Analysis of the Effect of Advertising on Sales and Profitability of Company

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Abstract: The paper assessed the effect of advertising on sales and profitability of a company. The SPSS software package was used to adequately verify the data collected for this study. The regression analysis was used to test the hypothesis of the variables that were involved in this study in order to analyze the data. The paper concludes that there exists a significant relationship between marketing expenses and profitability of the firm and also there exists a significant relationship between turnover and marketing expenses of the firm. The paper suggests that a company should maintain a cost effective system of advertising in which high quality personnel is a major component. The advertising system should be controlled by a mechanism that fosters the good reputation of the company and its product(s).

Keywords: Advertising Mechanism, Turnover, Profitability.

1. INTRODUCTION

The essence of being in business by any business outfits is to produce for sales and profits. In order to remain in business an organization must generate enough sales from its products to cover operating costs and post reasonable profits. For many organizations, sales estimate is the starting point in budgeting or profit. It is so because it must be determined, in most cases, before production units could be arrived at while production units will in turn affect material purchases. However, taking decision on sales is the most difficult tasks facing many business executives. This is because it is difficult to predict, estimate or determine with accuracy, potential customers’ demands as they are uncontrollable factors external to an organization. Considering, therefore, the importance of sales on business survival and the connection between customers and sales, it is expedient for organizations to engage in programs that can influence consumers’ decision to purchase its products. This is where advertising and brand management are relevant. Advertising is a subset of promotion mix which is one of the 4ps in the marketing mix i.e. product, price, place and promotion. As a promotional strategy, advertising serves as a major tool in creating product awareness and condition the mind of a potential consumer to take eventual purchase decision.

The Advertising Practitioner Council of Nigeria (APCON) says “advertising is a form of communication through mass media about product, services or ideas paid for by an identified sponsor”. Since communication is transfer of idea, attitude, information, mood, and so on from one person to another through a medium: it may be quite correct to define advertising as a form of communication. This is because in advertising, persuasive messages about the products, service or idea are made through a channel. This no doubt is similar to the communication process of a source sending a message through a channel to a receiver for a feedback.

According to William J Stanton (1994), advertising consists “all activities that involve presenting to a group, non-personal, oral or visual sponsored messages regarding a product, service or idea “Advertising is directed to groups of...
people and is therefore non-personal. Companies usually sponsor advertising in order to convince the public that their products will benefit them.

In Nigerian economy, many manufacturers attempt to stimulate the demand for their products (goods/services). They are not satisfied merely to produce and trust to the chance that consumers will become aware of their products through the impersonal interplay of the market.

It is believed that if a better product is produced, consumers will not necessarily take special pain of informing themselves of its existence, its worth, its satisfying qualities and where it can be purchased. Advertising provides information that facilitates the job of the seller, helps customer make quick decision, informs customer of the presence of a product, price which it is being sold and placement (where it is available) thereby giving room for economy of time, energy and money in trying to look for the product. It also announces a new product, indicates new uses of existing products, reminds customer of an existing product, about the desirable qualities, stimulates or generates enquires and builds corporate image to mention a few. The effectiveness of these is expected to result in increased sales and profit. Profit can be viewed as the excess of total revenue over and above the total cost. Profit making in any organization is a function of many factors. There is prudence in vigorously and diligently pursuing organizational goals and objectives. One of such goals is maximization of the wealth of the owners in an environment where social responsibility is openly embraced.

The main objective of this study is to examine the effect of advertising on sales and profit of the company. This research work is designed to achieve the following specific objectives:

i. To determine the relationship between marketing expenses and profitability of the firm

ii. To determine the relationship between turnover and marketing expenses of the firm.

iii. To determine the relationship between inventory and profitability of the firm.

The importance of this study is that it will bring to focus the importance of advertising in an organization, because of high competitive environment and many brands, the importance of advertising in winning customers and achieving brand loyalty cannot be overemphasized. The findings of this study will be of importance to business people and marketing companies whose product demand is very low because advertising has not been included in its market mix.

2. LITERATURE REVIEW

A well planned and organized advertising scheme has the potential of increasing awareness of a business products or brands in the environment in which the business operates, ceteris paribus. In consequence, the advertised brands or products increase their share of the market. This increased share of the market will translate into increased turnover, ceteris paribus. Under stable tax regime, profit after tax should increase and profit attributable to shareholders should rise correspondingly under well managed advertising. Advertising is used primarily to inform potential customer of; (1) the availability of products or services, (2) when they are in season, (3) where you are located and (4) anything special about your product.

