Effect of market penetration on the performance of small and medium scale enterprises in Makurdi metropolis, Benue State, Nigeria

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ABSTRACT

The study examined the effects of market penetration on the performance of small and medium scale enterprises in Makurdi Metropolis, Benue State, Nigeria from a population of 512 and a sample of 225 and were randomly selected. Multiple regression analysis was used as method of data analysis. Market segmentation, product packaging and product pricing all had a positive effect on performance of small and medium enterprises in Makurdi Metropolis, Benue State and the effect is statistically significant (p<0.05). Sales Promotion was negatively related to performance of small and medium enterprises in Makurdi Metropolis, It was concluded that in other to penetrate the market, entrepreneurs can use each or a combination of the market penetration strategies into an existing market. It was recommended among others that entrepreneur should ensure that effective promotion is carried out to create a good image of the products and services of the enterprise to the eyes of the customers.

Key Words: Pricing, Penetration, Market, Bonus, Promotion, Performance and Nigeria.

I. Introduction

The competition in the marketplace is fierce and to survive, entrepreneurs must devise ways of getting the large market share of its products. Scholars claim that growth requires expanding what a firm is doing currently to a more potential customer. Due to the fact that no one business can satisfy the entire market in which it operates, it implies that other businesses that deal in similar products may enter into the market to compete for the same market share with other enterprises who are trading in the same market niche. As a result, stiff competition between enterprises as to which business controls the largest market share of the products or services that are offered to the market by the competing enterprises. This entails that for businesses to survive in this stiff competitive environment, they must come up with a workable penetration strategy that can be used in gaining a large market share of the enterprise's products and services. One of the important strategies which other strategy relies on to
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achieve penetration into an existing market is market segmentation which segregates markets into clusters in which markets with similar attributes are grouped and served most effectively (Aremu and Adeyemi, 2011). As a result, scholars, governments and business people are depending on it highly to improve their present and future outlook with regard to their respective pursuits. It has been noted that penetration strategy holds the key to obtaining an impressive results for both public and private organization (Kotler, 2009). Researchers are of the believe that small and medium scale enterprises are the engine of development as it has been shown to improve the standard of living, income and socioeconomic wellbeing of members of the society. As a result of this several governments from both the developed and the developing countries of the world have paid a great deal of attention in developing entrepreneurial culture among its citizens as small and medium scale enterprises has been shown to complement greatly the government attempt to provide jobs to its teeming citizens. Experts are of the opinion that small and medium scale enterprises can bring a positive change to the development of society. This is because, Small and Medium-sized Enterprises (SMEs) play a critical part in the economic growth and development of countries. Consequently, the performance of the SME sector is closely associated with the performance of the nation. Performance is a process or the manner by which the business owner or manager of SMEs executes their functions and crucial element to improving business performance in organizations (Aremu and Adeyemi, 2011).

Several strategies are available to entrepreneurs in penetrating the market. However, market penetration strategies involve going to the market with product to be sold in an already existing market. Market penetration is one of the four strategies in the Ansoff matrix (Ansoff, 1965), which entrepreneurs can use as a means of getting a large market share for the products and services of the enterprises amidst other competing enterprises with similar products in the market. Market penetration carries a low amount of risk as it involves pushing into an existing market of already existing products and services. Hence, the level of risk involved in the use of this strategy will be lower compared to other components of the Ansoff matrix such as market development, diversification and product development. Startups and other investors will also be skeptical in investing in a very risky strategy such as product development, diversification and market development, thus leaving market penetration strategy as a strategy of choice for startups. The relationship between the researches variables has been studied by many researchers. Uslay (2005) studied the role of pricing strategy in market defense and found that this pricing strategy can be an effective penetration strategy for businesses already in production. Both limit pricing and predatory pricing can serve as effective strategies for the incumbents' market defense. The use of voracious pricing reduces the welfare of consumers in the marketing chain. Ooga et al. (2016) studied market penetration strategy and competitiveness of mobile telecommunication service providers in Kenya and found that market penetration strategy also correlates positively with organizational competitiveness, customer experience management and organizational competitiveness. Onaolapo et al. (2011) found that banks with a high level of market share demonstrate high customer retention ability and lower overall unit operating expenses. Yogo (2013) found that most of the business had embraced growth strategies such as marketing, pricing, market penetration among other strategies and such businesses have additional advantages.

