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Market Segmentation and Competitive Advantage in Nigerian Telecommunications

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Abstract:

The purpose of this study is to determine the effect of market segmentation on competitive advantage in the Nigerian telecommunications service sector in the Lagos state. **Motivation:** The Nigerian government's decision to liberalize the communication industry has increased rivalry among enterprises, implying that a market segmentation approach will improve both transaction flow and the quality of life. As a result, enterprises in the telecommunications sector must look beyond their financial capabilities and concentrate their efforts on developing a market positioning strategy that results in competitive advantage. Therefore, this study seeks to identify segmentation dimensions and their influence on competitive advantage and performance holistically: The focus was designed to establish the effect of factors of market segmentation such as measurability, accessibility, size, homogeneity, uniqueness and sustainability of a market segment on competitive advantage in the Nigerian telecom service industry. **Data:** A study of some selected telecommunications companies in the Lagos State, Nigeria, was adopted. Both purposive and accidental sampling was used to select a sample of 370 members of the population involved in the study using the Taro Yamane. **Tools:** Simple percentages and frequency tables were used as descriptive statistics, while Pearson correlation and Regression analysis were used for hypotheses testing. **Findings:** The study results indicate that measurability, accessibility, uniqueness, and size of a market segment are the most significant market segmentation variables that affect business competitive advantage in the Nigerian telecommunication industry. As such, to achieve competitive advantage through market segmentation, these variables must be well identified and strategically attained. **Contribution:** By comprehensively integrating and connecting the characteristics of market segmentation to competitive advantage, this study provides an understanding meaning to market segmentation based on the conceptual model. The study's implications for policymakers include that they should enhance these segmentation factors by incorporating additional characteristics outside of market segmentation to complement the market segmentation variables examined in this study in order to maintain competitiveness. Additionally, marketers may leverage customer relationship management (CRM) to create profitable market segments capable of recruiting new clients and lowering customer retention costs.

Keywords: Market Measurability, Accessibility, Market Size, Homogeneity, Uniqueness

JEL Classification Codes: J42, M31, R12, L96, D41

1. Introduction

Due to the difficulty service providers encounter in determining and serving the demands and requirements of consumers in varied network coverage areas around Nigeria, the Nigerian telecommunications sector is becoming more unpredictable and competitive (Gyemang & Emeagwali, 2020). Price sensitivity, quality service delivery, network coverage, marketing promotion and corporate social responsibility (CSR) are only some of the techniques used to segment the market in these contests (Ladipo, Dixon-Ogbechi, Akeke, Adejumola & Arebi, 2019). Given that Nigeria's telecom regulatory body has put the industry under stringent oversight, the degree of competition in this oligopolistic market is exceedingly high and fierce (Rizomyliotis, Poulis, Apostolos, Konstantoulaki & Kostopoulos, 2020). However, the Nigerian Communications Act No. 75 of 1992 has supervised the telecommunications industry from its creation (NCA, 2003). An industry moderator for free and flow networks, the Nigerian Communication Commission (NCC) revised the statute

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in 1992, making it effective. According to the authors (Aganbi and Ojo, 2017), by establishing Nigeria as the economic center of the world's rapidly expanding mobile markets, Obafemi (2014) claims, the country's economy would benefit. Over the last two decades, more than \$3 billion were invested in this area, which is likely to propel the industry (Obafemi, 2014). Olusegun Obasanjo, Nigeria's former president, deserves special recognition for bringing the Global System for Mobile (GSM) to the country, which has aided communication and helped the country's economic progress (Azubuike & Obiefuna, 2014). As a result of this evolution, both individuals and organizations have benefited and will continue to profit. As a consequence of the Nigerian government's decision to de-regulate the communications industry, competition among its participants has increased, and the plan for segmenting this market would enhance the flow of transactions and the general quality of life in Nigeria concurrently (Oyedijo, 2012; Obafemi, 2014).

Market segmentation, on the other hand, is a marketing approach used to reach a specified target market with goods and services (Kotler 2010; Dixon-Ogbechi, 2015). If you want to focus on just one market sector, market segmentation is what you need to do, according to Sule (2015), a market analyst. Markets are defined as a collection of customers who are concentrated in a certain area or environment (Sultan, Wong & Sigala, 2018). When it comes to the issue of "place" as coverage, which relates to the location of certain brand customers in order to meet their needs, this marketing tactic is one option (Kotler, 2010). It is difficult to please all customers equally as this it is due to complexities and challenges in determining their demands, as previously indicated (Ibidunni, 2020). A market segmentation strategy was designed to help organizations of all sizes and capacities better understand the demands of their consumers, which may help them gain a long-term competitive edge in today's marketplace (Porter, 1985; Kazmi, 2002).

Regardless of whether the firms were product- or service-oriented, their major task was to find and execute the most efficient approach for meeting the demands of their consumers (Keegan & Den Hartog, 2019). According to Kotler and Armstrong (2012), the most crucial consideration in marketing choices is whether the customers are satisfied or not. They say that the value of marketing choices rests not only in underperformance or profit realization, but also in the prioritization of consumers as the main objective. As a result, the organization's primary purpose is to meet the demands of its customers, independent of market niche.