2.1 Theoretical Literature:

According to Fill (1999), the purpose of advertising is to supply the means which advertising, public relations and sales promotion are communication tools to be accessed by marketers. One distinct feature of communication is that the target population or audience must understand the information and so it must be as simple as possible. Dunn et al. (1978) viewed advertising from its functional perspectives; hence they define it as a paid, non-personal communication through various media by business firms, non-profit organization, and individuals who are in some way identified in the advertising message and who hope to inform or persuade members of a particular audience. Morden (1991) is of the opinion that advertising is used to establish a basic awareness of the product or service in the mind of the potential customer and to build up knowledge about it. Kotler (1988) sees advertising as one of the four major tools companies use to direct persuasive communications to target buyers and public noting that “it consists of non-personal forms of communication conducted through paid media under clear sponsorship”. According to him, the purpose of advertising is to enhance potential buyers’ responses to the organization and its offering, emphasizing that “it seeks to do this providing information, by channeling desire, and by supplying reasons for preferring a particular organization’s offer. While writing
on advertising nature and scope, Etzel et al. (1997) compactly capture all advertising as having four features: (i) A verbal and or visual message, (ii) A sponsor who is identified, (iii) Delivery through one or more media, (iv) Payment by the sponsor to the media carrying the message.

Summarizing the above, they conclude that “advertising then consist of all the activities involved in presenting to an audience a non-personal, sponsor-identified, paid-for message about a product or organization”. Those views of Etzel et al., (1997) coincide with the simple but all-embracing definitions of Davies (1998) and Arens (1996). For instance, while Davies states that “advertising is any paid form of non-personal media presentation promoting ideas/concepts, goods or services by an identified sponsor. Arens expressing almost the same view describes advertising as “the personal communication of information usually paid for and usually persuasive in nature about products (goods and services) or ideas by identified sponsors through various media”.

From the preceding, it could be concluded that the purpose of advertising is to create awareness of the advertised product and provide information that will assist the consumer to make purchase decision, the relevance of advertising as a promotional strategy, therefore, depends on its ability to influence consumer not only to purchase but to continue to repurchase and eventually develop brand loyalty. Consequently, many organizations expend a huge amount of money on advertising and brand management.

2.2 Empirical Literature:

A lot of empirical studies have been carried out on advertising, one of such was carried out by Karounwi (1998), he said the producer’s ultimate goal is to sell product and make profit and one of the ways which he could achieve this is through advertising. The researcher noted the fact that there are stiff competitions in the market especially with advertising messages reaching the ultimate consumers first. Wright (1991) believed in is tentative findings that consumers are not helpless victims of advertisement once they are constantly exposed to various kinds of advertisement, they become motivated. Olawuyi (2004) in his own study, says that men of the world who want the best wherever they find it know that advertised goods are invariably the best of its kind for reliable product can stand up to intensive publicity. The manufacturer who makes a public claim must be able to prove it by advertising goods that are good for buying.

Also, Galbraith (1963) states that advertising has an effect on the rising sales of brand product categories and therefore increases the profit of the product. In a study undertaken to find out the role of social status in decision process, Kassarijian et.al. (1995) stated that increased social interaction permits the more rapid spread of new ideas and that there is a relationship between advertising appeals and social character. It may be necessary to mention that marketing activities are interwoven and no one’s activities are in stage and except one stage is completed the company may not go over to the next stage. This has resulted in people seeing marketing as an integrated system.

Stanton (1978) in one of his books sees marketing as a total system in which we price, promote, and distribute satisfying goods and services to potential customers. Arising from Stanton’s definition, it becomes evident that marketing activities are all geared toward consumer’s wants, needs, and satisfaction with a view to making some level of profit.

Satisfying the needs of target market brings one to the use of 4p’s in marketing otherwise known as marketing variable. When discussing the marketing variable many talk about the types of product, the price attached to the product, the advertising aspect to create product awareness, persuasion and finally, the place or distribution/logistics. For any good organization, the satisfaction of the needs of target market is highly dependent on its fashion and how it manipulates the four utilities to suit the needs of the consumers and the organization.