However, the failure rates of small and medium scale enterprises (SMEs) keeps one wondering if the entrepreneurs are not adopting the correct penetration strategies needed in today's competitive market place. It has been shown that SMEs poor performance is due to their inability to effectively utilize the penetration strategies to get a larger market share for their goods and services (David, 2009). This is because even despite concerted efforts from government intervention, the failure rate is still high. This study thus examines how market penetration strategy affects the small and medium scale enterprise's performance in Makurdi Metropolis of Benue State Nigeria. Specifically, the study examines the effect of market segmentation, product packaging, sales promotion and product pricing on performance of small and medium scale enterprises in the study area.
Research framework

As shown in Figure 01, the independent variable of the study is market penetration with the proxies of market segmentation, product pricing, sales promotion and product pricing while the dependent variable of the study is the performance of small and medium scale enterprises. This is in line with the work of (Ansoff, 1965) in which he enunciated the factors responsible for market penetration as depicted in the figure above (Ansoff, 1965).

II. Materials and Methods

The study used conducted in Makurdi Metropolis, Benue State Nigeria. Primary data was used for the study and was gathering during January 2020 to May, 2020. The survey design in gathering the data for examining the nexus between the variables of the study. The study area was Makurdi Metropolis which harbours registered Small and Medium Scale Enterprises comprising 512 SMEs in the study area. Taro Yamane's formula was used to obtain two hundred and twenty five (225) SMEs in Makurdi Metropolis which was sampled for the study. Simple random sampling was used to select 225 SMEs from the population for the study. Structured questionnaires were used to collate the information need of the study from the respondents.

Table 01. Kaiser-Meyer-Olkin and Bartlett’s test

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .813 |
|-------------------------------------------------|------|
| Bartlett's Test of Sphericity                    |      |
| Approx. Chi-Square                              | 8.690|
| df                                              | 10   |
| Sig.                                            | .017 |

Source: SPSS Result, 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 01, factor analysis indicates that the KMO (Kaiser-Meyer-Olkin) measure for the study's four (4) independent variable items is 0.813 with Barlett’s Test of Sphericity (BTS) value to be 10 at a level of significance $p=0.017$. Our KMO result in this analysis surpasses the threshold value of 0.50 as recommended by Hair et al. (1995). Therefore, we are confident that our sample and data are adequate for this study.

Table 02. Total Variance Explained

| Component | Initial eigenvalues | Extraction sums of squared loadings | Rotation sums of squared loadings |
|-----------|--------------------|-------------------------------------|----------------------------------|
|           | Total              | % of variance                       | Total                            | % of variance                       | Total                            | % of variance                       | Total                            | % of variance                       |
|           | 1.550              | 31.009                             | 1.550                            | 31.009                              | 1.470                            | 29.405                             | 29.405                            |
|           | 1.253              | 25.058                             | 1.253                            | 25.058                              | 1.308                            | 26.155                             | 55.560                            |
|           | 1.048              | 20.959                             | 1.048                            | 20.959                              | 1.073                            | 21.466                             | 77.026                            |
|           | .774               | 15.476                             | .774                             | 15.476                              | .774                             | 15.476                             | 77.026                            |
|           | .375               | 7.498                              | .375                             | 7.498                               | .375                             | 7.498                              | 77.026                            |

Extraction Method: Principal Component Analysis.

Source: SPSS Result, 2020
Table 02 shows how the variance is divided among the five (5) possible factors. Three factors have eigenvalues (a measure of explained variance) greater than 1.0, which is a common criterion for a factor to be useful. When the Eigenvalue is less than 1.0 the factor explains less information than a single item would have explained. Table 02 shows that the Eigenvalues 1.550, 1.253 and 1.048 for factors 1, 2 & 3 are all greater than 1. Component one gave a variance of 29.405, Component 2 gave the variance of 26.155 and Component gave a variance of 21.466. As shown by Table 02 on the rotated sum of squared loadings section, three components i.e component 1, 2 and 3 accounts for 77.026% of the variance of the whole variables of the study. This shows that the variables have strong construct validity.

### Reliability of the Research Instrument

Table 03. Reliability Statistics

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|------------------|---------------------------------------------|------------|
| .871             | .994                                        | 5          |

Source: SPSS Result, 2020

Table 03 shows the reliability statistics which indicates that the overall Cronbach Alpha value is 0.871. Reliability Cronbach Alpha statistics of 0.70 is considered adequate and reliable for study. Hence, the variables of this study fall above the limit of a reliable instrument for this study.

