

Telecommunication Service Features: Strategies for Influencing Subscribers' Preferences in Nigeria

¹Elikwu, Michael I. Ph.D., ²Ibrahim, Mohammed G. Ph.D. ³Jimoh, Aminat Eleojo
⁴Okorie, Ebere F. & ⁵Okafor, C.I.

¹Entrepreneurship Unit, Centre for Foundation and Interdisciplinary Studies,
Baze University, Abuja. michael.elikwu@bazeuniversity.edu.ng
Corresponding Author: +234 708 552 4075

²Department of Entrepreneurial Studies, Faculty of Management Sciences,
Nigerian Open University, Federal Capital Territory, Abuja.

³Department of Business Administration, Faculty of Management Sciences, Veritas University, Abuja

⁴Department of Business Administration, Faculty of Management Sciences,
Nnamdi Azikiwe university, Awka, Nigeria

⁵Department of Business Management, University of Essex

Abstract

Currently, telecommunication subscribers in Nigeria like never before are faced with the incessant introduction of varying and enticing features such as, call tariffs and data rates, and innovative mobile services by the four network providers in Nigeria (Airtel, MTN, Glo & 9mobile). Access to internet has made subscribers more knowledgeable about sophistication of information technology, service quality expectations and preferences. However, subscribers have continued to experience incessant failures in network availability, poor service quality, drop calls, high data and call rates at minimal value and poor customer service experiences. Hence, this study aimed to determine the features used by mobile telecommunication organisations as strategies that influence subscribers' preferences for value and better service experiences. To achieve the specific objectives, this study adopted the cross-sectional survey research design to collect primary data from a sample size of 285 participants across various states in Nigeria, and who are subscribers to the various telecommunication service providers in Nigeria. The research instrument was subjected to content and construct validity, while the reliability test of the instrument indicated a Cronbach Alpha value of $\alpha = 0.835$. The study adopted an online survey platform to administer and collect data for the study, while collected data were analysed using descriptive statistical tools. The findings established and concludes that, telecommunication product features such as lower call tariffs, data rates and various online transactional services; broad network coverage features; and service quality features offered by telecom service providers influences subscribers' preference of mobile telecommunication service providers.

Keywords: Differentiation, Product Quality, Network Coverage, Service Quality, Subscribers Preferences

Introduction

In Nigeria, the increasing competition among the mobile telecommunication service providers has resulted to the introduction of various competitive strategies, ranging from price wars in the areas of call tariffs and data rates, increasing number of product features and service delivery patterns, with a bid to influence subscribers' preferences. These strategies are designed to attract new and retain existing subscribers (Onyeaghala & Odiba, 2018), with the sole objective of influencing subscribers' preference of mobile telecommunication service provider.

Over the last two decades, Nigeria has witnessed increasing changes in social dynamics, ranging from social trends, lifestyles and changing customers' demographics, which have all continually influenced telecommunication service providers to invest heavily in technological advancement, sophistication and network coverage. These investments are aimed at influencing new subscribers' preferences and also increase patronage and satisfaction (Adio, et al., 2018). There is also increased competitiveness among the telecom service providers (Qayyum, 2017), owing to high subscribers' expectations in terms of product quality, network coverage (availability), demand for value in service quality experience, which largely determines subscribers' preferences.

A review of extant literature reveals that, competitive business strategies adopted by firms have consistently had a direct influence on product brand, market position, firm performance and growth (Onuoha & SandOlori, 2017). This presupposes that inimitability of products and services help firms develop competitive advantage that can improve the chances of mobile telecom providers in influencing subscribers' behaviour (Nwakanma, et al 2018). This implies that through the adoption of inimitable product, service channel and service quality differentiation strategies (Okeke & Ugwuegbu, 2018), telecommunication service providers show capacity to deliver value and better service experiences from that of competitors. Hence, this study aims to determine how the features used by mobile telecommunication organisations as differentiation strategies influences subscribers' preferences of service providers in Nigeria.

The rationale for this study emanated from the unpleasant experiences encountered while using mobile services in Nigeria (Abubakar, 2016), which over the years has been characterised by frequent drop calls and slow data speed (Nnochiri, 2015), yet at an increasing call and data rates (Hidayati et., 2018). This has made most subscribers subscribe to other available networks (Yoan et al., 2018) to achieve the purpose of using mobile services; hence, the need to determine the features used by mobile telecommunication organisations as strategies to influence subscribers' preferences of service providers in Nigeria.

Considering the existence of diverse studies on telecommunication service providers and effects on choices and preferences of subscribers (Olatokun & Nwonne, 2012; Rajkumar & Rajkumar, 2011); hence, the theoretical rationale for this study is the need to contribute to the body of knowledge and extant studies on the features sought by subscribers, which can be provided by the service providers to influence their preferences.

Currently, telecommunication subscribers in Nigeria like never before are faced with the incessant introduction of varying and enticing features such as, call tariffs and data rates, and innovative mobile services by the four network providers in Nigeria (Airtel, MTN, Glo & 9mobile). Access to internet has made subscribers more knowledgeable about sophistication of information technology, service quality expectations and preferences. However, subscribers have continued to experience incessant failures in network availability, poor service quality, drop calls, high data and call rates at minimal value and poor customer service experiences. Hence, this study aims to determine the features used by mobile telecommunication organisations as strategies that influence subscribers' preferences for value and better service experiences.

This study therefore attempts to answer this research question:

- i. What are the features used by mobile telecommunication organisations as strategies that influences subscribers' preferences of service providers in Nigeria?

The primary aim of this research study determines the features used by mobile telecommunication organisations as strategies to influence subscribers' preferences of service providers in Nigeria. The specific objectives are to:

- i. critically evaluate the product features that influence subscribers' preference of mobile service providers.
- ii. examine the network coverage features that influence subscribers' preference of mobile service providers.
- iii. critically examine the service quality features that influence subscribers' preference of mobile service providers.

Literature Review

Concept of Subscribers Preference

The concept of consumer preference entails consumers decisions based on satisfaction derivable from product usage or service experiences from diverse similar products or services. Consumers' preference for specific product or service, manufacturer or service provider can be stimulated by affective compatibility (Opele et al., 2018). This is often triggered by features associated with inherent product quality and values, availability and experiences (Abubakar, 2016) in the use of such products or services.

