

The Association between Advertising and Sales Volume: A Case Study of Nigerian Bottling Company Plc

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Abstract

Advertising is a form of communication that attempts to interpret the qualities of products, services and ideas in terms of consumer needs and wants. Some companies or organizations embrace advertising to achieve goodwill, high market share and sales. This research work is on the impact of advertising on sales volume with particular reference to Nigerian Bottling Company. The objective of the study is to examine the impact of advertising as a tool for growth in the company's sales, market share and profitability. It also seeks to study the nature of advertising as well as the relationship between advertising and sales. The statistical analytical techniques used for this study include student 't' test and ordinary least square regression method. The secondary data were collected from the company's annual financial records and account for eleven years covering 1999 - 2009. The major result showed that there is a significant relationship between advertising and the sales of the company. The study also showed that there is a significant improvement in the sales of the company as a result of advertising. It was recommended that organizations should educate the general public through advertising on the uses, functions and benefits of their products.

Keywords: advertising, sales volume, market share, communication, association

INTRODUCTION

Various writers have viewed advertising from different perspectives. Advertising is a tool of marketing for communicating ideas and information about goods and services to an identified group, which employs paid space or time in the media or uses another communication vehicle to carry its message. It openly identifies the advertiser and his relationship to the sales effort (Wanoff, 1997). Advertising can also be defined as any paid form of non-personal communication about an organization, product, service or idea by an identified sponsor (Bennet, 2006). Advertising is any paid message presented through various media, such as television, radio, magazines, newspaper, or billboards by an identified source.

Advertising is a non-personal communication paid for by an identified sponsor who is relayed through various media with the aim of influencing people's behavior towards the advertiser's products and services at the lowest possible cost. (APCON, 2002). Frank (2005) defined advertising as the aim to persuade people to buy. Advertising as the dissemination of information concerning an idea, service or product to compel action in accordance with the intent of the advertiser. Advertising is a controlled identifiable information and persuasion by means of mass communication media (Borden, 2007). Advertising is the non-personal communication of marketing-related information in a target audience, usually paid for by in order to reach the specific

objectives of the sponsor. (Bennett, 2006). Advertising is a message paid for by an identified sponsor and delivered through some medium of mass communication. It is not neutral, it is not unbiased; it says: 'I am going to sell you a product or an idea'. (Russell, Russell and Lane 2006). Going by the various definitions considered above, advertising is an indicator of the growth, betterment and perfection of the business environment. Not only does advertising mirror the business environment, it also affects and gets affected by our style of life. It is not at all surprising that advertising is one of the most closely scrutinized of all business institutions. In today's environment, advertisers are closely examined by the target audience for whom the advertisement is meant for in the society. (Kazmi, 2005). Modern advertising is largely a product of the twentieth century, however, communication has been a part of the selling process ever since the exchange of goods between people started. (Kazmi, 2005)

Historically, maximizing performance has largely been an exercise in uncertain intuition and gut feel' for marketers, especially when they are under mounting pressure to account for their actions and spending. While advertising may have several objectives, ultimately marketing and business executors want to know, "how advertising has contributed to sales and ultimately to the company's bottom line?" understanding and quantifying the benefits of

advertising is a problem as old as advertising itself. The problem stems from the many purposes advertising serves; building awareness of products, creating brand equity and generating sales. Each of these objectives are not easily measured or related to the advertising that may have affected it. There has been an explosion in media alternatives from the traditional standbys of television, radio and prints into a broader spectrum of both offline and online options, with the internet clearly being the most visible example of this change. The choices within each medium have also expanded in an attempt to reach more targeted audience. Television, for example, has burgeoned from three primary networks to literally dozens of mainstream cable channels, all capable of reaching large audiences with brand messages or product promotions. Hundreds of new magazines now serve many special interest groups; whole web advertising presses the edge of one-to-one marketing. In addition, more and more companies are using integrated multi-media strategies to reach their desired audience, layering broadcast advertising over dried response campaigns or combining online with offline campaigns. All of this is making it harder to separate out the individual influences of each advertising effort. Consequently, most companies are no longer satisfied relying solely on traditional methods of measuring advertising effectiveness, namely awareness surveys and tracking studies. Hence they want more precise and concrete evidence to prove that their marketing investment is paying off. It is one thing to know how memorable an advert might be or how potential customers feel about a company or its products, but it is quite another to quantify the sales and profitability impact that advertising might produce. The defiantly means that measuring these effects may involve training advertising's stimulus through a behavioral chain of events that may eventually culminate in a sales long after the advertising has been delivered.