### Table 04. 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 |
|----------------------------|--------------------------------|---------------------------------|-----------------------------|---------------------------------|
| PSME                       | 134.650                        | 155.713                         | .407                        | .812                            | .604                            |
| MSG                        | 135.000                        | 238.737                         | .455                        | .890                            | .739                            |
| PPK                        | 131.400                        | 219.305                         | .631                        | .746                            | .544                            |
| SLP                        | 137.300                        | 287.800                         | .542                        | .741                            | .500                            |
| PRP                        | 133.250                        | 299.882                         | .796                        | .643                            | .338                            |

Source: SPSS Result, 2020

As shown in Table 04, an item-total correlation test is performed to check if any item in the set of tests is inconsistent with the averaged behavior of the others, and thus can be discarded. A reliability analysis was carried out on the variables of the study values scale comprising five (5) items. Cronbach's alpha showed the questionnaire to reach acceptable reliability, $\alpha = 0.871$. 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.

### Model Specification

The functional relationship between the variables of the study is modeled using the multiple regression analysis as suggested by (Egwu and Autar, 2008). The implicit and the explicit form of the model is given as shown below:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_3 + e$$  \hspace{1cm} (1)

The implicit model form of the model is as shown below:

$$\text{PSME}=f(\text{MSG}, \text{PPK}, \text{SLP}, \text{PRP})$$  \hspace{1cm} (2)

The explicit form of the model can be restated as follows:

$$\text{PSME} = b_0 + b_1 \text{MSG} + b_2 \text{PPK} + b_3 \text{SLP} + b_4 \text{SLP} + U_t$$  \hspace{1cm} (3)

Where,

- PSME = Performance of SMEs
- PRP = Product Pricing
- MSG = Market Segmentation
- PPK = Product Packaging
- SLP = Sale Promotion
- $b_0$ = Regression Constant
- $b_1, b_2, b_3, b_4$ = Regression Coefficient
- $U_t$ = Error Term
Data analysis
The data collected in this study was analyzed statistically by the use of multiple regression analysis. The hypotheses formulated were tested by the probability values of the estimates. Thus, from the random sample from the population, we estimate the population parameters and obtain the sample linear regression model. The hypotheses of the study were tested using the probability value of the estimate with the following decision rule. If the p-value of (b<sub>i</sub>) > than the critical value we accept the null hypothesis, that is, we accept that the estimate b<sub>i</sub> is not statistically significant at the five percent level of significance. Or if the p-value of (b<sub>i</sub>) < than the critical value, we reject the null hypothesis, in other words, that is, we accept that the estimate b<sub>i</sub> is statistically significant at the five percent level of significance.

III. Results and Discussion
As shown in Table 05, none of the Correlation Matrix coefficients is more than 0.5 indicating that multicollinearity is not a problem in the model of the study. Hence, the variables can be used to model the relationships that exist between the dependent and the independent variables of the study.

Table 05. Correlation matrix<sup>a</sup>

|         | PSME   | MSG    | PPK    | SLP    | PRP    |
|---------|--------|--------|--------|--------|--------|
| Correlation |        |        |        |        |        |
| PSME    | 1.000  | .115   | .475   | -.027  | .104   |
| MSG     | .115   | 1.000  | -.073  | 1.000  | -.167  |
| PPK     | .475   | -.073  | 1.000  | .187   | -.209  |
| SLP     | -.027  | .020   | .187   | 1.000  | -.209  |
| PRP     | .104   | -.167  | -.209  | 1.000  |        |
| Sig. (1-tailed) |        |        |        |        |        |
| PSME    |        | .315   | .017   | .455   | .332   |
| MSG     | .315   |        | .380   | .467   | .241   |
| PPK     | .017   | .380   |        | .215   | .189   |
| SLP     | .455   | .467   | .215   |        | .189   |
| PRP     | .332   | .241   | .189   | .189   |        |

<sup>a</sup> Determinant = .591

Source: SPSS 20.0 Result Output, 2020

Table 06. Statistical Significance of the model

| Model   | Sum of squares | df | Mean square | F    | Sig.  |
|---------|----------------|----|-------------|------|-------|
| Regression | 405.134   | 4  | 101.284     | 1.702| .020<sup>b</sup> |
| Residual | 892.616    | 15 | 59.508      |      |       |
| Total   | 1297.750   | 19 |             |      |       |

<sup>a</sup> Dependent Variable: PSME
<sup>b</sup> Predictors: (Constant), PRP, MSG, SLP, PPK

Source: SPSS 20.0 Result Output, 2020

The result of the statistical significance of the model is presented in Table 06. The F-ratio in the ANOVA table 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 (4, 15) = 1.702, p =0.020<sup>b</sup> (i.e., the regression model is a good fit of the data).