Previous research has mostly concentrated on the influence of each dimension/item on the functioning of the organization. An important purpose is to determine how market segmentation affects the strength of quantifiability, accessibility, size and homogeneity as well as the originality and longevity of a company's competitive advantage in Nigerian telecom services. An in-depth analysis of Lagos State Nigerian telecommunications businesses was used to examine how market segmentation helps to distinguish the organizations in terms of their objectives and successes.

Research Questions

The purpose of this research was to investigate the effect of market segmentation on the competitive advantage in selected telecommunication companies in Lagos State, Nigeria – the Nigerian telecom service industry (NTSI). The following research questions were coined to guide and address the study's perceived problems:

1. What is the effect of market segment measurability on competitive advantage in NTSI?
2. What is the effect of market segment accessibility on competitive advantage in NTSI?
3. What is the effect of market size on competitive advantage in NTSI?
4. What is the effect of market segment homogeneity on competitive advantage in NTSI?
5. What is the effect of market segment uniqueness on competitive advantage in NTSI?
6. What is the effect of market segment sustainability on competitive advantage in NTSI?

Research Hypothesis

The above listed six research questions were aptly transformed into the following six hypothetical statements that are subjected to testing in the analysis section.

H₀₁: Market segment measurability has no significant effect on competitive advantage in NTSI.

H₀₂: Market segment accessibility has no significant effect on competitive advantage in NTSI.

H₀₃: Market size has no significant effect on competitive advantage NTSI.

H₀₄: Market segment homogeneity has no significant effect on competitive advantage NTSI.

H₀₅: Market segment uniqueness has no significant effect on competitive advantage NTSI.

H₀₆: Market segment sustainability has no significant effect on competitive advantage NTSI.

2 Literature Review

2.1 The Concept of market segmentation

As a general rule, market segmentation can be defined as a marketing strategy and techniques used by organizations to determine the group of organization service users who have a variety of tastes and preferences that are tied to their individual needs and wants (Kotler & Armstrong, 2012). Segmentation, according to Freathy and O'Connell (2012), is a realistic marketing approach in which complicated marketplaces are inspected into a tiny form that is modest enough to be handled and managed. Instead, the tactical principle underlying market segmentation is that some particular set of customers with comparable requirements, desires, and preferences are deliberately placed into a suitable medium in order to offer and meet their needs, desires, or preferences (Kotler, 2010).

2.2 Measurability of market segment

The idea of measurability may be described as the amount of time it takes an organization to identify the constituents or groups of customers in a market and quantify their importance (Gajdosik, 2020). When it comes to measurability, time is a useful unit of measurement. An avenue through which a group of customers exists or is accessible, together with quantifiable elements that may be utilized to reach organizational goals and objectives to be fulfilled, according to Kotler and Armstrong (2012), is referred to as a measurable market. The market size and the consumer buying power are combined in order to analyze and execute marketing choices established by the business in this research, and the word measurability refers to the amount to which these two variables are taken into consideration (Alhassan & Sakara, 2014). Understanding the measurability of a market group is crucial for marketers since it establishes the requirements for successful segmentation (Kingsnorth, 2019). Several researchers have concluded that every market sector is quantifiable when it includes customers who have made up their minds about what they want and need from comparable brands, at a specific price and quality, to satiate their taste and hunger (Zhou et al., 2020).

2.3 Accessibility of market segment

Accessibility may imply various things in different circumstances, depending on the subject matter that is sought to be addressed by the organization (Handy & Niemeier, 1997). It should be noted that the term 'accessibility' is synonymous 'within reach', which refers to "an organization's capacity to acquire the greatest amount of market share feasible in order to serve its intended audience." (Handy and Niemeier, 1997; Vila, González, and Darcy, 2020). When it comes to assessing market segmentation, the notion of accessibility encompasses promotion relationships with distributional marketing instruments for capturing a market (Michopoulou & Buhalis, 2013). This aspect is highly significant for firms, particularly when trying to join a new market, and it is particularly crucial when entering an existing market (Aghdaie & Alimardani, 2015). Accessibility is one of the most important factors that determine the people who live at a given location, as well as their geographical coverage and economic status (Buhalis & Michopoulou, 2011). It has been reported that certain markets are completely inaccessible, particularly when the culture and economics of the area are incompatible with the organization's planned brand and services, according to Kim, Wagman, and Wickelgren (2019). For example, it is prohibited to enter Arabian marketplaces that have trademarks that are connected with pork foods or alcoholic beverage use. Furthermore, some forex traders continue to find it difficult to access the markets and economies of emerging nations such as Nigeria, owing to the very unpredictable nature of the exchange rates and currency volatility.

