Effect of Market Segmentation on the Performance of Micro, Small and Medium Enterprises in Makurdi Metropolis, Benue State, Nigeria

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Abstract*: This study investigated the Effect of Market Segmentation on the performance of Micro, Small and Medium Scale Enterprises (MSMEs) in Makurdi Metropolis, Benue state Nigeria. A survey research was carried out while a sample of two hundred and forty six (246) was taken from the population of six hundred (600) managers and owners of micro, small and medium scale enterprises in the study area.Multiple regression analysis was used as the main statistical tool of interest with the aid of the Statistical Package for Social Science (SPSS) version 23.0. The result of the study indicates that Demographic segmentation has a positive effect on the performance of micro, small and medium enterprises in Makurdi Metropolis, Benue State, Nigeria and the effect is statistically significant (p<0.05) and in line with a priori expectation. Geographic segmentation has a negative effect on the performance of micro, small and medium enterprise in Makurdi Metropolis, Benue State, Nigeria and the effect is not statistically significant (p>0.05) and not in line with a priori expectation. Behavioural segmentation has a negative effect on the performance of micro, small and medium enterprises in Makurdi Metropolis, Benue State, Nigeria and the effect is not statistically significant (p>0.05) and not in line with a priori expectation. It was concluded that is a necessary strategy in capturing any market by the entrepreneur in the study area. It was recommended among others that managers of micro, small and medium scale enterprises in the study area should adopt segmentation based on demographic characteristics of the respondent as this will help to show the Micro, Small and Medium Scale Enterprises in identifying the best categories of people to target with a particular products and services and at a specific time.*

Keywords: *Market Segmentation, Performance, MSMEs, Benue State, Nigeria.*

I.   Introduction

Market segmentation is the process of dividing a market into smaller groups of buyers with distinct needs, characteristics, or behaviours who might require separate product or marketing mixes. In a similar submission, market segmentation is a practice of dividing markets up into homogenous segments of consumers or customers. In marketing theory, segmentation is one step in a broader process which includes the targeting of messages or advertising campaigns to specific segments. Also, market segmentation as the process of dividing a market into distinct subset of consumers with common needs or characteristics and selecting one or more segments to target with a distinct marketing mix. Marketers do not create a segment because segments are natural phenomenal. Through segmentation research, a marketer identifies the segments and selects one or more segments to target and satisfy. The underlying aim of market segmentation is to group customers with similar needs and buying behavior into segments, thereby facilitating each segment being targeted by a distinct product and marketing offerings to be developed to suit the requirements of different customer segments (Eniola, 2014).

Market segmentation helps businesses deal with this heterogeneity by balancing the variability in customers' needs with the limits of available resources. For most businesses it is simply unrealistic to satisfy the entire diverse customer needs in the marketplace. By focusing marketing efforts on certain segments, the impact of limited resources can be increased. Segmentation is fundamental to successful marketing strategies. The fundamental belief in the market segmentation strategy is that it enhances customer satisfaction, competitive advantage and superior performance especially for firms that have the expertise to: (1) identify segments of demand, (2) target specific segments, and (3) develop specific marketing mixes for each targeted market segment (Dibb and Simkin, 2010). According to Hunt (2002), Businesses from all industry sectors use market

segmentation in their marketing and strategic planning. For many, market segmentation is the panacea of modern marketing. Both the underlying logic and the rewards which segmentation offers are well established in the marketing literature. In the present well informed business environment, customer needs are becoming increasingly diverse and the needs can no longer be satisfied by a mass marketing approach. Businesses can only cope with this diversity by grouping customers with similar requirements and buying behaviour into segments.

In Nigeria, the contribution performance of the small and medium scale enterprises (SMEs) is considered as the spinal column. SMEs are extremely important and contribute significantly to the economic growth in the country. These classes of enterprises comprise about 70 percent to 90 percent of the business establishment in the manufacturing sector in Nigeria (Eniola and Ektebang, 2014). Moreover, the potential of small and medium scale enterprises is to serve as an engine for wealth creation, employment generation, entrepreneurial skills development, and sustainable economic development. SMEs is the creativity and ingenuity of entrepreneurs in the utilization of the abundant non- oil, natural resources of this nation will provide a sustainable platform or springboard for industrial development and economic growth as is the case in the industrialized and economically developed societies (Eniola and Ektebang, 2014, Dzisu, Smile and Ofosu, 2014). SME provides over 90 percent of employment opportunities available in the manufacturing sector and account for about 70 percent of aggregate employment created per annum.