Table 07. Model summary

| Model | R    | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|------|----------|-------------------|---------------------------|
| 1     | .973<sup>a</sup> | .831     | .788              | 7.71412                   |

<sup>a</sup> Predictors: (Constant), PRP, MSG, SLP, PPK
<sup>b</sup> Dependent Variable: PSME

Source: SPSS 20.0 Result Output, 2020

Table 07 shows the model summary. The coefficient of determination R<sup>2</sup> for the study is 0.831 or 83.1%. This indicates that 83.1% of the variations in the model can be explained by the explanatory variables of the model while 16.9% 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 (78.8%) for the explanatory variables introduced by the researcher.

### Table 08. Regression coefficients

| Coefficients | Unstandardized coefficients | Standardized coefficients | T | Sig. | Collinearity statistics |
|--------------|-----------------------------|---------------------------|---|------|-------------------------|
| Model        | B                           | Std. error                | Beta| t    | Tolerance | VIF |
| (Constant)   | -.9560                      | .545                      | -17.541|.020 |           |     |
| MSG          | .793                        | .200                      | .596| 3.965|.014       | .960|1.042|
| PPK          | -.640                       | .257                      | .554| 2.486|.025       | .924|1.083|
| SLP          | -.149                       | .387                      | -.085|-.385|.705       | .935|1.069|
| PRP          | .634                        | .254                      | .434| 2.496|.017       | .895|1.117|

a. Dependent Variable: PSME
Source: SPSS 20.0 Result Output, 2020

**i. determine how market segmentation affects the performance of SMEs**

As shown in **Table 08**, Market Segmentation (MSG) was positively related to performance of small and medium enterprises in Makurdi Metropolis, Benue State (PSME) and the effect is statistically significant (p<0.05) and in line with *a priori* expectation. This means that a unit increase in Market Segmentation (MSG) will result to a corresponding increase in performance of small and medium enterprises in Makurdi Metropolis, Benue State (PSME) in selected states in Nigeria by margin of 59.6%. Using the probability value of the estimate, p (b1)< critical value at 0.05 confidence level. Thus, we reject the null hypothesis. That is, we accept that the estimate b1 is statistically significant at the 5% level of significance. This implies that Market Segmentation has a significant effect on consumer behaviour in selected states in Nigeria. This finding is in tandem with the findings of (Onaolapo, Salami and Oyedokun, 2011) who studied Marketing Segmentation Practices and Performance of Nigerian Commercial Banks and found that banks with high level of market share demonstrate high customer retention ability and lower overall unit operating expenses have a well and efficient market segmentation framework in its operations.

**ii. Ascertain the effect of product packaging on the performance of SMEs**

Product Packaging (PPK) was positively related to performance of small and medium enterprises in Makurdi Metropolis, Benue State (PSME) and the effect is statistically significant (p<0.05) and in line with *a priori* expectation. This means that a unit increase in Product Packaging (PPK) will result to a corresponding increase in performance of small and medium enterprises in Makurdi Metropolis, Benue State (PSME) in selected states in Nigeria by margin of 55.4%. Using the probability value of the estimate, p (b2)< critical value at 0.05 confidence level. Thus, we reject the null hypothesis. That is, we accept that the estimate b2 is statistically significant at the 5% level of significance. This implies that Product Packaging has a significant effect on consumer behaviour in selected states in Nigeria. This finding is in tandem with that of (Yogo, 2013) who carried out a study on growth strategies adopted by small and medium business enterprises in Oyugis town, Homa bay county, Kenya and found a positive effect between penetration strategies and the growth of SMEs in Kenya.

**iii. Examine how sales promotion affects the performance SMEs**

Sales Promotion (SLP) was negatively related to performance of small and medium enterprises in Makurdi Metropolis, Benue State (PSME) and the effect is statistically significant (p<0.05) and in line with *a priori* expectation. This means that a unit increase in Sales Promotion (SLP) will result to a corresponding increase in performance of small and medium enterprises in Makurdi Metropolis, Benue State (PSME) in selected states in Nigeria by margin of 8.5%. Using the probability value of the estimate, p (b3)< critical value at 0.05 confidence level. Thus, we reject the null hypothesis. That is, we accept that the estimate b2 is statistically significant at the 5% level of significance. This implies that Sales Promotion has no significant effect on consumer behaviour in selected states in Nigeria. This finding is contrary to that of (Ooga et. al, 2016) who studied market penetration strategy and competitiveness of mobile telecommunication service providers in Kenya and found a positive effect between market penetration variables and enterprise performance. The negative effect of variables could be attributed...
to poor sales promotion campaign by owners of the Small and Medium Scale Enterprises in Makurdi Metropolis.