2.4 Size of market segmentation

The importance of size in market segmentation components is determined by the quantity of clients and consumers in the marketplace (Ding & Niu, 2019). As a result, the size of the section is determined by the amount of revenue that may be generated from it (Kotler, 2010; Almgren, 2014). But the quality of a good market size is determined by its wideness in relation to the population that consists of the required customers, as well as important socio-demographic criteria such as gender, age, socioeconomic class, religion, and others. A good market size is defined as follows: (Alhassan & Sakara, 2014). Additionally, while planning or constructing marketing tactics for decision making, it is equally necessary to consider a certain category and its size (Cross, Belich & Rudelius, 2015). As an example, consider economies of scale as a good technique for mapping huge market sectors with a comprehensive size that may assist a firm in achieving its aims and objectives (Pani, Sahu & Majumdar, 2019).

2.5 Homogeneity and uniqueness of market segmentation

The homogeneity of the market and the similarity of the target audience's features are prerequisites for the effectiveness of market segmentation (Horan, Beck & Tolbert, 1980; Urbankova & Krizek, 2020). According to Kotler and Armstrong (2012), demographics are an important factor in determining the homogeneity of a market group. These include characters with similar characteristics, such as gender, age, marital status, religion, culture, tribes, educational background, and so on. The same goes for class, whether it is low, middle or upper, when it comes to determining which brand or service is most suited for their consumptions (Tarkkala & Tupasela, 2018). In Cavusgil, Deligonul, Kardes & Casuzgil (2018), the middle class is a market driver and a homogeneous section that is critical to the emergence of a rising economy. Because of this, an organization's efforts must be directed at pinpointing the desires and requirements of its target market while also creating a detailed market map.

2.6 Competitive advantage and market segmentation

Massive and persistent changes in business settings throughout the world are allowing new segments or economies into global marketplaces, which is what is often referred to as "globalization" (Hunt & Arnett, 2004). As a result, the global market opens a plethora of chances and difficulties for its participants, while simultaneously expanding the market to the benefit of the organizations (Dash, 2013). Because of this, many firms have taken the notion of discovering, establishing, and maintaining a competitive market extremely seriously, with an ongoing race to gain a distinct advantage and edge (Bowonder, Dambal, Kumar & Shirodkar, 2010). The term "comparative advantage" refers to the situation when a company's products and services are more cost-effective than those of its rivals (Wiseman, 1985). Creating value for consumers boosts a company's competitive edge. Value increases if rivals' prices are lower than yours, for example (Porter, 1985; Kazmi, 2002; Wheelen & Hunger, 2012). Cost leadership, differentiation, and focus on market niche were all named by Sahrp (1991) referencing Porter (1985) as three of the Porter generic management strategies. Porter (1985) defined cost leadership as a strategy based on a company's capacity to have the lowest cost of service in a particular industry, enabling the company to cut its prices in comparison with its rivals. It was proposed by Porter (1985) as well that "the company aspires to be distinctive in its business by putting its product and services apart." Porter (1985). Higher or lower quality may be achieved in terms of reduced or higher cost, consumer awareness, increased accessibility, and many other ways (Freytag & Clarke, 2001). As a result, this marketing approach is viewed as guaranteeing that the product offering is seen as distinctive by the buyer. Rivalry between specialty groups has been cited as an example of a focus strategy (Ladipo, Awoniyi & Arebi, 2017).

2.7 Conceptual Model

The conceptual model shows the link between key measurement for effective market segmentation and competitive advantage, hence for a market segmentation strategy to be effective

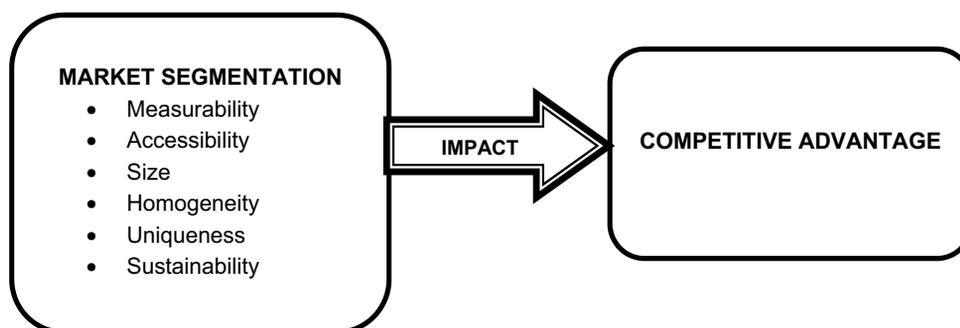


Figure 1: Conceptual Model Showing the Effect of Market Segmentation on Competitive Advantage
Source: Conceptual Model Adapted from the Work of both Hunt and Arnett, (2004) and Yabs (2014).

2.8 Theoretical framework

The competitive advantage hypothesis developed by Michael Porter was used as a foundation for this investigation. Micheal Porter was the first to propose this hypothesis, which was published in 1985. It is defined as a technique that takes into account the influence of other firms on a company's operations. According to Porter (1985), "governments and enterprises should adopt policies that encourage the production of high-quality commodities that can be sold at high prices in the market." According to the idea, competition is at the heart of a business's success or failure since it indicates the appropriateness of corporate operations that have an influence on company performance while taking into consideration both internal and external market environmental variables (Kotler, 2010).