The outcome of market segmentation should be depth of market position in the segments that are effectively defined and penetrated, indicating a measure of market performance. Many empirical works have been done by researchers to establish the nature of relationship between market segmentation and business performance. Adina, (2011) conducted an empirical study on market segmentation capability and business performance: A reconceptualization and empirical validation. The main purpose of this study was to investigate the relationship between market segmentation and business performance. The research was conducted within the critical realism paradigm and adopted a sequential qualitative-quantitative methodology, using twenty four (24) in-depth interviews with marketing managers and segmentation experts. The study revealed that implementing market segmentation is perceived to have positive effects on three (3) types of business performance measures. Firstly, through targeted marketing campaigns and tailored value propositions based on each segment's needs, segmentation implementation is perceived to increase customer performance measures, e.g. customer acquisition, loyalty and satisfaction. Secondly, through identifying remaining 'pockets of value' in a maturing market and/or growing, under-served or valuable segments in a developing market, exiting shrinking segments and adapting brand communications to suit each segment's preferences, segmentation can increase market performance outcomes. The study therefore concludes that pursuing a segmentation approach should enhance an organization's performance.

The main objective of this study is to determine the effect of market segmentation on the performance of micro, small and medium enterprises in Makurdi Metropolis, Benue State, Nigeria. The specific objectives of the study are to; examine the effect of demographic geographic and behavioural segmentation on the performance of micro, small and medium scale enterprises in Makurdi Metropolis, Benue State Nigeria.

II Methodology

Survey research design was used for this study using a questionnaire to obtain information from a population of 637 registered micro, small and medium scale enterprises in Makurdi Metropolis, Benue State Nigeria. Taro Yamane's 1967 formula was used to obtain the sample of two hundred and forty six (246) respondents who are the managers or the owners of the micro, small and medium scale enterprises in the study area. Simple random sampling was used to select the sample from the respondents.

The Kaiser Meir Olkin test of Sampling Adequacy

Table 1: Sample Adequacy Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.841
Bartlett's Test of Sphericity	Approx. Chi-Square	12.812
	df	6
	Sig.	.046

Source: SPSS Result Output, 2020

A pilot test was conducted. The input variable factors used for this study were subjected to exploratory factor analysis to investigate whether the constructs as described in the literature fits the factors derived from the factor analysis. From Table 1, factor analysis indicates that the KMO (Kaiser-Meyer-Olkin) measure for the study's four variable items is 0.841 with Barlett's Test of Sphericity (BTS) value to be 6 at a level of significance p=0.046. Our KMO result in this analysis surpasses the threshold value of 0.50. Therefore, we are confident that our sample and data are adequate for this study.

Table 2: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.708	42.708	42.708	1.708	42.708	42.708	1.626	40.662	40.662
2	1.296	32.394	75.101	1.296	32.394	75.101	1.378	34.439	75.101
3	.690	17.255	92.356						
4	.306	7.644	100.000						

Extraction Method: Principal Component Analysis.

Source: SPSS Result Output, 2020

The Total Variance Explained in Table 2 shows how the variance is divided among the four (4) possible factors. Two (2) variable factors have eigenvalues (a measure of explained variance) greater than 1.0, which is a common criterion for a factor to be useful. The Table shows that the Eigenvalues are 1.708 and 1.296 and are all greater than one (1). Component one (1) produced a variance of 42.708, while Component 2 produced a variance of. 32.394. Two (2) components i.e component one (1) and two (2) accounts for 75.101 percent of the variance of the whole variables of the study. This shows that the variables have strong construct validity.

Table 3: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.830	.988	4

Source: SPSS Result Output, 2020

As shown by the individual Cronbach Alpha Coefficient the entire construct above falls within an acceptable range for a reliable research instrument of 0.70. The Cronbach Alpha for the individual variables is 0.830 and is found to be above the limit of acceptable degree of reliability for research instrument.

Table 4: Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
MSMP	90.9000	174.621	.625	.409	.765
DMSG	96.5000	115.000	.448	.421	.639
GOSG	96.7000	67.905	.520	.165	.562
BEHS	94.8000	129.537	.425	.315	.810

Source: SPSS Result, 2020

As shown in Table 4, an item-total correlation test is performed to check if any item in the set of tests is inconsistent with the averaged behaviour of the others, and thus can be discarded. A reliability analysis was carried out on the variables of the study values scale comprising 4 items. Cronbach's Alpha showed the questionnaire to reach acceptable reliability, $\alpha = 0.830$. Most items appeared to be worthy of retention, resulting in a decrease in the alpha if deleted. There is no exception to this in all the variables of the study as none of the items if deleted will improve the overall Cronbach Alpha statistics. As such, none of the variables was removed.