For telecommunication firms, it is imperative to have a broad-based knowledge of factors influencing subscriber preferences (Hollensen, 2015); more importantly as determinants of competitive strategies (Yoan, et al., 2018) needed to influence subscribers' preferences (Kapto & Njeru, 2014). Thus, the ability of telecommunication service providers to utilise differentiation strategies (Reitsperger, 2013) to portray responsiveness (Alnsour, Abu & Alzyadat, 2014), provide assurances of service availability (Abubakar, 2016) and reliability (Opele, Afolabi & Onifade, 2018) towards changing needs of subscribers will significantly influence subscribers' preferences.

Concept of Differentiation

The concept of differentiation, being a generic strategy is often utilised by firms to gain competitive advantages premised on the assumption that subscribers are inclined to pay a premium for a service perceived to be of higher value, of superior quality (Pulaj et al., 2015), and excellent after sale customer services that creates unique experience to the subscribers (Olamitunji, 2015). In essence, differentiation strategy supports the development of competitive advantages by stimulating telecom subscribers' loyalty, reducing the chances of switching to substitute products (Yoan, et al., 2018). Differentiation has been variously defined as a strategy for making significant and noticeable changes in terms of quality, value, durability, usage experience (Akingbade, 2014), among others to enhance the uniqueness of the firm's products or services from that of industry competitors' and to stimulate subscribers brand preference, buying decision and satisfaction (Hollensen, 2015). This also entails a firm differentiating its product or service offerings from its other product/services (Kamau, 2015). As an important strategy, differentiation is utilised by organisations to differentiate themselves from industry rivals (Afande, 2015) as better service or superior value providers.

The utilisation of differentiation strategies by service delivery firms is a conscious attempt to re-establish the brand's range of products and stimulate market competitiveness, with the intention of influencing subscribers' preference and strengthen consumers' brand loyalty (Kapto & Njeru, 2014). This denotes that assuming industry leadership in the areas of competitive price advantage (Porter, 1980), service or product quality, market and network coverage (Kotler & Keller, 2014), is evidenced by the success of a firm's differentiation strategy

(Porter, 1985), which is premised on ability of telecommunication operators to continually transform unusual strategies that advances competitive advantage of the service providers (Pulaj, et al., 2015).

Benefits inherent in adopting differentiation strategy in the telecommunication industry ensures that it is focused on meeting consumers' needs, for subscribers to experience service usage satisfaction and get value for money spent (Olamitunji, 2015). Also, benefits of differentiation strategy being adopted by telecommunication operators and service providers include creation superior brand reputation (Hollensen, 2015), product/service value and broad market coverage (Akingbade, 2014), increased service patronage translating into increased market share and profitability (Banker et al., 2014), increase in subscribers' loyalty (Kapto & Njeru, 2014), while increase in service quality translates into increased subscribers product usage (Afande, 2015); hence profitability, performance and growth (Baum et al., 2011).

The concerted efforts telecommunication organisations make towards improving acceptability of their brands, increase wide market coverage to ensure increased subscribers' patronage (Kotler & Keller, 2014), are largely anchored on various interacting factors within the marketing mix (Amar, 2016, Emokhare & Elikwu, 2017). These factors include offering broad range of unique and quality services/products (Wijetunge, 2016) and service channel differentiation (Reitsperger, 2013). This denotes that telecom operators are constantly presented with strategic decisions to be made on appropriate differentiation strategies needed to ensure continued and sustained subscribers' preference.

Product quality features as differentiation strategy

Product quality differentiation involves the entire activities and processes deliberately taken to differentiate an existing or a new product from other product lines of the same firm or that of the firm's competitors. This is achieved through value creation or addition in the areas of product features, function, durability or purpose for a specific target market (Dirisu, et al., 2013) to influence consumers' choice of product among substitutes. These value additions enable consumers differentiate their preferred products from other existing brands (Amar, 2016). Value additions such as price cut promotion (Omotayo, 2011) and free gift promotions (Saeed, et al., 2013) are attributes that influences subscribers' telecommunication service usage and customer retention (Orevba & Elikwu, 2020).

The perception of subscribers about product quality is at all times a significant aspect of preference and purchase decision. Subscribers of telecom services often face the challenge of valuing the quality of such products under circumstances of imperfect knowledge (Rajkumar & Rajkumar, 2011) concerning the underlying features of the numerous product offerings with the help of personally outlined quality criteria. However, a review of extant literature shows that communication (promotion), features, functions (calls and internet services) (Onyeaghala & Odiba, 2018) and call and data tariffs (price) (Rajkumar & Rajkumar, 2011, Saha, Islam & Hoque, 2016) are common attributes associated with quality of telecom products. Also, network providers offer bonus airtime for calls on every recharge during promotions (Orevba & Elikwu, 2020),

Quality of telecom products are also attributed by subscribers to product branding and brand reputation, packaging and product features (Haquea et al., 2010). Furthermore, telecom product quality is also associated to the availability of the product's core functional attributes (Olatokun & Nwonne, 2012) compared to other products and the subscribers' experience from the product use.

Service channel (network coverage) features as differentiation strategy

Channel differentiation implies the deliberate actions adopted by telecommunication operators to ensure wider network coverage, which provides a superior competitive advantage and wide market presence for their services (Kalubanga, et al., 2012). It entails the various ways telecom operators offer services to their dispersed customers (Bardhan, Sharma & Saxena, 2012), which is achieved through deliberate investment in distribution sub-stations mounted in various geographical locations.

In Nigeria, the spread of network coverage is still perceived to be inadequate and weak even in city centres and urbanised areas in comparison with what is obtainable in advanced countries of the world. Network coverage has been described as encompassing diverse locations and the extent of geographical spread telecom service providers install network signals in order to provide quality services to potential subscribers (Nwakanma et al., 2018). This includes technological infrastructure that supports quality, uninterrupted and accessible call and data services (Nnochiri, 2015). However, in spite of subscribers' expectations, network coverage and capacity in rural and urban areas in Nigeria is still inadequate (Hidayati, et al., 2018), resulting in (frequent in rural areas and occasional in urban areas) incessant call dropout and network outage. This denotes that, poor/low network capacity and coverage (service channel) influences subscribers' preferences.

Service quality features as differentiation strategy

Service differentiation unlike product differentiation is more difficult to achieve owing to the intangibility of services (Emokhare, et al., 2017), and other associated factors which includes; perishability if unused, none transportable, inability to store, hence consumption takes effect simultaneously with production and can be relative depending on customers experiences, tastes, status or expectations (Bruhn & Georgi, 2006). Telecommunication service quality denotes the subscribers' overall impression of the comparative superiority or inferiority of a service provider and its service delivery (Adjaino, 2017). Perceived telecommunication service quality occurs at various levels in the service providers' organisation, encompassing the call / data services, service outlet environment, interface with the personnel at the outlets or online customer care services (Wang, Huang, Chen and Lin, 2010), which significantly influences subscribers' perceived value of the service rendered.