As a matter of fact, profit making should not be the primary objective of any organization rather, quality product will satisfy consumer’s needs and enhance repeat purchase. Definitely the company will make some profit in order to remain in business. This is also applicable to the beverage industry, it is pertinent to mention that this will only be achieved when a company produces a quality product and this product is reasonably priced based on its value to the consumers and a good promotion employed to inform and create product awareness and the product is within the reach of the target consumers. According to Young (1965), advertising does not inform the public that a product exists but promotes its benefits, it also persuades, induces people to like, prefer and buy a product to others.
2.2.1 RELATIONSHIP BETWEEN ADVERTISING, SALES AND PROFIT:

With companies investing millions of naira or dollars in marketing communication including advertising, it is but natural to examine its impact on the bottom line of the firm. With markets becoming powerful, practitioners and researchers have turned their attention towards examining the impact of communication activities like advertising on firm valuations.

Moreover, interest is rising in quantifying the impact of marketing activities on firm’s profitability and value providing the framework for linkages between marketing, finance and strategy. This study focuses on studying these relationships by seeking to measure the impact of advertisement spending by a firm on the firm’s sales and profitability.

In today’s competitive era one is constantly bombarded with advertisements. Empirical studies show that advertisements have an influence on the purchase behavior of consumers. Consumers purchase decision is also influenced by the “value” they feel they would derive from purchasing that particular product or service. Consumers expect a return on investment (price Vis a Vis value). In other words, consumers expect value for each kobo they spend. At the other end of the spectrum the marketers expect a return on the investment they make on advertising. This is natural given the fact that promotion activities do cost the firms a lot. The return may be in the form of increased profitability and an increase in firm’s turnover. Every year companies invest millions of naira or dollars in marketing communication. A bulk of this obviously goes into advertising expenditure. Naturally, marketers expect a return on investment (ROI) on this. Their expectation stems from the likely impact, marketing investments have on the market performance and thus the profitability of the firm. Raymond (1970) argues that the effectiveness of advertising conveys different meanings to different groups. To a manager, it would obviously mean the impact the advertising strategy has on the firm’s profitability. With marketing communication used for creating awareness and building a long lasting relationship, many studies have focused on copy and media effects and awareness building about the product. A metrics have been developed to assess and measure consumer awareness and loyalty. Besides many studies use the AIDA or its adaptations that has been around from the early 20th century (Strong 1925). Few research studies concentrate on measuring the sales and profit effects (Gattigon 1993, Montrala 2002; Naik et al 2007). A cursory glance at this suggests that these effects have been studied on the US consumers and markets. It therefore is imperative to study the impact of spending on advertisements on the sales and profitability of the firm.

3. METHODOLOGY

3.1 Data Analysis Techniques:

In the analysis of data and testing of hypothesis, the researcher shall make effort to study every available document. The statistical tool to be used for this study is contained in SPSS (Statistical Package for Social Scientists) so as to adequately verify information collected for this study. In order to analyze the data, the regression analysis was used to test the hypothesis of the variables involved in the study.

3.2 Model Specifications:

The researcher used regression analysis with the following model specification.

\[ Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \mu \]

\( Y \) = inventory
\( \beta_0 \) = Coefficient of the equation
\( \beta_1, \beta_2, \beta_3 \) = coefficient of variable \( X_1, X_2, X_3 \)
\( \mu \) = error term
\( X_1 \) = Profit after tax
\( X_2 \) = turnover
\( X_3 \) = earnings per share

Furthermore, the researcher put into use (SPSS) Statistical package for social and management science in analysing the attainable data during the course of research. F-test is the proposed model to be used in analyzing the attainable data,
Anova is used to assess whether the expected values of a quantitative variable within several pre-determined groups differ from each other.

\[ F = \frac{\text{Explained variance}}{\text{Unexplained variance}} \]

4. ANALYSIS AND DISCUSSION

4.1 Test of Research Hypotheses:

Having given a careful analysis of the data obtained from the Annual report and accounts of Securities and Exchange Commission, PZ Cussons Plc, May & Baker Plc, Nigeria Bottling Companies Plc, UAC Plc and Unilever Plc the hypotheses earlier formulated in the first chapter of this study will now be tested and the results fully discussed below. In all, there are two hypotheses, which are to be tested, and in doing so, SPSS version 17.0, specifically regression, is employed, with a value of 0.05 (level of significance) that corresponds to a 95% confidence level. Therefore, all tables presented are SPSS analysis outputs.

**Hypothesis One:**

\( H_0: \) There is no significant relationship between marketing expenses and profitability of the firm.