Models Specification

The functional relationship between the variables of the study, the model is expressed in implicit and explicit function as shown below:

MSMP $=f$ (DMSG, GOSG, BEHS)   -   -   -   -   -   -   - (1)
Where,
MSMP = Micro, Small and Medium Enterprises Performance
DMSG = Demographic segmentation
GOSG = Geographic segmentation
BEHS = Behavioural segmentation
In explicit form, the functional relationship between the variables of the study can be shown below:
MSMP = $b_0 + b_1$DMSG + b_2GOSG + b_3BEHS + U_t-   -   -   -   -   - (2)

Where,
b_0 = Regression constant
$b_1 - b_3$ = Coefficients of independent variables.
U_t is the error term
A priori expectations
(X_1) = Geographic Segmentation; *a priori* expected to have a negative effect on performance of Micro, Small and Medium Enterprises
(X_2) = Geographic Segmentation; *a priori* expected to have a positive effect on performance of Micro, Small and Medium Enterprises
(X_3) = Behavioural Segmentation; *a priori* expected to have a positive effect on performance of Micro, Small and Medium Enterprises.

Multiple Regression Analysiswas used to assess the nature and degree of effect of the independent variables on the dependent variable of the study. However, the probability value of the regression estimates was used to test the hypotheses of the study.
Decision rule: The following decision rules were adopted for accepting or rejecting hypotheses: *If the probability value of b_i [p (b_i) > critical value] we accept the null hypothesis, that is, we accept that the estimate* $b_i$is not statistically significant at the 5 percent level of significance. *If the probability value of b_i [p (b_i) < critical*

value] we reject the null hypothesis, in other words, that is, we accept that the estimate b_1 is statistically significant at the 5 percent level of significance.

III   Results and Discussion

Figure 1: Regression Standardized Residual
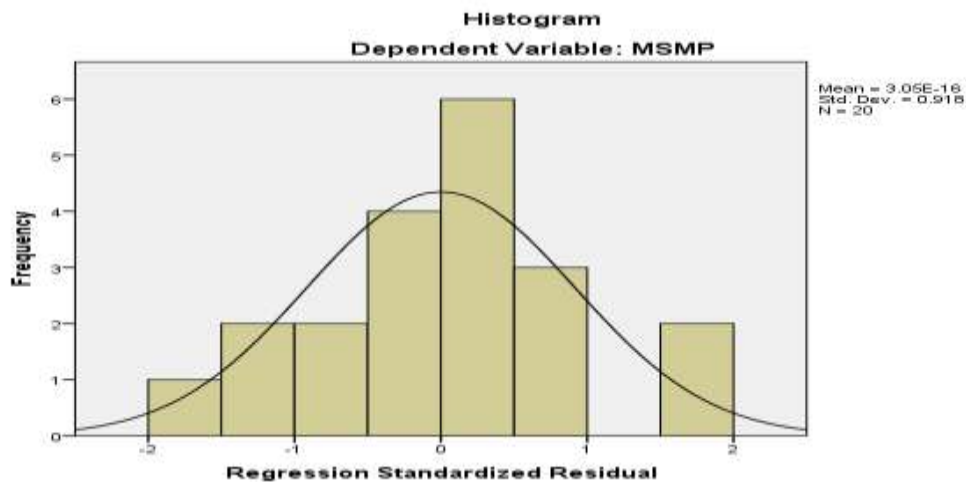
Source: SPSS Result Output, 2020

Figure 1 above shows a histogram of the residuals with a normal curve superimposed. The residuals look close to normal, implying a normal distribution of data. Here is a plot of the residuals versus predicted dependent variable of Micro, Small and Medium Enterprises (MSMP). The pattern shown above indicates no problems with the assumption that the residuals are normally distributed at each level of the dependent variable and constant in variance across levels of Y.

Table 5: Statistical Significance of the model

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	685.421	3	228.474	3.695	.034[b]
1	Residual	989.379	16	61.836		
	Total	1674.800	19			

a. Dependent Variable: MSMP

b. Predictors: (Constant), BEHS, GOSG, DMSG

Source: SPSS 20.0 Result Output, 2020

The F-ratio in the ANOVA Table 5 above tests whether the overall regression model is a good fit for the data. The table shows that the independent variables statistically significantly predicts the dependent variable $F_{(3, 16)} = 3.695$, $p = 0.0340$[b] (i.e., the regression model is a good fit of the data).

Table 6: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.973[a]	.841	.730	7.86360

a. Predictors: (Constant), BEHS, GOSG, DMSG

b. Dependent Variable: MSMP

Source: SPSS 20.0 Result Output, 2020

Table 6 shows the model summary. The coefficient of determination R^2 for the study is 0.841 or 84.1 percent. This indicates that 84.1 percent of the variations in the model can be explained by the explanatory variables of the model while 15.9 percent of the variation can be attributed to unexplained variation captured by the stochastic term. The Adjusted R Square and R^2 show a negligible penalty (73.0 percent) for the explanatory variables introduced by the researcher.