iv. Examine the effect of product pricing on the performance of SMEs

Product Pricing (PRP) was positively related to performance of small and medium enterprises in Makurdi Metropolis, Benue State (PSME) and the effect is statistically significant ($p<0.05$) and in line with a priori expectation. This means that a unit increase in Product Pricing (PRP) will result to a corresponding increase in performance of small and medium enterprises in Makurdi Metropolis, Benue State (PSME) in selected states in Nigeria by margin of 43.4%. Using the probability value of the estimate, $p(b_2) < critical\ value\ at\ 0.05\ confidence\ level$. Thus, we reject the null hypothesis. That is, we accept that the estimate $b_2$ is statistically significant at the 5% level of significance. This implies that Product Pricing has a significant effect on consumer behaviour in selected states in Nigeria. This finding is in line with that of (Uslay, 2005) who studied the role of pricing strategy in market defense and found that price variable is among the most powerful instruments in the arsenal of the executives to achieve entry deterrence objectives. The study noted that both limit pricing and predatory pricing can serve as effective strategies for the incumbents’ market defense, thus helping to bring an improvement in the performance of small and medium scale enterprises.

V. Conclusion

The results of the study indicated that objectives I, II and IV which examined the effect of market segmentation, product packaging and product pricing have a positive and significant effect on the performance of small and medium scale enterprises in Makurdi Metropolis. This implies that the use of these strategies will guarantee the effective performance of small and medium scale enterprises in the study area. The finding has thrown more empirical backing to entrepreneurs who are skeptical of employing market penetration strategy. This can help to reverse the ugly trend of the demise of SMEs earlier reported by some researchers. Based on the findings of the study the following recommendations are made: managers of small and medium scale enterprise in the study area should utilize the market penetrations strategies that showed positive and significant effect on the performance of small and medium scale enterprises. Since packaging serves very useful purposes in marketing, managers of the SMEs in the study area should pay very serious attention to product packaging as it has been shown too positively and significantly improves performance of SMEs. Entrepreneurs from the study area should ensure that effective promotion is carried out. This will help to improve the image of the enterprises and hence improve performance. Price discrimination is one of the best strategies in penetrating the market for companies goods and services. The following suggestions are made for future studies:

i. An increased population of the study should be used for generalizability of results;

ii. Other sectors of the economy should be included in the study.

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References

[1]. Aremu, M. A. and Adeyemi, S. L. (2011). Small and medium scale enterprises as a survival Strategy for employment generation in Nigeria. Journal of Sustainable Development, 4(1), 200-206. https://doi.org/10.5539/jsd.v4n1p200

[2]. Ansoff, H. I. (1965). Corporate strategy: An analytic approach to business policy for growth and expansion, New York: McGraw Hill.

[3]. David, F. R. (Eds.) (2009). Strategic Management – Concepts and Cases, 12th ed. Pearson Inc. Upper Saddle River, New Jersey 07458, US.A

[4]. Egwu, K. and Autar, K. (2008). Introduction to Regression. Online at http://mathforcollege.com/nm/mws/gen/06reg/mws_gen_reg_bck_regressionintro.pdf
Effect of market penetration on the performance of small and medium scale enterprises

[5]. Hair, J. F., Anderson, R. E., Tatham, R. L. and Black, W. C. (1995). Multivariate data analysis. Englewood Cliffs, NJ: Prentice-Hall.

[6]. Kotler, P. (Eds) (2009). Marketing Management. Pearson International.

[7]. Ooga, P. G., Kuria, J. T. and Byaruhanga, J. (2016). Market penetration strategy and competitiveness of mobile telecommunication service providers in Kenya. IJRDO-Journal of Business Management, 2(12). http://www.ijrdo.org/index.php/bm/article/view/1539

[8]. Onaolapo, A. A, Salami A. O. and Oyedokun A. J. (2011). Marketing Segmentation Practices and Performance of Nigerian Commercial Banks. European Journal of Economics, Finance and Administrative Sciences, 29, 33-39.

[9]. Uslay, C. (2005). The Role of Pricing Strategy in Market Defense. A published dissertation in the Georgia Institute of Technology. Georgia. https://smartech.gatech.edu/bitstream/handle/1853/10578/uslay_can_200505_phd.pdf

[10]. Yogo, N. A. (2013). Growth strategies adopted by small and medium business enterprises in oyugis town, homa bay county, Kenya. A research project submitted in the department of business administration school of business, university of Nairobi. https://pdfs.semanticscholar.org/83af/09393590ad1d9f6eb428289fd9dc2ac316d6.pdf

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