A review of extant literature (Abd-Elrahman, 2018) shows attributes associated with service quality, which includes tangibles such as the ambience of physical service facilities, technology and personnel (Oyatoye, Adebisi & Amole, 2013); and responsiveness which entails the enthusiasm to promptly assist subscribers (Alnsour, Abu & Alzyadat, 2014). Also, reliability denotes the capability to accurately and dependably deliver on service promised (Chen & Yang, 2015); assurance implies the employees' knowledge and ability to courteously inspire confidence and trust (Abd-Elrahman, 2018, Chen & Yang, 2015); while empathy implies the ability to personalise service delivery while attending to subscribers (Alnsour, et al., 2014).

The importance of service differentiation comprises influencing subscribers' preference of service provider and determines satisfaction, continued patronage and loyalty (Adjaino, 2017). Thus, quality service differentiation in telecommunication service offering includes; ease of service ordering (Abd-Elrahman, 2018), to facilitate timely and unrestricted service placement by subscribers, subscribers' ease of paying bills and effecting banking transactions (Adewoye, 2013); speed of data and clarity of call service delivery (Alabar, et al., 2017) to enhance subscribers experience and satisfaction; provision of customer care, information services on products and service usage, for optimum data and call service experiences.

Empirical Review

Product quality features and subscribers' preferences

In Bangladesh, Saha, et al., (2016) examined factors affecting customers' satisfaction of mobile phone subscribers, focusing on price level, network coverage, product diversity and service quality. Sampling 200 subscribers, the study adopted descriptive analytical tools, with the ANOVA to test posited hypotheses. The findings established that lower price level (call tariffs), quality full network coverage, more variations in product offers, value added services offered and enjoyed by the mobile users, all independently influenced subscribers' satisfaction. The study however failed to establish the existence or not of these features among competing service providers, and also failed to capture contemporary challenges necessitating subscribers' dissatisfaction.

In India, Rajkumar and Rajkumar (2011) investigated perception choice of consumers' in selecting cellular mobile telecom providers, focusing on call service, quality, call tariffs, facilities, customer care and service provider's features. Sampling 112 subscribers, a reliability value of 0.9778 Cronbach Alpha was established for the research instrument, while factor analysis was used in analysing the collected data. The result showed that call tariff has significant influence and determines subscribers' preference of service providers, while service availability and product quality have significant impact on subscribers' preference of mobile service providers. However, the study based its findings on 212 participants as against 112 sample size indicated in the methodology. This makes the findings of this study questionable and not generalizable.

Service channel (network coverage) features and subscribers' preferences

In Indonesia, Hidayati, et al., (2018) investigated behaviour of prepaid customers in Medan, Indonesia, with focus on service quality and network coverage. With a sample size of 290 respondents and the use of T-test to test the hypotheses, the study established that, customer decisions are significantly influenced by availability of quality network coverage. However, the study failed to clearly establish network coverage as service distribution channel, against the use of modern technology as a parameter.

Recently, Nwakanma et al., (2018) assessed factors influencing telecommunication subscribers' decision to port among network providers in Nigeria. The study adopted a sample size of 378 subscribers and tested hypotheses using regression analysis. The findings established that, decision of subscribers to port/switch is influenced by network coverage. This finding has however been overtaken by events, as subscribers no longer port to other service providers because of inconsistencies of service providers; hence this is a limitation necessitating this study.

Another study in Nigeria by Adjaino (2017) examined subscribers' satisfaction with telecommunication services, compared services provided by the four service providers; determined the existence of any significant variance in the level of satisfaction among subscribers of the service providers. The survey design was adopted, with a sample size of 300 subscribers; while both the descriptive and inferential statistics were adopted to analyse collected data. The study established that, subscribers are more satisfied with billing system and network quality than customer care services. In its comparison, the study failed to determine subscribers' satisfaction based on network coverage (channel distribution) of the firms.

Nnochiri (2015) investigated the quality-of-service delivery of mobile telecommunication service providers operating in Nigeria; focusing on how service availability (channel distribution) influences perception of subscribers in their choice of mobile telecom services,

among others. Using passive research method in collating actual traffic data on the networks; the study adopted the aggregate number of accepted - successful - dropped calls of the four network providers were recorded and analysed using the Structural Equation Model. The study established that, service availability (channel distribution) has a direct impact on subscribers' choice of mobile telecom services. While primarily focusing on those factors within the channel distribution process, this study failed to determine subscribers' experiences based on actual network coverage, which is confirmed by the interferences and network unavailability.

Olatokun and Nwonne (2012) in an earlier study investigated the significance of price (call rate), service quality, product availability, promotion and brand, with focus on influence of these variables including product and service outlets (channel distribution) on perception and choice of a network service provider. With a sample size of 367 respondents and using the Structural Equation Modelling (SEM) approach, factor analysis and regression analysis, the study established that product and service outlets have significant influence on subscribers' choice of mobile service provider. However, the study failed to establish the connection between network coverage (channel distribution) and subscribers' choice of service provider, which this study focuses on.

Service quality features and subscribers' preferences

In a comparative study, Obe, et al., (2019) evaluated quality of services delivered by the mobile telecommunication service providers in Akure, Nigeria. The study adopted a sample size of 527 respondents, the descriptive statistics, one-way ANOVA and regression analysis to evaluate the degree of quality of services delivered against subscribers' satisfaction. The results indicated that, there is an insignificant effect of quality of services on subscribers' satisfaction. Though this study established that subscribers use multiple networks, it however failed to establish the service quality features responsible for this.

Opele, et al., (2018) examined consumers' preference and satisfaction for GSM service providers in a tertiary institution environment in Nigeria. The study was supported by randomly collected primary data from 300 respondents, analysed using descriptive statistical tools, correlation and regression analysis. The results indicated a significant positive correlation between service reliability, service assurance, service responsiveness, service empathy and customers' satisfaction of GSM service provision among students of tertiary institution.

Adebiyi, et al., (2016) investigated the determinants of customer preference and satisfaction in mobile telecommunication industry, with a sample size of 200 subscribers who are students of tertiary institutions in Nigeria. The study adopted the Pearson Product Moment correlation test and multiple regression analysis. The coefficient values for service features revealed a positive influence on customers' satisfaction; while coefficient values of price/billing, service quality, and customer care service positively correlated with buying decisions of subscribers.