Table 7: Regression coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	79.967	14.743		5.424	.000		
	DMSG	.560	.231	.524	2.427	.027	.793	1.262
	GOSG	-.319	.224	-.283	-1.429	.172	.941	1.063
	BEHS	-.584	.325	-.380	-1.796	.091	.823	1.214

a. Dependent Variable: MSMP

Source: SPSS 20.0 Result Output, 2020

Demographic segmentation (DMSG) has a positive effect onthe performance of micro, small and medium enterprises (SMEs) in Makurdi Metropolis, Benue State, Nigeria and the effect is statistically significant (*p<0.05)* and in line with *a priori expectation*. This means that a unit increases in Demographic segmentation (DMSG) will result to a corresponding increase in the performance of micro, small and medium enterprises (SMEs) in Makurdi Metropolis, Benue State, Nigeriaby a margin of 52.4 percent. Using the probability value of the estimate, p (b_1) < critical value at 0.05 confidence level. Thus, we reject the null hypothesis. That is, we accept that the estimate b_1 is statistically significant at the 5 percent level of significance. This implies that demographic segmentation has a significant effect on the performance of micro, small and medium enterprises in Makurdi Metropolis, Benue State, Nigeria. This finding is in line with that of Stank, Goldsby and Vickery (1999) who argued that customer satisfaction has a substantial strategic implications and may offer a broader range of benefits to the service industry. Geographic segmentation (GOSG) has a negative effect on the performance of micro, small and medium enterprises (SMEs) in Makurdi Metropolis, Benue State, Nigeria and the effect is not statistically significant (*p>0.05)* and not in line with *a priori expectation*. This means that a unit increases in Geographic segmentation (GOSG) will result to a corresponding decrease in the performance of micro, small and medium enterprises in Makurdi Metropolis, Benue State, Nigeria by a margin of 28.3 percent. Using the probability value of the estimate, p (b_2) < critical value at 0.05 confidence level. Thus, we accept the null hypothesis. That is, we accept that the estimate b_2 is not statistically significant at the 5 percent level of significance. This implies that geographic has no significant effect on the performance of micro, small and medium enterprises (SMEs) in Makurdi Metropolis, Benue State, Nigeria. Behavioural segmentation (BEHS) has a negative effect on the performance of micro, small and medium enterprises in Makurdi Metropolis, Benue State, Nigeria and the effect is not statistically significant (*p>0.05)* and not in line with *a priori expectation*. This means that a unit increases in behavioural segmentation (BEHS) will result to a corresponding decrease in the performance of micro, small and medium enterprises in Makurdi Metropolis, Benue State, Nigeria by a margin of 38.0 percent. Using the probability value of the estimate, p (b_3) > critical value at 0.05 confidence level. Thus, we accept the null hypothesis. That is, we accept that the estimate b_3 is statistically significant at the 5 percent level of significance. This implies that behavioural segmentation has no significant effect on the performance of micro, small and medium enterprises in Makurdi Metropolis, Benue State, Nigeria.The result of this study is in line with results of many other similar studies including those of Onaolapo, Salami and

Oyedokun, (2011), Adina, (2011), who all agree that Market Segmentation has a lot of positive effect on performance. On the contrary, the study contradict the findings of Foedermayr and Diamantopoulos (2008) whose study conclude that of market segmentation practice offers little practical help and guidance to marketers who seek to implement it.

IV   Conclusion and Recommendations

This study investigated the effect of Market Segmentation on the performance of micro, small and medium enterprises in Makurdi Metropolis Benue State, Nigeria. The result of the study indicates that segmentation based on demographics is the only positive and significant market segmentation that will bring about the performance of micro, small and medium enterprises in the study area. Segmentation based on geographic location and behaviour was negatively related to performance of micro, small and medium enterprises in the study area. This result implies that issues regarding market segmentation should be given further emphasis by micro, small and medium enterprises owners/managers as it has become clear that the ability of any micro, small and medium enterprises to give market segmentation the attention it deserves will guarantee its success and hence, the possibility of achieving high and sustained performance as well as gaining competitive advantage. The following recommendations are made:i) MSMEs managers should always adopt segmentation based on demographic characteristics of the respondent as this will help to show the micro, small and medium enterprises the best categories of people to target with a particular products and services and at a specific time. Managers and owners of micro, small and medium enterprises should thoroughly investigate the potentials inherent in geographical segmentation and tap into it so as to improve their performance. Also, managers should study the behaviours of the target market before launching new products or services into the market.

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