The linear Regression analyzed through SPSS is presented below: Regression

**PZ CUSSONS PLC**

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Model Summary^b

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
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<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
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^a. Predictors: (Constant), Turnover/Revenue

^b. Dependent Variable: Profit after Tax

Source: Field Study 2014
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**MAY & BAKER PLC**

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Model Summary^b

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</table>

^a. Predictors: (Constant), Turnover/Revenue

^b. Dependent Variable: Profit after Tax

Source: Field Study 2014
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**NIGERIA BOTTLING COMPANY**

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Model Summary^b

<table>
<thead>
<tr>
<th>Model</th>
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^a. Predictors: (Constant), Turnover/Revenue

^b. Dependent Variable: Profit after Tax

Source: Field Study 2014
UAC NIGERIA PLC

Model Summary

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</table>

a. Predictors: (Constant), Turnover/Revenue
b. Dependent Variable: Profit after Tax

Source: Field Study 2014

UNILEVER GROUP

Model Summary

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a. Predictors: (Constant), Turnover/Revenue
b. Dependent Variable: Profit after Tax

Source: Field Study 2014

PZ CUSSONS INDUSTRY-

\[ Y = -178.708 + 2.374x \]

MAY & BAKER PLC-

\[ Y = 131596.527 - 0.02x \]

NIGERIA BOTTLING COMPANY-

\[ Y = 1159784.628 - 0.019x \]

UAC NIGERIA PLC-

\[ Y = 2565114.472 - 0.003x \]

UNILEVER GROUP-

\[ Y = 1061.924 + 0.079x \]

The results of the Regression show that at the 5% level of significance, only the coefficients of the intercept and Turnover/Revenue are statistically significant. The analysis of the coefficients of multiple determinations (R^2) which measures the goodness of fit of a model revealed R^2 of about 0.807, 0.602, 0.316, 0.501 and 0.591 respectively which implies that 80.7%, 60.2%, 31.6%, 50.1% and 59.1% of the systematic variations in the Profit after Tax are being explained by the variations in Turnover/Revenue.

Also, the Analysis of the T-Statistics (T-TEST) which is expressed as the ratio of estimated parameter to its standard error was used to test for the individual significance of individual estimated parameters. The model is statistically significant given the F-value computed is 8.375, 5.003, 6.550, 6.120 and 2.891 respectively which is greater than 2.82 from the F-table. The Durbin-Watson statistics revealed 1.653, 2.994, 3.159, 3.352 and 1.874 respectively which is approximately the criteria of 2.0 and it can be deduced that there is an absence of serial correlation between the variables observed for this study.

DECISION:

F_{cal} 8.375, 5.003, 6.550, 6.120 and 2.891 respectively > F_{tab} 2.82, we therefore reject H_0 and therefore there is a significant relationship between marketing expenses and profitability of the firm. Alternatively, the level of significance 0.05 is greater than the asymptotic significance value (P-value) of 0.030, 0.037, 0.008, 0.016 and 0.005 respectively we therefore reject H_0 and accept H_1 that there is a significant relationship between marketing expenses and profitability of the firm.

Hypothesis Two

H_0: There is no significant relationship between turnover and marketing expenses of the firm.

Regression
PZ CUSSONS PLC

Model Summary

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MAY & BAKER PLC

Model Summary

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NIGERIA BOTTLING COMPANY

Model Summary

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UAC NIGERIA PLC

Model Summary

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UNILEVER GROUP

Model Summary

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a. Predictors: (Constant), Turnover/Revenue, Inventory
b. Dependent Variable: Profit after Tax
Source: Field Study 2014

PZ CUSSONS INUDSTRY- Y = 26.547 – 0.84 x1 + 1.711x2
MAY & BAKER PLC- Y = 339993.589 – 0.272 x1 + 0.024x2
NIGERIA BOTTLING COMPANY- Y = -3855616.390+ 2.095 x1- 0.188x2
UAC NIGERIA PLC- Y = 1.36407 – 0.254 x1 - 0.060x2
UNILEVER GROUP- Y = 276.529+ 0.171 x1- 0.080x2

The results of the Regression show that at the 5% level of significance, only the coefficients of the intercept and Turnover/Revenue and Inventory are statistically significant. The analysis of the coefficients of multiple determinations (R^2) which measures the goodness of fit of a model revealed R^2 of about 0.974, 0.821, 0.729, 0.533 and 0.593 respectively which implies that 907.4%, 82.1%, 72.9%, 53.3% and 59.3% of the systematic variations in the Profit after Tax are being explained by the variations in Turnover/Revenue and Inventory.