Similarly, Alabar, et al., (2017) empirically measured the impact of quality service delivery on satisfaction of Mobile Telecommunication subscribers in Nigeria. With a sample size of 532 subscribers, the study employed the Pearson product-moment correlation coefficient to evaluate the correlation between quality service delivery and satisfaction, and also tested the posited hypotheses. The study established that, reliable service quality significantly and positively correlates with subscribers' satisfaction. The study however failed to outline parameters used in determining subscribers' satisfaction.

Abubakar (2016) evaluated the impact of perceived service quality by Mobile Telecommunication service providers on satisfaction of customers in Nigeria. With a sample size of 374, the use of simple percentages and Minnesota Customer Satisfaction Model (MnCSI) to analyse collated data, the findings established that, the delivery of service quality by mobile telecom operators in Nigeria is below average and not commensurate to subscribers' expectations. This is premised on the perceived poor availability needed service and poor customer services of the service providers.

Methodology

This study adopted the cross-sectional survey research design (Creswell, 2014), which supported the collection of quantitative data using a structured questionnaire through an online platform. This design provided quantitative depiction of trends of events, participants' views and attitudes (Saunders, et al., 2009) towards the features that influenced their preferences of mobile telecommunication service providers in Nigeria. This research design appropriately supports the descriptive analysis of collected data.

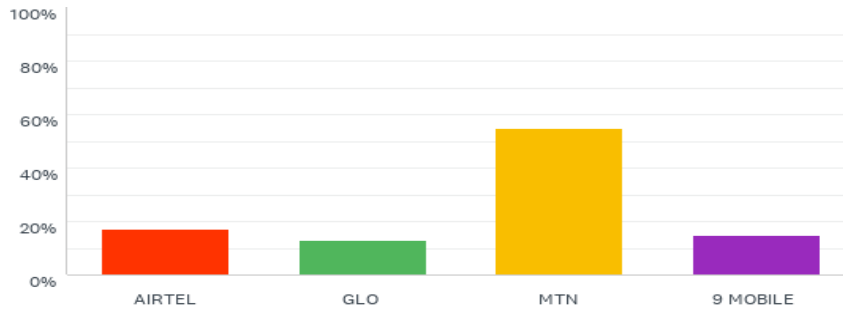
Taking into consideration that this study applied the online survey as method of data collection, the population of this study was anchored on the entire number of subscribers in Nigeria as provided by the Nigerian Communications Commission (NCC). NCC statistics shows the total number of mobile subscribers in the country as at June 2020 is *189,282,796 subscribers (NCC, 2020), cutting across the four mobile telecommunication service providers (MTN, Airtel, Glo & 9mobile)*. However, owing to the large size of the population and considering that the participants are members of the public who are subscribers, the sample size for this study was determined based on number of subscribers that participated in the online survey.

Based on the online survey conducted through the Survey Monkey platform, which was made accessible to large subscriber base of subscribers; hence, a sample size of 285 subscribers participated in survey. The sampling technique adopted for selection of study participants was the purposive random sampling technique, which was used on the basis that it helped select only participants with active social media and email accounts relevant to this study; while the random sampling made sure that every member of the population on social media and with email contacts had equal opportunity of being selected.

Taking into consideration that by nature, an online survey is not restricted by physical boundaries owing to the global spread of the internet, and also taking into consideration that the entire *189,282,796 active subscribers (NCC, 2020) of the four mobile telecommunication service providers (MTN, Airtel, Glo & 9mobile) are spread across the entire geographical area of Nigeria*. Participation was made open to subscribers of all four mobile telecommunication network services resident in various States and cities across Nigeria. For the purpose of this study, data was collected and collated using an online survey platform, which gave credibility to the administration processes without any form of interference from the researcher. Thus, collated data were analysed using descriptive analytical methods.

Results and Discussion of Findings

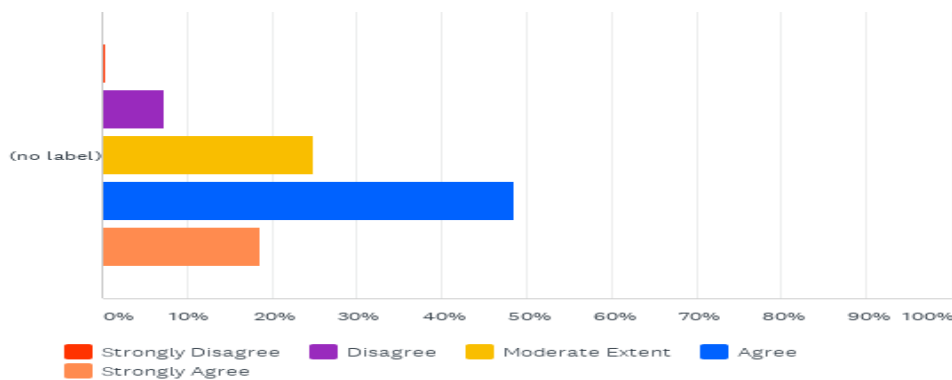
For the purpose of this study, a total of two hundred and eighty-six (286) subscribers of the various mobile telecommunication networks participated in this survey; however, only two hundred and eighty-five participants are considered based on the mode of actual participants. Hence, 285 form the actual sample size of this study.



Source: Online Survey, (2021)

Figure 1: Preferred Mobile Service Provider of Participants

Figure 1 shows participants' distribution based on subscribers preferred mobile service provider. The result shows that, 157 subscribers which account for 55.1% of the participants indicated that MTN is their preferred mobile service provider, 49 subscribers representing 17.2% of the participants indicated that AIRTEL is their preferred mobile service provider, 42 subscribers representing 14.7% of the participants indicated that 9 MOBILE is their preferred mobile service provider, while 37 subscribers representing 13% of the participants indicated that GLO is their preferred mobile service provider.

