area for the telecom firms and the demand for value added services are very high among subscribers. Value added services impacts on the current competitive market place by enhancing existing products or services valued by customers and also by fundamentally altering ways customers think about product or service performance (Stadnicka & Ratnayake, 2016). The ability to expand market share revolves around telecommunication firm's ability to enhance the quality of products and services offered. Value added services are critical in retaining customers (Bhatti, Abareshi & Pittayachawan, 2016). Customers select their operators based on the type of value added services the operator provides, so it is important for telecommunication firms to introduce new and innovative value added services in order to both attract more customers and retain their market. The inability to retain customers through value added services strategy significantly influences the profitability of telecommunication service providers. Wong (2010) indicated that in the Canadian telecommunication sector there was customer churn at the rate of 1.6% per month. Wong (2010) also connected customer retention with customer satisfaction which is interconnected with value-added services.

In Malaysia the competitiveness of telecommunication firms is based on the value added service strategies. The telecommunication firms are keen at providing value-added services and subsequently with infrastructure and other services (Rahman, Haque & Ahmad, 2010). In India, The four main pillars of value added services anchoring the telecommunication sector are infrastructure, technology, content, and access devices. The pillars are interconnected in such a way as to make value added services beneficial to the telecom firms and to the advantage of the customers (Kar & Singh, 2011). Some of the important areas in which value added services are offered to the customers with these three delivery platforms include entertainment, alerts and news, e-commerce, social VAS, interactive voice response (IVR) services, business process outsourcing (BPO), mobile money transfer and Enterprise value added service (Shafei & Tabaa, 2016). In Indonesia, the telecommunications industry is experiencing a relative decline in ARPU (Average Revenue per User) resulting in lower income mobile telecommunications service providers. This situation reveals that income from conventional voice services is not enough for the mobile telecom service providers to survive. To overcome this, mobile operator companies are developing a Mobile Value-Added Services (M-VAS) as a source of new revenue and differentiation strategies (Oktavianto & Hudrasyah, 2013).

## 1.2 Statement of the Problem

Telecommunication firms need to heavily invest value added services (VASs) as strategy to enhance performance. Value added services strategies are aimed at improving service quality, attracting new customers while retaining the existing, enhancing the nature of products and services (Možný, 2017). Value added can be based on its impact into those sustaining the current competitive marketplace by enhancing existing products or services valued by customers and those that disrupt the marketplace by fundamentally altering ways customers think about product or service performance. Any value-adding strategy should take the objectives of relationship marketing, establishing, maintaining and enhancing relationships with customer at a profit, so that the objectives of the parties are met into account.

Dynamic changes in technology have led to the introduction of new value-added services in order for the telecommunication firms to compete favorably (Stadnicka & Ratnayake, 2016). The telecommunication companies are keen at introducing new value-added services on mobile phones, instead of relying on basic call voice, short message services and internet provision (Bhadani, Shankar & Rao, 2016). In fact, it has been recognized that developing value-added services is a must for telecom service providers to survive, as voice mail and SMS are no longer reeling in high profits. Because of this mobile operators should introduce value added services to stay afloat. The services include money transfer and different other mobile technologies (m-technologies).

In Kenya, the telecommunications industry are experiencing a relative decline in Average Revenue Per User resulting in overreliance on voice, short message serve and internet services as major source of revenue (Mathenge, 2017). This situation reveals that income from conventional voice services will not be enough for the mobile telecom service providers to survive. To overcome this, telecommunications firms are engaging in value added service strategies as a source of new revenue and differentiation strategies (Oteri, Kibet & Ndung'u, 2015). Various value-added services linked to telecommunication firms such as communication, entertainment, information services and money transfer services have been intensively incorporated to sustain and serve the customer's need, which in turn demands performance maximization (Njeri, 2017). Improving the quality of value added service strategies is crucial in enhancing firms' performance. It is evident that value added services strategies influences the performance and this may be replicated to of telecommunication firms.

## 1.3 Objective of the Study

- i. To establish the influence of communication based value-added strategies on performance of Telecommunication firms in Kenya
- ii. To establish the influence of application based value added strategies on performance of telecommunication firms in Kenya



## **2. THEORETICAL BACKGROUND**

### **2.1 Theory of Value Chain Analysis**

Value chain analysis was put forward by Porter (1985). Porter describes value chain analysis as a useful tool as the firms seeks to enhance its performance through sustainable competitive advantage (Kaplinsky & Morris, 2000). Value chain is depicted as a way of conceptualizing the activities that are needed in order to provide a service or a product to a customer (Dekker, 2003). Porter (1985) introduces a generic value chain model includes the primary activities that have direct support and affect the value of service or goods. This include in bound logistics, operations, outbound logistics, marketing and sales and service.