Furthermore, companies today are in a more competitive and faster-paced environment than were before, accelerating the need to understand the consequences of their marketing efforts. Marketers simply do not have the luxury any more to rest on their laurels or to assess how a set of campaigns performed months after they have been concluded. The marketplace is evolving so rapidly in many cases that knowing what's working and what's not almost as fast as it is happening has great value. For these reasons, marketers have begun to seek new and effective measurement tools to help them estimate the impacts of their advertising mostly on sales volume.

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

Nature of Advertising

Advertising is much more complex than could be really imagined. Placing cause and effect is much more difficult in advertising than in the physical

science. This is because it is not easy to control the various factors that could be regarded as contributory in an advertising environment. For instance, a company cannot categorically claim that a particular advertising campaign was solely responsible for recorded increase in its sales at the end of the campaign. Other unrecognizable factors like higher income for potential customers, reduction problems of competitors, improved customer relation of distributors and retailers and other unnoticeable factors apart from the campaign may be responsible for the company's improved sales. It is also difficult to classify advertising as either an art or a science. Neither practitioner nor academicians have ever agreed on an answer. This is because advertising has a bit of both. In general, creative people regard advertising as an art and themselves and artistes who through their creative ability device effective ways of communicating advertising ideas that will persuade potential customers to use a product, service or an idea.

However, people who work in the area of advertising as part of marketing mix often emphasize the science of advertising. This is because they see advertising as part of a mixture of elements combined in a marketing plan to achieve an effect. This, of course looks quite scientific. Whether we emphasized the art or science of advertising, we must concede the fact that like many other fields of social endeavour, advertising is becoming more and more measurable and scientific source. But because it deals with people and its main products are artistic expressions of human creativity, it will never be an exact science but a social science. (Frank , 2005)

THE ROLE OF ADVERTISING

The main role of advertising is to make known the availability of a product or science to sell. In addition to this however, advertising performs some other useful and important roles in every society. (Sandage and Rotzoll 2001) stated that advertising plays the following roles:

Provision of Employment Opportunities

The advertising business is such a lucrative one that very many people are employed in the sector as specialists and non-specialists.

Creation of Standards through Competition

Advertising message often extol the good qualities of products or service. For consumers to continue to buy these product or service, manufactures or organization are compelled to adhere to the advertised qualities, for if they allow the qualities to drop, consumers will buy less of their products or services and patronize their competitors instead. This thus ensures that manufactures and organization do not allow the quality of their products or service to fall below a standard that is acceptable to consumers.

Improvement of Living Standard

Many things that make life easier and more pleasant like radio, television, fan, video, computer, and motor cars and so on are not necessities but comforts. The comparative inexpensiveness of these products are made feasible through mass demand, a “by-product” of mass awareness created by advertising. This evidently shows the link between advertising and standard of living in a society.

Provision of Entertainment and Relaxation

Many advertising companies especially broadcast media advertisement present their messages with humor and thus provide entertainment and relaxation for the audience. The presence of some characters in advertorial prints is geared towards providing entertainment and relaxation for the audience without the message being lost or submerged.

Aesthetic Role

The billboards on our roads and neon sign advertising displays on high-rise building play an aesthetic role and without them in our stadia and such other public areas, they will look bare and unattractive. This is why it could be rightly said that advertising plays an aesthetic role in the society.