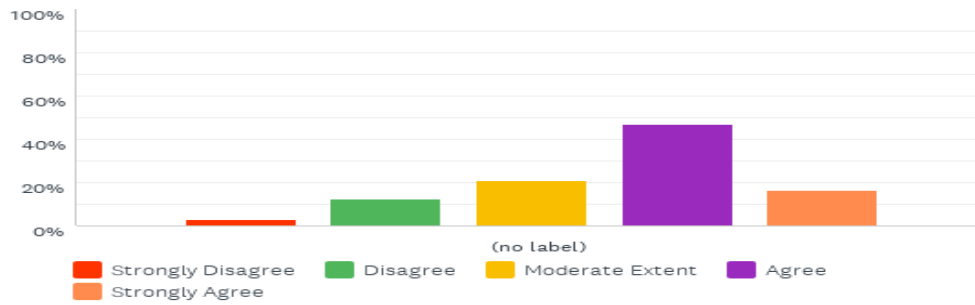


Source: Online Survey, (2021)

Figure 2: The service provider offers different products with range of affordable call tariffs

Figure 2 shows participants' distribution which ascertained the extent to which service providers offer different products at a range of affordable call tariffs. The result shows that, 138 subscribers which accounts for 48.6% of the participants agree, while 53 subscribers which accounts for 18.7% of the participants strongly agree. With a weighted average of 3.78 and an aggregate of 191 subscribers (67.3% of the participants); the result implies that the service providers offer different products at a range of affordable call tariffs.

These findings are in agreement with extant literature which shows features, such as calls and internet services (Onyeaghala & Odiba, 2018); call tariffs and internet data rates (Nnochiri, 2015; Orevba & Elikwu, 2020; Rajkumar & Rajkumar, 2011) are attributes associated with preferences of subscribers. The findings aligned with the study of Saha, et al., (2016) which established that, lower price level (call rates on different tariffs) and value-added services (availability of service outlets) offered, all independently influenced subscribers' satisfaction.

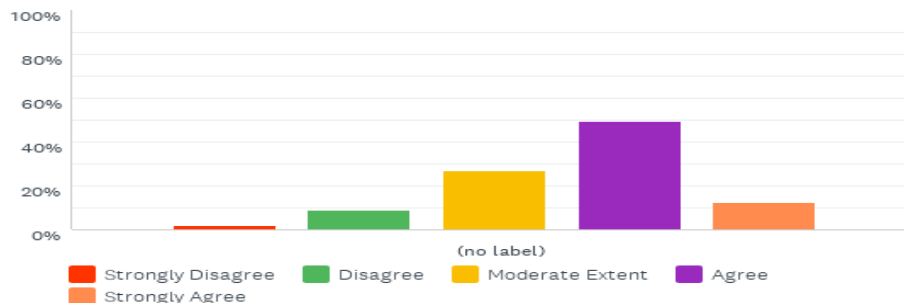


Source: Online Survey, (2021)

Figure 3: The mobile service provider offers range of internet products at very affordable rates

Figure 3 shows participants' distribution which ascertained the extent to which mobile service providers offer range of internet products at very affordable rates. The result shows that, 134 subscribers which accounts for 47% of the participants agree, while 47 subscribers which accounts for 16.5% of the participants strongly agree. With a weighted average of 3.62 and an aggregate of 181 subscribers (63.5% of the participants); the result implies that the mobile service providers offer range of internet products at very affordable rates.

This finding in analysis of Figure 3 is in agreement with extant literature which shows features, such as calls and internet services (Onyeaghala & Odiba, 2018); call tariffs and internet data rates (Nnochiri, 2015; Orevba & Elikwu, 2020; Rajkumar & Rajkumar, 2011) are attributes associated with preferences of subscribers. The findings aligned with the study of Saha, et al., (2016) which established that, lower price level (call rates on different tariffs) and value-added services (availability of service outlets) offered, all independently influenced subscribers' satisfaction.



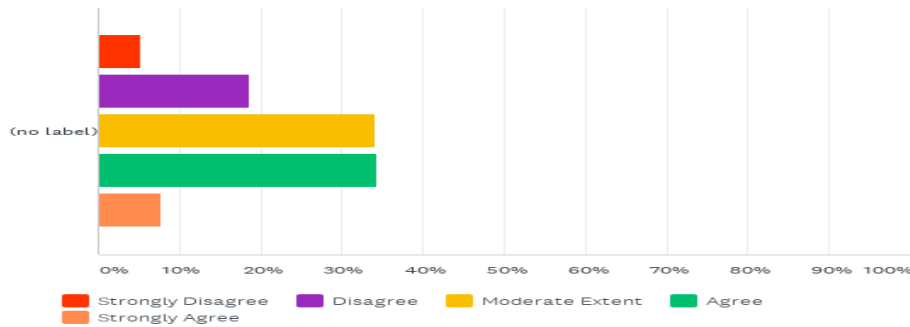
Source: Online Survey, (2021)

Figure 4: My service provider outlets are available and easily accessible to get needed services

Figure 4 shows participants' distribution concerning availability and easy accessibility of service provider outlets to subscribers to get needed services. The result shows that, 141 subscribers which accounts for 49.7% of the participants agree, while 36 subscribers which accounts for 12.7% of the participants strongly agree. With a weighted average of 3.62 and an aggregate of 177 subscribers which accounts for 62.4% of the participants; the result implies that the service provider outlets were available and easily accessible to subscribers to get needed services.

The finding in Figure 4 corroborates the assertion of Wang, et al., (2010) that, service quality occurs at various levels in the service providers' organisation, at the outlets or online customer care services, and significantly influences subscribers' perceived value of the service rendered. The finding also aligns with the study of Olatokun and Nwonne (2012), which established that

product and service outlets have a significant influence on subscribers' choice of mobile network service provider.

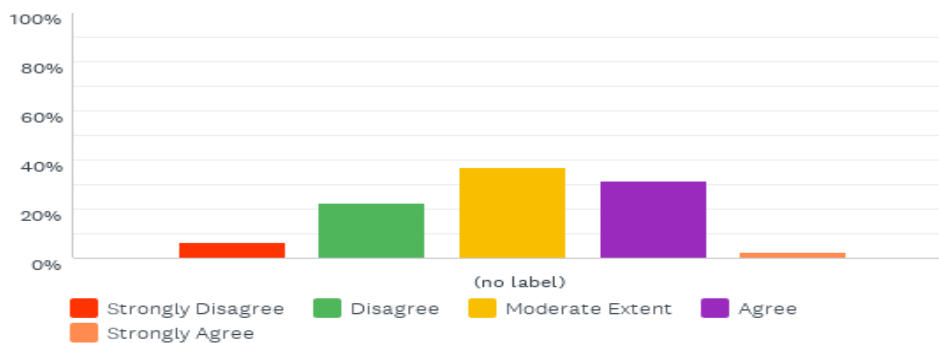


Source: Online Survey, (2021)

Figure 5: My mobile network is always available whenever I travel to different locations in Nigeria

Figure 5 shows participants' distribution which ascertained the extent to which mobile network is always available whenever subscribers travel to different locations in Nigeria. The result shows that, 98 subscribers which accounts for 34.4% of the participants agree and 22 subscribers which accounts for 7.7% of the participants strongly agree, a significant 97 subscribers which accounts for 34% of the participants agree to a moderate extent, while 53 subscribers which accounts for 18.6% of the participants disagree. Though an aggregate of 120 subscribers which account for 42.1% variously agree, other subscribers however think otherwise.