When looking at competitive advantage from a general standpoint, Porter (1985) outlined three marketing tactics that include cost leadership, distinctiveness, and focusing on a niche market (Kazmi, 2002). To further describe cost leadership, Porter (1985) pointed out that it is defined as a strategy based on a firm's capacity to have the lowest cost of production within an industry, which allows the organization to charge a cheaper price than its rivals. Furthermore, Porter (1985) noted that "organizations engaged in a differentiation strategy strive to be distinctive in their business by differentiating their products and services from their competitors." This may be accomplished by superior quality, cheaper or higher cost, more consumer awareness, greater availability, and other means (Kazmi, 2002). As a result, marketing strategy is viewed as distinguishing the product from the competition and ensuring that the product offering is seen as distinctive by the consumer. Finally, it is said that the competitive scope of a company defines the emphasis strategy. As a result, picking a sector or collection of segments within an industry and tailoring marketing methods to serve that segment is essential (Kazmi, 2002; Kotler, 2010; Dixon-Ogbechi, 2015).

3 Research Methods

3.1 Population of the study

Population, according to Asika (2012), is the total number of people who live in a certain geographical area or region. Employees of the chosen Nigerian telecommunications service providers such as MTN, Airtel, 9mobile, and Globacom are included in the research population, which totals 4,785 people in all (National Bureau of statistics, 2020). However, due to a huge number of participants in the cross-sectional study during a certain period of time, the scope of this study was confined to the headquarters of the chosen telecommunications service firms in Lagos State, Nigeria, rather than the whole country.

3.2 Sampling selection and data collection

A sample is a medium where a representative element is drawn from the population frame (Asika, 2012). In this study, both purposive and accidental sampling was used to select members of the population involved in the study. The targeted sample size was derived using the Taro Yamane (Yamane, 1967) formula to calculate the sample size for this study. The formula was coined as:

$$n = \left(\frac{N}{1+N(e^2)} \right)$$

n = Sample size N = Total Population e = Precision estimate.

Confidence level is 95% while + or - is stationed at 5%.

$$\left(\frac{4785}{(1+4785(0.05^2))} \right) = \left(\frac{4785}{(1+4785(0.0025))} \right) = 369.14 = 369 \text{ or } 370$$

Therefore, the sample size used for this study is calculated at 370.

3.3 Data collection instrument

This study adopted the questionnaire as the only evaluated research instrument used for data collection. The questionnaire was designed and piloted to ascertain its consistency in the reliability and accuracy in the validity test.

4. Data Analyses

The data generated from the field were analyzed and presented with simple percentages and frequency tables. For the data analysis, both descriptive and inferential statistical techniques were employed. For descriptive analysis, frequency and percentages were mostly used while Pearson correlation and Regression analysis were used for the hypotheses testing with the aid of statistical packages for Social Science (SPSS) version 20.0.

Test of Hypotheses

Hypothesis One

H₀1: Market segment measurability has no significant effect on competitive advantage in NTSI.

H₁1: Market segment measurability has a significant effect on competitive advantage in NTSI.

Table 1: Pearson Correlation Analysis between Market Segment Measurability and Competitive Advantage

| SPSS Output | | Measurability | Competitive Advantage |
|-----------------------|---------------------|---------------|-----------------------|
| Measurability | Pearson Correlation | 1 | .911** |
| | Sig. (2-tailed) | | .002 |
| | N | 309 | 309 |
| Competitive Advantage | Pearson Correlation | .911** | 1 |
| | Sig. (2-tailed) | .002 | |
| | N | 309 | 309 |

** . Correlation is significant at the 0.05 level (2-tailed).

The first correlation table above illustrates the link between market segment measurability and competitive advantage in NTSI. The Pearson correlation, on the other hand, displays a p-value lower than the level of significance (0.002: p 0.05), with a strong coefficient value of 0.911. This conclusion indicates that the market segment measurability has a considerable influence on competitive advantage in NTSI, whereas the null hypothesis that market segment measurability has no significant effect on competitive advantage is now rejected.

Hypothesis Two

H₀2: Market segment accessibility has no significant effect on competitive advantage in NTSI.

H₁2: Market segment accessibility has a significant effect on competitive advantage in NTSI.