SCOPE OF ADVERTISING

The scope of advertising anywhere could be measured in terms of the volume of money involved in the advertising business, the number of personnel in the industry, the standard of professional practice, the sophistication of equivalent and material use in advertising practice and other numerical parameters (Sandage, 1999). The statistics for the amount of money involved in the advertising business in Nigeria may not be easily obtainable but a good idea could be gotten by considering the following parameters:

- ❖ Amounts realized by the broadcasting media from commercials annually.
- ❖ Amounts realized by the print media from advertising annually.(the print media solely depends on revenue from advertising for survival)
- ❖ The number of advertising agencies and agents in the country. The presence of many agents is an indication of the profitability of the advertising business.
- ❖ The number of billboards on our roads and the cost of mounting them up.
- ❖ The amounts expended on producing advertorial publications for both the print and electronic media.
- ❖ The volume of remunerations paid to personnel in the advertising business could be appreciated by considering the various organizations who handle or use advertising and employ advertising practitioners and allied workers on full time or part time basis. Such organizations include

advertising agencies, the mass media and advertisers.

All over the world, advertising has ceased to be an all comers job. Even though there are still quacks in the profession like in all professions, that standard of advertising professional practice in Nigeria is currently highly demanded. To qualify as an Advertising practitioner, one must go through specified academic learning in higher institutions or pass the professional examinations conducted by the Advertising Practitioners council of Nigeria (APCON). Also establishing an advertising agency involves a rigorous process, which requires that a qualified advertising practitioner is at the helm of its affairs (or employing one to be in charge). An advertising agency must also at all times comply with the code of ethics and professional practice prescribed by both APCON and Association of Advertising Agencies of Nigeria (AAAN). This depicts that advertising has crossed the threshold from being a mere activity to a highly recognized profession. Like all frontline professions, advertising is really taking advantage of technological advancement by improving its outlook in all spheres. Sky signs, product display on the side of high-rise buildings, interest advertising and other forms of hi-tech advertisements that are very common these days are indications of the level of sophistication in the advertising business. The use of computers in copywriting, layout and designs and even the print production processes are also part of sophistication in advertising. Looking at all the parameters discussed above in relation to other factors; it is obvious that the scope of advertising business in the world and even in Nigeria is advancing at a level that is very substantial.

Advertising Environment or Issues

Advertising is one of the most visible activities of business and it does not operate in a vacuum. By informing, persuading and reminding consumers to use their products or services, companies risk public criticism and attack if their advertising is offensive to the audience or if the advertised products or services do not perform as promised. The opinion of people about advertising is divided.

Economic Issues

Advertising sets off a chain reaction of economic events. Why do consumers prefer advertised brands as compared to unadvertised brands in the same product category? Not necessarily because advertised brands are superior but because advertising can add value to a brand in the consumer's mind. The famous psychologist, Ernest Ditcher, known as the father of motivational research, has stressed that a products image created in part by advertising and promotion, is an inherent feature of the product itself. It has also been shown that while an advert may not speak directly about a product's quality, the image created by advertising may imply quality and make the product

more desirable by adding value to it. Advertising also adds value by educating consumers about their option of choosing their desired value in the products or services they buy. If the price is more important to consumers, they have options of buying less expensive alternatives. Many of our wants are emotional, social, or psychological in nature rather than purely functional. Advertising also offers consumers the opportunity to satisfy their psychic or symbolic needs and wants through products or service that they use.

Advertising contributes to the self-interest of both consumers and advertisers by adding value to products and services in a free-market system. Furthermore, it encourages competition which adds to serve the consumer's self-interest. Note that there are several costs involved in doing business, and advertising is one of them. Most retail advertising prominently focuses on price and tends to hold price down. Manufactures advertising usually focuses more on product features, benefits or image in an attempt to convince consumers that the product is better. In this instance, advertising tends to support higher prices. Economists are critical of advertising because it creates a barrier to entry of smaller firms which have fewer resources, and cannot match the power of large firms with huge advertising budgets. High costs may inhibit their entry and brands of large firms could benefit greatly from this barrier. This results in less competition and consequently higher prices (Bennett, 2006)