This finding like the two previous findings indicates a significant improvement in the network coverage of the existing telecommunication service providers in Nigeria; hence confirms the assertion and expectations of Nwakanma et al., (2018) that, network coverage features include installation of network signals in diverse locations across the country in order to provide quality services. Also, this finding partly aligns with the assertion of Hidayati, et al., (2018) that, in spite of subscribers' expectations, network coverage and capacity in rural and urban areas in Nigeria is still inadequate. The finding justifies the assertions of Kalubanga, et al., (2012) that telecom ensure wider network coverage, which provides a superior competitive advantage and wide market presence for their services. Also, it justifies the assertion that telecom operators offer services to their dispersed customers (Bardhan, Sharma & Saxena, 2012), which is achieved through deliberate investment in distribution sub-stations mounted in various geographical locations.

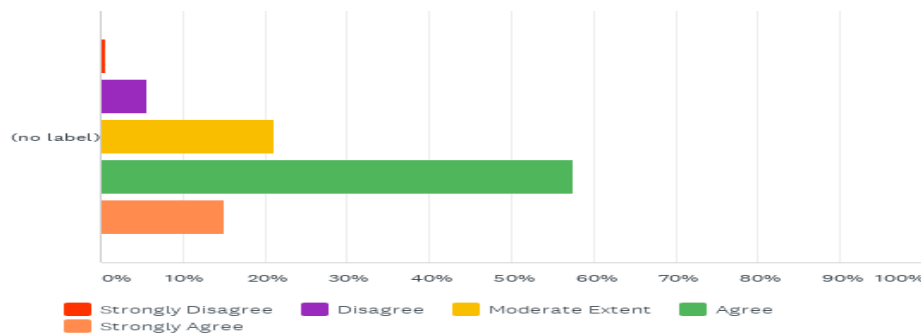


Source: Online Survey, (2021)

Figure 6: My network provider is very reliable in providing uninterrupted services even with change in weather

Figure 6 shows participants' distribution which ascertained the extent to which network providers are reliable in providing uninterrupted services irrespective of change in weather. The result shows that, 90 subscribers which accounts for 31.7% of the participants agree and only 7 subscribers which accounts for 2.5% of the participants strongly agree. However, a significant number of 105 subscribers which accounts for 37% of the participants agree to a moderate extent, while a total of 64 and 18 subscribers which accounts for 22.5% and 6.3% of the participants variously disagree. With 105 subscribers being majority of the sample size, which accounts for 37% agreeing to a moderate extent, this implies that network providers are not completely reliable in providing uninterrupted services when there is a change in weather.

This finding established that, network providers are not completely reliable in providing uninterrupted services when there is a change in weather, which contradicts expectations of Chen and Yang (2015) that, reliability denotes the capability to accurately and dependably deliver on services promised. The findings of this study, justifies the results of Opele, et al., (2018) that, service reliability, assurance and responsiveness influences customers' satisfaction of GSM service provision. The finding also aligns with the study of Alabar, et al., (2017) that, reliable service quality significantly and positively correlates with subscribers' satisfaction.

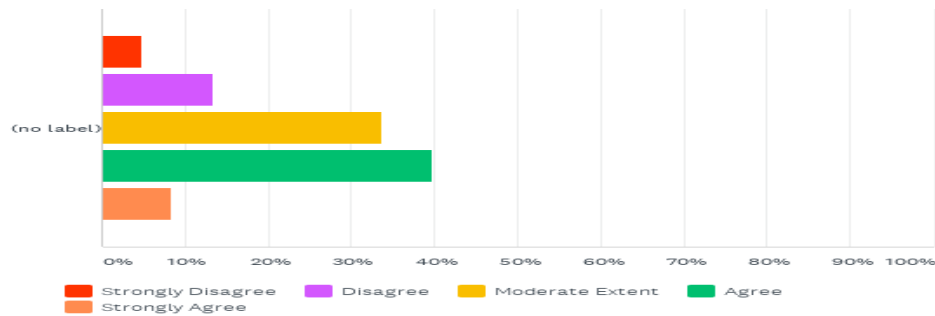


Source: Online Survey, (2021)

Figure 7: The mobile service provider supports various online transactional services

Figure 7 shows participants' distribution which ascertained the extent to which mobile service providers support various online transactional services. The result shows that, 164 subscribers which accounts for 57.5% of the participants agree, 43 subscribers which accounts for 15.1% of the participants strongly agree, while a significant 60 subscribers which accounts for 21.1% of the participants agree to a moderate extent. Thus, with a weighted average of 3.81 and an aggregate of 207 subscribers (72.6% of the participants); the result implies that the mobile service providers support various online transactional services.

This finding is in tandem with the assertion of Abd-Elrahman (2018) that quality of telecommunication service offering includes ease of service ordering, to facilitate timely and unrestricted service placement by subscribers, and aligns with the assertion of Adewoye (2013) that mobile telecommunication supports subscribers' ease of paying bills and effecting banking transactions. Also, it is in tandem with the assertion of Amar (2016) on value addition and the finding of Saha, et al., (2016) that, value added services offered to mobile users, influenced subscribers' satisfaction.

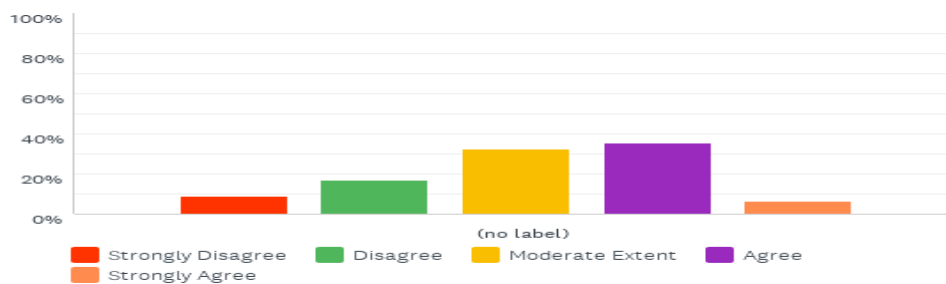


Source: Online Survey, (2021)

Figure 8: The mobile service provider's technological infrastructure supports quality call services everywhere in Nigeria

Figure 8 shows participants' distribution which ascertained the extent to which mobile service providers' technological infrastructures support quality call services everywhere in Nigeria. The result shows that, 113 subscribers which accounts for 39.7% of the participants agree and 24 subscribers which accounts for 8.4% of the participants strongly agree, a significant 96 subscribers which accounts for 33.7% of the participants agree to a moderate extent, while 38 subscribers which accounts for 13.3% of the participants disagree.