Table 2: Pearson Correlation Analysis between Market Segment Accessibility and Competitive Advantage

| SPSS Output | | Accessibility | Competitive Advantage |
|-----------------------|---------------------|---------------|-----------------------|
| Accessibility | Pearson Correlation | 1 | .987** |
| | Sig. (2-tailed) | | .001 |
| | N | 309 | 309 |
| Competitive Advantage | Pearson Correlation | .987** | 1 |
| | Sig. (2-tailed) | .001 | |
| | N | 309 | 309 |

** . Correlation is significant at the 0.05 level (2-tailed).

The link between market segment accessibility and business competitive advantage in NTSI is examined in the second correlation table above. There are no statistically significant differences between these two groups, however Pearson's correlation shows that the correlation coefficient is strong (0.987) and the p-value is below the level of significance (0.001). Market segment accessibility has a significant effect on competitive advantage in NTSI, while a null hypothesis that market segment accessibility has no significant effect on competitive advantage in NTSI has been rejected by this research.

Hypothesis Three

H₀3: Market size has no significant effect on competitive advantage in NTSI.
 H₁3: Market size has a significant effect on competitive advantage in NTSI.

Table 3: Pearson Correlation Analysis between Market Size and Competitive Advantage

| SPSS Output | | Market Size | Competitive Advantage |
|-----------------------|---------------------|-------------|-----------------------|
| Market Size | Pearson Correlation | 1 | .801** |
| | Sig. (2-tailed) | | .032 |
| | N | 309 | 309 |
| Competitive Advantage | Pearson Correlation | .801** | 1 |
| | Sig. (2-tailed) | .032 | |
| | N | 309 | 309 |

** . Correlation is significant at the 0.05 level (2-tailed).

The third table above shows the examination of association between the market size and the competitive advantage in NTSI. There is no statistical significance (p=0.032) in the Pearson correlation, although there is a strong coefficient value (0.801) of 0.81. Therefore, the null hypothesis that market size has no substantial impact on competitive advantage is rejected, since this study reveals that market size has a considerable impact on competitive advantage in NTSI.

Hypothesis Four

H₀4: Market segment homogeneity has no significant effect on competitive advantage in NTSI.
 H₁4: Market segment homogeneity has a significant effect on competitive advantage in NTSI.

Table 4: Pearson Correlation Analysis between Market Segment Homogeneity and Competitive Advantage

| SPSS Output | | Homogeneity | Competitive Advantage |
|-----------------------|---------------------|-------------|-----------------------|
| Homogeneity | Pearson Correlation | 1 | .751** |
| | Sig. (2-tailed) | | .011 |
| | N | 309 | 309 |
| Competitive Advantage | Pearson Correlation | .751** | 1 |
| | Sig. (2-tailed) | .011 | |
| | N | 309 | 309 |

** . Correlation is significant at the 0.05 level (2-tailed).

The fourth correlation table above illustrates the link between market segment homogeneity and competitive advantage in NTSI. Pearson correlation, on the other hand, displays a p-value lower than the level of significance (0.011: p 0.05), with a positive coefficient value of 0.751. This study indicates that market segment homogeneity has a considerable influence on competitive advantage in NTSI, whereas the null hypothesis that market segment homogeneity has no significant effect on competitive advantage is therefore rejected.

Hypothesis Five

H₀5: Market segment uniqueness has no significant effect on competitive advantage in NTSI.
 H₁5: Market segment uniqueness has a significant effect on competitive advantage in NTSI.

Table 5: Pearson Correlation Analysis between Market Segment Uniqueness and Competitive Advantage

| SPSS Output | | Uniqueness | Competitive Advantage |
|-----------------------|---------------------|------------|-----------------------|
| Uniqueness | Pearson Correlation | 1 | .918** |
| | Sig. (2-tailed) | | .003 |
| | N | 309 | 309 |
| Competitive Advantage | Pearson Correlation | .918** | 1 |
| | Sig. (2-tailed) | .003 | |
| | N | 309 | 309 |

** . Correlation is significant at the 0.05 level (2-tailed).

The fifth correlation table above illustrates the link between market segment uniqueness and competitive advantage in NTSI. However, the Pearson correlation coefficient value of 0.918 indicates that the p-value is less than the level of significance (0.003: p 0.05). This conclusion indicates that market segment uniqueness has a considerable influence on competitive advantage in NTSI, whereas the null hypothesis that market segment uniqueness has no significant effect on competitive advantage is now rejected.

Hypothesis Six

H₀₆: Market segment sustainability has no significant effect on competitive advantage in NTSI.

H₁₆: Market segment sustainability has a significant effect on competitive advantage in NTSI.

Table 6: Pearson Correlation Analysis between Market Segment Sustainability and Competitive Advantage

| SPSS Output | | Sustainability | Competitive Advantage |
|-----------------------|---------------------|----------------|-----------------------|
| Sustainability | Pearson Correlation | 1 | .833** |
| | Sig. (2-tailed) | | .000 |
| | N | 309 | 309 |
| Competitive Advantage | Pearson Correlation | .833** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 309 | 309 |

** . Correlation is significant at the 0.05 level (2-tailed).

The sixth correlation table above illustrates the link between market segment sustainability and competitive advantage in NTSI. However, the Pearson correlation coefficient value of 0.833 indicates that the p-value is less than the level of significance (0.000: p 0.05). This conclusion indicates that market segment sustainability has a considerable influence on competitive advantage in NTSI, whereas the null hypothesis that market segment sustainability has no significant effect on competitive advantage is now rejected.