Also, the Analysis of the T-Statistics (T-TEST) which is expressed as the ratio of estimated parameter to its standard error was used to test for the individual significance of individual estimated parameters. The model is statistically significant.
given the F-value computed is 18.949, 2.901, 11.343, 7.077 and 7.728 respectively which is greater than 2.82 from the F-table. The Durbin-Watson statistics revealed 2.116, 2.944, 2.535, 3.007 and 1.840 respectively which is approximately the criteria of 2.0 and it can be deduced that there is an absence of serial correlation between the variables observed for this study.

**DECISION:**

$F_{cal} 18.949, 2.901, 11.343, 7.077$ and $7.728$ respectively $> F_{tab} 2.82$, we therefore reject $H_0$ and therefore there is a significant relationship between turnover and marketing expenses of the firm.

Alternatively, the level of significance 0.05 is greater than the Asymptotic significance value (P-value) of 0.016, 0.023, 0.021, 0.031 and 0.038 respectively we therefore reject $H_0$ and therefore there is a significant relationship between turnover and marketing expenses of the firm.

**Hypothesis Three**

$H_0$: There is no significant relationship between inventory and profitability of the firm.

**Regression**

**PZ CUSSONS PLC**

Model Summary

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**MAY & BAKER PLC**

Model Summary

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**NIGERIA BOTTLING COMPANY**

Model Summary

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**UAC NIGERIA PLC**

Model Summary

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**UNILEVER GROUP**

Model Summary

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a. Predictors: (Constant), Inventory
b. Dependent Variable: Profit after Tax

**Source:** Field Study 2014

**PZ CUSSONS INDUSTRY**

$Y = 299.284– 1.443 x_1$

**MAY & BAKER PLC**

$Y = 392767.246– 0.218 x_1$
NIGERIA BOTTLING COMPANY -
\[ Y = 453328.483 + 0.227 x_1 \]

UAC NIGERIA PLC -
\[ Y = 6703745.099 - 0.145 x_1 \]

UNILEVER GROUP -
\[ Y = 5051.329 - 0.041 x_1 \]

The results of the Regression show that at the 5% level of significance, only the coefficients of the intercept and Inventory are statistically significant. The analysis of the coefficients of multiple determinations \((R^2)\) which measures the goodness of fit of a model revealed \(R^2\) of about 0.670, 0.672, 0.313, 0.704 and 0.501 respectively which implies that 67.0%, 67.2%, 31.3%, 70.4% and 50.1% of the systematic variations in the Profit after Tax are being explained by the variations in Inventory.

Also, the analysis of the T-Statistics (T-TEST) which is expressed as the ratio of estimated parameter to its standard error was used to test for the individual significance of individual estimated parameters. The model is statistically significant given the F-value computed is 4.058, 4.088, 5.910, 4.159 and 4.000 respectively which is greater than 2.82 from the F-table. The Durbin-Watson statistics revealed 2.216, 2.633, 3.312, 2.965 and 2.702 respectively which is approximately the criteria of 2.0 and it can be deduced that there is an absence of serial correlation between the variables observed for this study.

**DECISION:**

\( F_{c.4.058, 4.088, 5.910, 4.159 and 4.000} > F_{tab} 2.82 \), we therefore reject \( H_o \) and therefore there is a significant relationship between inventory and profitability of the firm.

Alternatively, the level of significance 0.05 is greater than the Asymptotic significance value \((P-value)\) of 0.030, 0.037, 0.008, 0.016 and 0.005 respectively we therefore reject \( H_o \) and therefore there is a significant relationship between inventory and profitability of the firm.

**5. CONCLUSION AND RECOMMENDATIONS**

**5.1 Conclusion:**

The study examined the issue of “examine the effect of advertising on sales and profit of the company (Nigeria Bottling Company Lagos, UAC Lagos, PZ Lagos, May & Baker Lagos and Unilever Group Lagos)”. From the data and information collected scientifically tested and analyzed in the course of the research the following conclusions can be deduced from the study that there is a significant relationship between marketing expenses and profitability of the firm. There is a significant relationship between turnover and marketing expenses of the firm. Also, there is a significant relationship between inventory and profitability of the firm.

**5.2 Recommendations:**

Based on the valid conclusions reached the following recommendations if implemented faithfully would assist in meeting the objectives set for the research. It will improve the advertising in Nigeria, such that; The advertising and personnel department should maintain an effective medium of advertising in consideration of cost and quality. There should proper advertising mechanism that will foster the reputation of the company as well as the products. Organizations should use the best medium of advertising that will create easy awareness of usage of products. Organization should ensure that ways of determining the profit generated via effective advertising.

**REFERENCES**