This finding indicates a significant improvement in the network coverage of the existing telecommunication service providers in Nigeria; hence confirms the assertion and expectations of Nwakanma et al., (2018) that, network coverage features include installation of network signals in diverse locations across the country in order to provide quality services. This finding partly aligns with the assertion of Hidayati, et al., (2018) that, in spite of subscribers' expectations, network coverage and capacity in rural and urban areas in Nigeria is still inadequate. This finding supports the assertion that technological infrastructure (Nnochiri, 2015, Oyatoye, et al., 2013) supports quality, uninterrupted and accessible call and data services.



Source: Online Survey, (2021)

Figure 9: The network's technology supports quality internet connections everywhere in Nigeria

Figure 9 shows participants' distribution which ascertained the extent to which the network providers' technology supports quality internet connections everywhere in Nigeria. The result shows that, 101 subscribers which accounts for 35.6% of the participants agree and 18 subscribers which accounts for 6.3% of the participants strongly agree, a significant 92 subscribers which accounts for 32.4% of the participants agree to a moderate extent, while 48 subscribers which accounts for 16.9% of the participants disagree. Though an aggregate of 119 subscribers which account for 41.9% variously agree, other subscribers however think otherwise.

This finding like the previous finding also indicates a significant improvement in the network coverage of the existing telecommunication service providers in Nigeria; hence confirms the assertion and expectations of Nwakanma et al., (2018) that, network coverage features include installation of network signals in diverse locations across the country in order to provide quality services. This finding partly aligns with the assertion of Hidayati, et al., (2018) that, in spite of subscribers' expectations, network coverage and capacity in rural and urban areas in Nigeria is still inadequate. This finding supports the assertion that technological infrastructure (Nnochiri, 2015, Oyatoye, et al., 2013) supports quality, uninterrupted and accessible call and data services.

Discussion of Findings

This study revealed contemporary features associated with mobile telecommunication product and service qualities (Saha, et al., 2016; Rajkumar & Rajkumar, 2011) that support subscribers' decision in choosing preferred network service provider (Hollensen, 2015). These are features (qualities) associated with telecommunication products offered by the mobile service providers. This is affirmed by the findings on range of affordable call tariffs and data rates (Rajkumar & Rajkumar, 2011, Saha et al., 2016), availability of service outlets (Adjaino, 2017) and support for online transactions (Adewoye, 2013) for convenience. Hence, subscribers are afforded the opportunity to either switch to other service providers (Yoan, et al., 2018) or demand for better product features (qualities) from their preferred service providers.

The study also revealed contemporary network coverage features (channel differentiation) (Reitsperger, 2013) premised on subscribers' perception and experiences (Abubakar, 2016), which is largely perceived as challenges which telecommunication service providers need to address in order to prevent subscribers from porting or switching to other service providers (Yoan, et al., 2018). This study is therefore important, as it provides the basis for telecommunication service providers by identifying network coverage (channel differentiation) features (Hidayati, et al., 2018), that need to be improved. This includes need to deploy wider network technology (Kalubanga, et al., 2012) that supports quality call and internet connections (Alabar, et al., 2017) everywhere in Nigeria. This will make the service providers provide broad and uninterrupted services (Nnochiri, 2015) across different locations in Nigeria, to prevent subscribers from switching networks.

Considering the existence of diverse studies on telecommunication service providers (Pulaj, et al., 2015), choice and preferences of subscribers (Kapto & Njeru, 2014; Opele, et al., 2018) based on various product (Kotler & Keller, 2014) or service qualities (Afande, 2015; Oyatoye, et al., 2013) and factors in different climes of the world; this study is therefore considered important premised on its contribution to existing literature through descriptive approach to the body of knowledge on features sought by subscribers that influences their preferences of mobile telecommunication service providers.

Conclusion

This study determined the specific features used by mobile telecommunication service providers as strategies that influence subscribers' preferences in selection and usage of mobile lines in Nigeria, with specific focus on product features (product quality differentiation), network coverage features (channel differentiation) and service quality features (service differentiation) as they influence subscribers' preferences of mobile telecommunication service providers. Based on the above findings, this study concludes that, product features, network coverage features and service quality features offered by telecommunication service providers, influences subscribers' preference and choice of mobile networks.