Table 7: Multiple Regression Analysis for Testing the Hypotheses

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .869 ^a | .755 | .704 | .477 |

Predictors: (Constant), Market segmentation

ANOVA^a

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|-------|-------------------|
| 1 | Regression | 1.901 | 1 | 1.901 | 8.356 | .001 ^b |
| | Residual | 24.338 | 308 | .227 | | |
| | Total | 26.239 | 309 | | | |

a. Dependent Variable: Competitive advantage

Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|---------------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 1.122 | .108 | | 10.426 | .000 |
| | Market segmentation | .101 | .035 | .269 | 2.891 | .001 |

Coefficients

| Model | | Unstandardized Coefficients | | Standardized Coefficients | f | Sig. |
|-------|----------------|-----------------------------|------------|---------------------------|--------|-------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 2.890 | 0.203 | 0.234 | 14.265 | 0.000 |
| | Measurability | 0.268 | 0.056 | 0.061 | 4.771 | 0.001 |
| | Accessibility | 0.118 | 0.035 | -.108 | -1.500 | 0.020 |
| | Market Size | 0.120 | 0.046 | 0.078 | 1.529 | 0.000 |
| | Homogeneity | 0.110 | 0.052 | 0.011 | 1.271 | 0.002 |
| | Uniqueness | 0.103 | 0.012 | 0.112 | 1.354 | 0.001 |
| | Sustainability | 0.212 | 0.045 | 0.100 | 1.423 | 0.000 |

a. Dependent Variable: Competitive advantage

The six hypotheses as statements comprised of the research variables are depicted in the above regression tables. The competitive advantage is used as a dependent variable in the regression, whereas market segmentation components (i.e. Measurability, Accessibility, Size, Homogeneity, and Uniqueness) are used as an independent variable in testing the hypotheses.

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3$$

Y is the dependent variable, a is the intercept. X_1, X_2, X_3 etc. are the independent variables, while b_1, b_2, b_3 are the coefficients of the independent variables

- X_1 = Measurability
- X_2 = Accessibility
- X_3 = Size
- X_4 = Homogeneity
- X_5 = Uniqueness
- X_6 = Sustainability
- Y = Competitive Advantage

The regression model is, therefore:

$$Y = a + \beta X_1 + \beta X_2 + \beta X_3 + \beta X_4 + \beta X_5 + \beta X_6$$

$$Y = 2.890 + 0.268 X_1 + 0.118 X_2 + 0.12 X_3 + 0.11 X_4 + 0.13 X_5 + 0.10 X_6$$

The preceding analysis demonstrates the effect of the independent variable and its coefficients on the dependent variable. Additionally, R-value = .869a indicates that the independent variable can explain 86.9% of the dependent variable. R squared equals .755. The regression table indicates that the F value is 8.356 at the .001 level of significance (p 0.05). The result indicates that the null hypothesis should be rejected while accepting the alternative hypothesis.

5. Research Findings

Specifically, a study of Lagos-based telecommunications businesses was conducted to examine how market segmentation affects corporate competitiveness in NTSI. Market segmentation characteristics are crucial and have a major impact on a company's ability to compete, according to the conclusions of this research. These are the coefficients: 0.268, 0.118, 0.120, 0.110, 0.103, 0.212 for measurability; for accessibility; for size; for homogeneity; for uniqueness; for sustainability. Market segmentation is affected by the number of important characteristics, according to a research by Hunt and Arnett (2004) and Alhassan and Sakara (2014). According to the research results, Pearson correlation has found that the most important characteristics in determining competitive advantage are measurability, accessibility, distinctiveness, and size. Onaolapo et al. (2011), Premkanth (2012), Yabs (2014), and Sule (2014) all obtained similar results (2015).

Conclusions, Recommendations and Implications

A conclusion drawn from the above data is that market segmentation is crucial and has a major impact on the degree to which a company might gain an unfair advantage. We have also come to the conclusion that the most relevant market segmentation characteristics are measurability, accessibility, distinctiveness, and market segment size, which are all examined in this research. As a result, in order to create competitive advantage via market segmentation, it is necessary to identify and accomplish these characteristics in a strategic manner. However, the results of the research also have implications for practitioners, as they urge that market segmentation techniques be enhanced via the use of numerous marketing choices and marketing mix components, particularly those associated with market segments such as 'location.' Additionally, competitive advantage must be developed around the VRIO architecture by way of the market segmentation process. As a result, market sectors must be valued, uncommon, unique, and well-structured in order that they should succeed. Finally, additional training should be provided in the use of technological platforms as part of market segmentation plans in order to gain a competitive edge. It is recommended that future research solicit additional literature and relevant resources that are relevant to the topic of this study. Since this study concentrated on the influence of market segmentation on competitive advantage in the Nigerian telecommunications service business, future research should consider doing studies in relation to other industries or comparing the different sectors of the industry in Nigeria.