It also includes the support activities; the infrastructure of the firm, human resource management technology development and procurement (Peppard & Rylander, 2006). It demonstrates the way a product gains value as it moves along the route of design, production, marketing, delivery and service to the customer alongside supportive activities in the value chain aimed at gaining competitive advantage (Taylor, 2005). Value chain analysis describes the improvement of products and services to the benefit of the company and the customer. This aims at satisfying customer demands in the wake stiff competition in the business environment.

Value added strategies have been identified as a viable strategy in enhancing the performance of telecommunication firms. Value added services are considered the most important area for the telecom firms and the demand for value added services are very high among subscribers. The ability to expand market share revolves around telecommunication firm's ability to enhance the quality of products and services offered. Value added services are critical in retaining customers.

### **2.2 Schumpeter Theory on Innovation**

Schumpeter Theory on Innovation was authored by Schumpeter in 1934 as cited by Drejer (2004). The theory states that, anyone seeking to make profits must innovate. That will cause the different employment of economic system's existing supplies of productive means. Schumpeter believed that innovation is considered as an essential driver of competitiveness and economic dynamics (Hagedoorn, 1996). According to this theory, entrepreneurs who could be independent inventors or research and development engineers in large corporations, created the opportunity for new profits with their innovations. In turn, groups of imitators attracted by super profits would start a wave of investment that would erode the profit margin for the innovation (Roberts, 2001).

This theory is relevant to the study in the sense that, it advocates for the power on invention and innovation in business growth. Schumpeter acknowledged that innovation is a very important element of firm growth. Firm growth may rotate around innovation, entrepreneurial activities and market dominance and sought to confirm that innovation-originated market power can deliver better results than the invisible hand and price competition. Technological innovations many times create a short term monopoly that allows abnormal profits that are competed away by rival competitors and imitators. Through innovation, telecommunication firms are able to compete favorably by enhancing the competitiveness of products and services through the value added service strategies.

## 2.2 Empirical Literature

Empirical studies have shown that value added service strategies have a significant effect on the performance of telecommunication companies.

### 2.2.1 Communication based value-added strategies on performance of Telecommunication firms in Kenya

In empirical review to analyze factors influencing the telecommunication industry growth, Venkatram and Zhu (2012) established that number of subscribers, technology innovation and strategic product and services found to be the most influential and contributing factors towards the growth of the Telecom industry in China and India. The introduction of voice calls promotions, SMS bundles, missed calls alert, voice mail services, ringtones, SMS chatting and dating premium services. In a study on mobile value added services in India Narang (2015) noted that value added services are enhanced services, in the nature of non-core services, which add value to the basic telecom services. In addition to benefiting consumers, mobile value added services is likely to become a tool for additional revenue, service differentiation, and customer retention for service providers. Further, while studying value added services in telecom industry in India, Kar and Singh (2011) sound that value added services have become an important aspect of telecom operator's profitability. However, while selling value added services, operator's need to match promotions to specific consumers based on their individual preferences. Pattern association has emerged as one of the powerful tool that can help in identifying consumer preferences based on their historical services usage data.

According to Rafiq and Gao (2008) on the dynamics of mobile telecommunications market in Pakistan emphasizes on the importance of an independent regulator, technological innovation and harmony among all stake holders to develop a successful mobile industry. It draws on the emerging approach that views mobile telecom industry as a complex socio-technical system comprising both human and technological components. The nature of the current business environment particularly in the telecommunication sector requires value added service strategy to survive. While using survey methodology co conduct a study on telecom branding in Pakistan Siddiqui, Ali, Sarki and Khuhro (2015) it was identified that network coverage, value added services and pricing strategies are shaping the telecommunication sector in the country.

Locally, by adopting adopted a descriptive survey research design to establish effects of innovation strategy on firm performance in telecommunications industry the case of Safaricom Kenya Limited Njeri (2017) found that there was a positive and significant correlation between product innovation strategy and performance. There was also a significant relationship between process innovation and performance. While to establishing the effect of online marketing strategies on performance of telecommunication companies Mathenge (2017) found that there is a clear indication that there exists a positive relationship between online marketing strategies; promotion and product development with performance. Furthermore, Kimani (2012) while addressing mobile value added services adoption and customer stickiness in Kenya, it was found that perceived usefulness, perceived cost, perceived service quality, perceived enjoyment and perceived image/trust have positive and significant influence on customers attitude towards adoption of mobile value added services.