References

- Abd-Elrahman, A.E. (2018) A review of telecommunications service quality dimensions. *Scholar Journal of Applied Science and Research*: 1(1), pp, 10-18.
- Abubakar, A. (2016) Impact of perceived service quality by mobile telecommunication industry on customer satisfaction in Nigeria: *International Journal of Advanced Research*; 4(4), pp. 845-852, DOI: 10.21474/IJAR01
- Adebiyi, S.O. Shitta, H.A. & Olonade, O. (2016). Determinants of customer preference and satisfaction with Nigerian mobile telecommunication services: *Journal of Management Research*, 8(1), 1-13
- Adewoye, J.O. (2013) Impact of mobile banking on service delivery in the Nigerian commercial banks: *International Review of Management and Business Research*; 2(2), 333 - 344
- Adio, A.I. Bananda, R.A. & Eluka, J.C. (2018). Product differentiation and competitive advantage: evidence from the Nigerian telecommunication sector; *International Journal of Management and Marketing Systems*, 13(4), 23-39
- Adjaino, O. V. (2017). Subscribers' satisfaction with telecommunication services in Nigeria. *Nigeria Journal of Business Administration*: 15(1&2) pp, 86-96
- Alabar, T. T. Ode, E. & Gbande, I.R. (2017) Service quality and customer satisfaction in Nigerian mobile telephony: *British Journal of Marketing Studies*; 5(3), 1-13,
- Alnsour, MS, Abu Tayeh B, & Alzyadat MA (2014) Using SERVQUAL to assess the quality of service provided by Jordanian telecommunications sector: *International Journal of Communication Management*; 24: 209-218.
- Amar, M.Y. (2016) The influence of product differentiation strategy on operational performance at Small and Medium Enterprises (SMEs) in South Sulawesi, Indonesia: *Journal of Economics, Business, and Accountancy Ventura*; 18(3), pp. 343 – 350
- Bardhan, D., Sharma, M. L., & Saxena, R. (2012) Market participation behaviour of smallholder dairy farmers in Uttarakhand: A disaggregated analysis. *Agricultural Economics Research Review*, 25(2): 243–254
- Chen LK. & Yang, W.N. (2015). Perceived service quality discrepancies between telecommunication service provider and customer: *Computer Standards Interfaces* 41: 85-97.
- Creswell, J. W. (2014) *Research design: qualitative, quantitative and mixed methods approaches*; Thousand Oaks, CA: Sage.
- Emokhare, G. Elikwu, M.I. & Igbokwe, A.C. (2017) Influence of print and electronic advertising on consumers of coca cola in Abuja; *Conference Proceedings of the 3rd International Conference on Social (Business Administration) ICSS-Africa, at the Nile University of Nigeria, Abuja, May 10 – 11, 2017, 406 – 426, Online PDF Publication, <https://icss.nileuniversity.edu.ng/proceedings/#tab-id-3>*
- Hidayati, J. Ginting, L. & Nasution, H. (2018) Customer behaviour for telecommunication service provider; *International Conference on Science and Technology*, Series 1116 (2018) 022015, doi:10.1088/1742-6596/1116/2/022015
- Hollensen, S. (2015). *Marketing management: A relationship approach*. Pearson Education.
- Kalubanga, M., Tumwebaze, S., & Kakwezi, P. (2012). Examining the effect of multi-channel product distribution on firms' performance. *International Journal of Economics and Management Sciences*, 1(12), 90-103.
- Kapto, J. S & Njeru, A. (2014). Strategies adopted by mobile phone companies in Kenya to gain competitive advantage. *European Journal of Business Management*, 2 (1), 352.
- Kotler P. & Keller K. (2014). *Marketing management*. (14th edition). India: Prentice Education
- National Communication Commission Statistics, (NCC, 2020), Nigeria's telecoms subscriber base hits 189.2 million in June, 2020, <https://techeconomy.ng/2020/06/ncc-stat-nigerias-telecoms-subscriber-base-hits-189-2-million-in-june-2020/#>:

- Nnochiri I.U. (2015) Evaluation of the quality of service of global system for mobile telecommunication (GSM) operators in Nigeria: *Journal of Multidisciplinary Engineering Science and Technology*; 2(7), pp. 1686 - 1694
- Nwakanma, I. Udunwa, A. Anyiam, K. Ukwunna, E.D. & Obasi, E. (2018) Factors influencing telecommunication subscribers' decision to port among network providers in Nigeria. *AM Journal of Computer Science Information Technology*; 6(1:15), 1-12
- Obe, O.O. Sangodoyin, O.O. & Otti, C. (2019) Assessment of quality of service of mobile network operators in Akure: *International Journal of Business Administration*; 10(3), 118-131
- Okeke, O.T. & Ugwuegbu, C.O. (2018) Differentiation strategy and Impact on Business: *Strategic Journal of Business and Social Science*; 1, 1-20
- Olamitunji, D. (2015) Aggregate analysis of competitive strategies among the global system for mobile telecommunication operators in Nigeria: *Journal of Resourcefulness and Distinction*, 10(1).
- Olatokun, W. & Nwonne, S. (2012) Determinants of users' choice of mobile service providers in the Nigerian telecommunications market: *African Journal of Computing & ICT*; 5(4), 9-32
- Onuoha, C. and SandOlori, W. O (2017) Business strategies and sustainable competitive advantage of banks in Port-Harcourt: *International Journal of Advanced Academic Research, Social & Management Sciences*; 3(11)
- Onyeaghalala, O.H. & Odiba, O.M. (2018) Generic business strategy as driver of competitiveness in organizations: A study of selected mobile telecommunication companies in Lagos, Nigeria; *Journal of Business and Economic Development*. 3(3), 86-96. doi: 10.11648/j.jbed.20180303.14
- Opele, A.M. Afolabi, O.J. & Onifade, T.A. (2018) Consumers' preference and satisfaction of GSM service providers among students of tertiary: *Nigerian Journal of Technology (NIJOTECH)*, 37(4), 1099 – 1109
- Orevba, F.E. & Elikwu, M.I. (2020) Effectiveness of sales promotional campaign in achieving customer loyalty: A study of selected GSM operators in Abuja
- Oyatoye, E.O. Adebisi, S.O. & Amole, B.B. (2013) An empirical study on consumers preference for mobile telecommunication attributes in Nigeria. *British Journal of Humanities, Economics, Management and Trade*; 3(4); 419-428
- Porter, M.E. (1980). *Competitive strategy: techniques for analyzing industries and competitors*. Free Press: New York
- Pulaj, E. Kume, V. & Cipi, A. (2015) The impact of generic competitive strategies on organisational performance: *European Scientific Journal* 11(8), 82-103.
- Qayyum, Y. (2017) Product differentiation strategies and impact of factors influencing the differentiation process: *A case study of the mobile telecom service industry of Pakistan; Master's Thesis*, Linnaeus University, Växjö, School of Business and Economics
- Rajkumar, P. & Rajkumar, H. (2011) Service quality and customers preference of cellular mobile service providers: *Journal of Technology Management & Innovation*; 6(1),38-45
- Reitsperger, W. D. (2013). Product quality and cost leadership: compatible strategies? *Management International Review*, 42(3), 31-49.
- Saha, N.K. Islam, M.R & Hoque, A.U. (2016) Factors affecting customers' satisfaction of mobile phone subscribers: An Empirical Study on Mobile Telecommunication Industry in Bangladesh; *International Journal of Business and Management*; 11(6), pp. 252 – 261, doi:10.5539/ijbm.v11n6p252
- Saunders, M. Lewis, P. & Thornhill, A. (2009) *Research methods for business students* 5th Ed: Prentice Hall

- Wijetunge, W.A. (2016). Service quality, competitive advantage and business performance in service providing SMEs in Sri Lanka: *International Journal Scientific and Research Publications*, 6(7), 720-728
- Yoan, S.P. Sudarmiatin, F. & Suharto, J. (2018), “Analysis of differentiation strategies to create competitive advantages in facing global markets” in *The First International Research Conference on Economics and Business*, KnE Social Sciences, pages 254–269. DOI 10.18502/kss.v3i3.1888