According to the findings of this study, since the market segmentation variables investigated had a significant impact on competitive advantage, practitioners and policymakers should improve these segmentation variables in order to maintain competitive advantage, while other variables outside of market segmentation may also be investigated in order to complement those market segmentation variables investigated in this study. Furthermore, marketers may use customer relationship management (CRM) to establish lucrative market segments that are capable of attracting new consumers while simultaneously reducing the cost of client retention (retention costs).

REFERENCES

- [1] Aganbi, V. E., & Ojo, T. O. (2017). Nigerian Communication Policy: Concept, Approach and Effects. *Oman Chapter of Arabian Journal*, 7(1), 13-18. DOI:10.12816/0041745
- [2] Aghdaie, M. H., & Alimardani, M. (2015). Target market selection based on market segment evaluation: a multiple attribute decision making approach. *International Journal of Operational Research*, 24(3), 262-278. DOI: 10.1504/IJOR.2015.072231
- [3] Alhassan, F., & Sakara, A. (2014). Factors influencing market segmentation in the hotel industry. *International Journal of Economics, Commerce and Management United Kingdom*, 2(9), 1-16.
- [4] Almgren, K. (2014). The four factors for targeting an attractive market. *International Journal of Humanities and Social Science*, 49(1), 71-92.
- [5] Asika, N. (2012). *Research methodology in the behavioural sciences*. Lagos: Learn Africa publishing Plc.
- [6] Azubuike, C., & Obiefuna, O. (2014). Wireless Communication: The Impact of Gsm on the Economic Lives of the Nigerian Rural Users. *Journal of Educational and Social Research*, 4(7), 79. DOI: 10.5901/jesr.2014.v4n7p79
- [7] Bowonder, B., Dambal, A., Kumar, S., & Shirodkar, A. (2010). Innovation strategies for creating competitive advantage. *Research-technology management*, 53(3), 19-32. DOI: 10.1080/08956308.2010.11657628
- [8] Buhalis, D., & Michopoulou, E. (2011). Information-enabled tourism destination marketing: addressing the accessibility market. *Current Issues in Tourism*, 14(2), 145-168. DOI: 10.1080/13683501003653361
- [9] Cavusgil, S. T., Deligonul, S., Kardes, I., & Cavusgil, E. (2018). Middle-class consumers in emerging markets: conceptualization, propositions, and implications for international marketers. *Journal of International Marketing*, 26(3), 94-108. DOI: 10.1509/jim.16.0021
- [10] Cross, J. C., Belich, T. J., & Rudelius, W. (2015). How marketing managers use market segmentation: An exploratory study. In *Proceedings of the 1990 Academy of Marketing Science (AMS) Annual Conference* (pp. 531-536). Springer, Cham. DOI: 10.1007/978-3-319-13254-9_107
- [11] Dash, A. K. (2013). Competitive advantage: its importance and impact on design of strategy. *International Journal of Application or Innovation in Engineering & Management*, 2(12), 7-11.
- [12] Ding, C., & Niu, Y. (2019). Market size, competition, and firm productivity for manufacturing in China. *Regional Science and Urban Economics*, 74, 81-98.
- [13] Dixon-Ogbechi, B. N. (2015). *The fundamentals of business policy and strategy with Q/A*. Lagos: Philglad Nigeria, pp.106-130.
- [14] Freathy, P., & O'Connell, F. (2012). Spending time, spending money: passenger segmentation in an international airport. *The International Review of Retail, Distribution and Consumer Research*, 22(4), 397-416. DOI: 10.1080/09593969.2012.690778
- [15] Freytag, P. V., & Clarke, A. H. (2001). Business to business market segmentation. *Industrial marketing management*, 30(6), 473-486. DOI: 10.1016/S0019-8501(99)00103-0
- [16] Gajdošík, T. (2020). Smart tourists as a profiling market segment: Implications for DMOs. *Tourism Economics*, 26(6), 1042-1062. DOI: 10.1177/1354816619844368
- [17] Gyemang, M., & Emeagwali, O. (2020). The roles of dynamic capabilities, innovation, organizational agility and knowledge management on competitive performance in telecommunication industr. *Management Science Letters*, 10(7), 1533-1542. DOI: 10.5267/j.msl.2019.12.013
- [18] Handy, S. L., & Niemeier, D. A. (1997). Measuring accessibility: an exploration of issues and alternatives. *Environment and planning A*, 29(7), 1175-1194. DOI: 10.1068/a291175
- [19] Horan, P. M., Beck, E. M., & Tolbert, C. M. (1980). The market homogeneity assumption: on the theoretical foundations of empirical knowledge. *Social Science Quarterly*, 61(2), 278-292.
- [20] Hunt, S. D., & Arnett, D. B. (2004). Market segmentation strategy, competitive advantage, and public policy: Grounding segmentation strategy in resource-advantage theory. *Australasian Marketing Journal (AMJ)*, 12(1), 7-25. DOI: 10.1016/S1441-3582(04)70083-X