In a study by Tharamba, Rotich and Anyango (2016) on effect of strategic positioning on the firms performance in the telecommunications firms in Kenya, it was found that multiple products had a positive influence on the organizational performance in the telecommunication industry in Kenya. While employing descriptive research to examine the influence of business strategies on the performance of telecommunication companies in Kenya Ikonyareg and Ogollah (2015) found that new product creation and provision outstanding customer service had positive and significant effect performance of telecommunication companies in Kenya. Letangule and Letting (2012) while studying the effect of innovation strategies on performance of firms in the telecommunication sector in Kenya, it was established that excellent customer relation management services significantly influences the performance of telecommunication companies in Kenya. Using descriptive design to establish the effects of effect of innovation strategies on the performance of firms in the telecommunication industry in Kenya, Soi (2016) established that product innovations affected the performance of the telecommunication firms in the industry.

### **2.2.2 Application based value added strategies on performance of telecommunication firms in Kenya**

While conducting a study on Value Innovation in the Malaysian Telecommunications Service Industry, Hajar, Ibrahim and Al-Sharafi (2018) adopted a qualitative research approach. The study concentrated on the motivation of telecommunications companies to shift their strategies from tariff competition to value competition in order to improve customer value and promote customer loyalty which leads to increased business performance and profitable growth. In another empirical review to analyze factors influencing the telecommunication industry growth, Venkatram and Zhu (2012) established that number of subscribers, live streaming, location-based services, mobile advertising, m-commerce based services, mobile TV and OTT services were found to be the most influential and contributing factors towards the growth of the Telecom industry in China and India.

In a study on strategic review of mobile value-added services opportunity based on customer satisfaction and loyalty criteria in Indonesia Oktavianto and Hudrasyah (2013) established that the telecommunications industry in Indonesia is experiencing a relative decline in Average Revenue Per User resulting in lower income mobile telecommunications service providers. It was noted that income from conventional voice services were not be enough for the mobile telecom service providers to survive. Oktavianto and Hudrasyah (2013) proposed that there is need to employ application based value added strategies including mobile advertising and m-commerce based services to promote the performance of the telecom companies. To overcome this, mobile operators developed a Mobile Value-Added Services (M-VAS) as a source of new revenue and differentiation strategies. Srikanjanarak, Omar and Ramayah (2013) while studying value added service and service quality from the customer's perspective in Thai Telecommunication Industry revealed that value-added services enhances the performance of telecommunication firms. The results reveal a meaningful insight into how customers perceive the value-added services offered by telecom service providers.



### **3. RESEARCH METHODOLOGY**

The study determines the influence of Value-Added Services Strategies on Performance of Telecommunication Firms in Kenya. The paper employs a desk study review methodology. A critical review of empirical literature is conducted to identify main thematic concepts of the paper.

### **4. RESULTS AND DISCUSSION**

Desktop literature review results indicate that value added strategies in the telecommunication industry contributes immensely to firm performance. Telecom providers invest in value added strategies to be able to cross-sell additional mobile services and enlarge their share-of-wallet with the consumer. This way, the provider does not only get more revenue from its customers, but also creates value added to products and services offered. Some of the value added services impacting the telecommunication sector e-commerce, social VAS, interactive voice response (IVR) services, business process outsourcing (BPO), mobile money transfer and enterprise value added service.

In Kenya, the mobile money services have been significant in enhancing performance of telecom companies. Application based value added strategies including live streaming, location-based services, mobile advertising, m-commerce based services, mobile TV and OTT services, Online gaming, Infotainment services, stickering and WAP content downloads. Further, the communication based value added strategies employed to enhance the performance of telecommunication firms include voice calls promotions, SMS bundles, missed calls alert, voice mail services, ringtones, SMS chatting and dating premium services.

Empirical results indicated that the telecommunications companies should shift their strategies from tariff competition to value added based competition in order to improve customer value and promote customer loyalty which leads to increased business performance and profitable growth. The empirical results advocates for the for the use of mobile value-added as a source of new revenue and differentiation strategies in order to increase Average Revenue per User. Value-added products positively and significantly enhance the performance of telecommunication firms. Value added services strategies improve service quality, attracting new customers while retaining the existing, enhancing the nature of products and services. Moreover, online marketing strategies are source of value added services.

Mobile value added services significantly improves the performance of telecommunication company. However, while selling value added services, operator's need to match promotions to specific consumers based on their individual preferences. Pattern association has emerged as one of the powerful tool that can help in identifying consumer preferences based on their historical services usage data. Mobile value added services that entail perceived usefulness, perceived cost, perceived service quality, perceived enjoyment and perceived image have positive and significant influence on customers' attitude towards adoption of mobile value added services. Excellent customer relation management services significantly influences the performance of telecommunication companies in Kenya. Value added service and service quality from the customer's perspective enhances the performance of telecommunication firms. The results reveal

a meaningful insight into how customers perceive the value-added services offered by telecom service providers.

The number of subscribers, technology innovation and strategic product and services found to be the most influential and contributing factors towards the growth of the Telecom. Value added Services are enhanced services, in the nature of non-core services, which add value to the basic telecom services. In addition to benefiting consumers, mobile value added services is likely to become a tool for additional revenue, service differentiation, and customer retention for service providers. Value added products in telecom industry have become an important aspect of telecom operator's profitability.

The dynamics of mobile telecommunications market emphasizes on the importance of customer tailored products to develop a successful mobile industry. The nature of the current business environment particularly in the telecommunication sector requires value added products in order to survive that entail mobile money services, e-commerce and strong network coverage. There was a positive and significant correlation between product innovation strategy and performance. Multiple products had a positive influence on the organizational performance in the telecommunication industry in Kenya. Strategic product creation and provision outstanding customer service have positive and significant effect performance of telecommunication companies in Kenya.

## **5. CONCLUSIONS**

It is concluded that there are many benefits associated with adoption of value added service strategies in the telecommunication industry. The developments in value added technologies are tremendously expanding the telecommunication industry. The mobile money services, e-commerce, mobile banking, fast internet services supported by forth generation networks, self-service customer services have brought a lot of changes in the telecommunication industry. In Kenya, Mobile money services, mobile banking, the introduction of fast 4G internet services have led to the growth of telecom's total revenue. Based on the explanation above, it can be concluded that the business issues that occur in the telecommunications industry in Kenya in regard to value added service revolves around how to improve service delivery and reaching many more customers. Value-added services strategies helps telecommunication firms to create and design a variety of services that are appropriate for their customers' needs. It is concluded that value added products and services should emanate from customers' preferences. Strategic products are significantly important in promoting telecommunication profitability.

## **6. RECOMMENDATIONS**

The present study gives some key implications on value added service strategies in the telecommunication industry. Improving and extending existing value added services are critical. Telecommunication firms should continue to improve the voice segment and internet services to include other services. By demonstrating the linkage to other core services, the benefits of value added strategies need to be enhanced through research and development. Research and development shall promote the innovation of products and services that are specifically tailored

to meet customer needs. Service and product improvement must emanate from customers' views and preferences. Considering the sum of resources invested into value added services systems, it is essential to ensure that the services meet customers' needs and quality standards. In order to achieve this goal, and based on the findings, this study recommends that a proactive awareness programme should be developed and implemented to educate customers on the available value added services and how this will benefit them, as well as business partners on the potential of value added service strategies in enriching their revenue growth, over and above cost reduction, operational efficiency and customer base growth and retention.

The telecommunication firms need to make efforts in diffusing the value added service strategies by developing the faith in usefulness, ease of use, credibility, reliability, access, and fastness among the customers. Telecommunication firms need to match the services to specific consumers based on their individual preferences. Pattern association has emerged as one of the powerful tool that can help in identifying consumer preferences based on their historical services usage data. Based on the application of neural networks, the study proposes the use of pattern association rules to develop a technique for identifying profitable value added services and campaigns for specific consumers and thus increase revenue from the existing customer base. This technique has its advantage in its computational efficiency as well as simplicity in usage. To enhance the sustainability of the value-added services strategies, there is need for leadership commitment. Investing in value added services require sufficient funding hence the need for the senior management support.

## **7. IMPLICATIONS OF THE STUDY TO THEORY AND PRACTICE**

The results indicated that value added service strategies enhance firm performance. Value added services are considered the most important area for the telecom firms and the demand for value added services are very high among subscribers. The ability to expand market share revolves around telecommunication firm's ability to enhance the quality of products and services offered. Value added services are critical in retaining customers. This empirical evidence extends the conceptualization of Value Chain Analysis by Porter (1985) that value chain analysis describes the improvement of products and services to the benefit of the firm and the customer.

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