- [21] Ibidunni, A. S. (2020). Exploring knowledge dimensions for improving performance in organizations. *Journal of Workplace Learning*, 1(2), 102-121. DOI: 10.1108/JWL-01-2019-0013
- [22] Kazmi, A. (2002). *Strategic management and business policy* (3rd edition). New Delhi: McGraw-Hill.
- [23] Keegan, A., & Den Hartog, D. (2019). Doing it for themselves? Performance appraisal in project-based organizations, the role of employees, and challenges to theory. *Human Resource Management Journal*, 29(2), 217-237. DOI: 10.1111/1748-8583.12216
- [24] Kim, J. H., Wagman, L., & Wickelgren, A. L. (2019). The impact of access to consumer data on the competitive effects of horizontal mergers and exclusive dealing. *Journal of Economics & Management Strategy*, 28(3), 373-391. DOI: 10.1111/jems.12285
- [25] Kingsnorth, S. (2019). *Digital marketing strategy: an integrated approach to online marketing*. Kogan Page Publishers.
- [26] Kotler, P. (2010). *Marketing management*, 11th ed., Delhi, India: Pearson Education. Pte. Ltd.
- [27] Kotler, P., & Armstrong, G. (2012). *Principles of marketing*, 12th ed., Upper Saddle River: Pearson Education Inc.
- [28] Ladipo, P. K. A., Awoniyi, A. M., & Arebi, I. T. (2017). The influence of marketing intelligence on business competitive advantage (A study of diamond bank Plc). *Journal of Competitiveness*, 9(1), 51-71. DOI: 10.7441/joc.2017.01.04
- [29] Ladipo, P. K. A., Dixon-Ogbechi, B. N., Akeke, O. S., Adejumo, B. P., & Arebi, I. T. (2019). Deep Brand and Customer Satisfaction in Nigerian Banking Industry. *Economic Insights-Trends & Challenges*, 5(1), 45-63.
- [30] Michopoulou, E., & Buhalis, D. (2013). Information provision for challenging markets: The case of the accessibility requiring market in the context of tourism. *Information & Management*, 50(5), 229-239. DOI: 10.1016/j.im.2013.04.001
- [31] NCA. (2003). *Federal republic of Nigeria official gazette*, Nigeria Communication Acts, 90(62).
- [32] Obafemi, O. K. (2014). Competition in the Nigerian telecommunications industry. *Beijing Law Review*, 5, 283-297. DOI: 10.4236/blr.2014.54027
- [33] Onaolapo A. A., Salami A. O. & Oyedokun A. J. (2011). Marketing segmentation practices and performance of Nigerian commercial banks. *European Journal of Economics, Finance and Administrative Sciences*, 29, 34-42.
- [34] Oyedijo, A. (2012). Strategic agility and competitive performance in the Nigerian telecommunication industry: An empirical investigation. *American International Journal of Contemporary Research*, 2(3), 227-237.
- [35] Pani, A., Sahu, P. K., & Majumdar, B. B. (2019). Expenditure-based segmentation of freight travel markets: Identifying the determinants of freight transport expenditure for developing marketing strategies. *Research in Transportation Business & Management*, 33, 100437. DOI: 10.1016/j.rtbm.2020.100437
- [36] Porter, M. E. (1985). *Competitive advantage: Creating and sustaining superior performance*. New York: The tree Press.
- [37] Premkanth, P. (2012). Market segmentation and its impact on customer satisfaction with special reference to commercial bank of Ceylon PLC. *Global Journal of Management and Business Research*, 12(17), 72-86.
- [38] Rizomyliotis, I., Poulis, A., Apostolos, G., Konstantoulaki, K., & Kostopoulos, I. (2020). Applying fcm to predict the behaviour of loyal customers in the mobile telecommunications industry. *Journal of Strategic Marketing*, 28(1), 1-15. DOI: 10.1080/0965254X.2018.1479720
- [39] Sule, M. (2015). The impact of market segmentation on the sales volume of a company's product or service. *European Journal of Business and Management*, 7(11), 12-33.
- [40] Sultan, P., Wong, H. Y., & Sigala, M. (2018). Segmenting the Australian organic food consumer market. *Asia Pacific Journal of Marketing and Logistics*, 5(3), 35-45. DOI: 10.1108/APJML-10-2016-0211
- [41] Tarkkala, H., & Tupasela, A. (2018). Shortcut to success? Negotiating genetic uniqueness in global biomedicine. *Social studies of science*, 48(5), 740-761. DOI: 10.1177/0306312718801165
- [42] Urbankova, E., & Krizek, D. (2020). Homogeneity of Determinants in the Financial Sector and Investment in EU Countries. *Economies*, 8(1), 14. DOI: 10.3390/economies8010014
- [43] Vila, T. D., González, E. A., & Darcy, S. (2020). Accessibility of tourism websites: the level of countries' commitment. *Universal Access in the Information Society*, 19(2), 331-346. DOI: 10.1007/s10209-019-00643-4