Social Issues

The source of controversy over advertising stems from the way it is used by advertisers. In accomplishing the sales or communication objectives of marketers, advertising influences social values, life styles and society's tastes. Advertising is criticized for being untruthful and deceptive, offensive and in bad taste and it is said to also exploit valuable groups. It is generally agreed that advertising exerts a powerful social influence and is criticized for encouraging materialism in society. Advertising is blamed for manipulating consumers to buy things for which they have no real need, depicting stereotypes and controlling the media. Materialism is the tendency to accord undue importance to material interests and this tendency, perhaps, lessens the importance of freedom, love and intellectual pursuits of society; which are non-material. People from many countries and cultures believe that materialism tends to be negatively related to happiness and hence is considered undesirable. Many people wonder whether advertising encourages materialism or merely reflects values and attitudes that develop as a consequence of more important sociological forces. There is no doubt that advertising and the advertised products are a part of our culture and influence it in some way, however advertising cannot be said to have the power to dominate the forces of religion, family, literature, etc, that contribute to the values of society. There seems to be little

support for the view that advertising is a pervasive force in altering consumer spending. Level of income seems to determine the pattern of consumption, which in turn influences the intensity of advertising. In most societies, material possession are considered as an evidence of success and many argue that an emphasis on material possessions does not mean disinterest in intellectual, spiritual or cultural values. Consumers, whose basic needs have been fulfilled, can be interested in fulfilling higher-order needs. For instance, a consumer may buy an expensive music system to really enjoy music rather than simply acquire a material possession to impress someone.

Ethical Issues

Ethics are moral principles and values that govern the actions and decisions of an individual or group. Many laws and regulations are forces that determine what is permissible in advertising. However, not every issue is controlled by rules. Marketers are often faced with decisions regarding the appropriateness of their actions which are based on ethical considerations rather than what are within the law or industry guidelines. There is a considerable overlap between what many consider to be ethical issues in advertising and the issues of manipulation, taste and the effects of advertising on values and lifestyles certainly may be within the law but still unethical. Advertising is a highly visible business activity and any lapse in ethical standards can often be risky for the company. Consumer protection groups question the sponsorship and support of sports events by companies selling alcoholic beverages or tobacco products. (Lwin, 2006)

ADVERTISING AND SALES RELATIONSHIP

The relationship between advertising and sales has been the topic of lots research and discussions designed to determine the shape of the response curve. Almost all advertisers subscribe to one of two models of the advertising/ sales response function.

The Concave Downward Function

After reviewing more than 100 studies of the effects of advertising on sales, Julian Simon and Johan Arndt concluded that the effects of advertising budgets follow the microeconomic law of diminishing returns. That is, as the amount of advertising increases, its incremental value decreases. The logic is that those with the greatest potential to buy will likely act on the first (or earliest) exposures, while those less likely to buy are not likely to change as a result of the advertising. For those who may be potential buyers, each additional advert will supply little or no new information that will affect their decision. Thus, according to the concave-downward function model, the effect of advertising quickly begins to diminish. Budgeting under this model suggests that fewer advertising naira may be needed to create the optimal influence on sales.

CONCAVE-DOWNWARD RESPONSE CURVE.

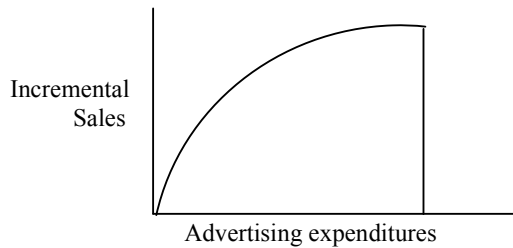


Figure 1:- The concave downward response curve. Source: George E. Belch (2003)

The S-Shaped Response Function

Many advertising managers assume the s-shaped response curve (as shown below), which projects an s-shaped response function to the budget outlay (again measured in sales). Initial outlays of the advertising budget have little impact (as indicated by the essentially flat sales curve in range A). After a certain budget level has been reached (the beginning of range B), advertising and promotional efforts begin to have an effect, as additional increments of expenditures result in increased sales. This incremental gain continues only to a point, however because at the beginning of range C additional expenditures begin to return little or nothing in the way of sales. This model suggests a small advertising budget is likely to have no impact beyond the sales that may have been generated through other means (for example, word of mouth). At the other extreme, more does not necessarily mean better: Additional naira's spent beyond range B have no additional impact on sales and for the most part can be considered wasted. As with marginal analysis, one would attempt to operate at that point on the curve in area B where the maximum return for the money is attained.

THE S-SHAPED RESPONSE FUNCTION

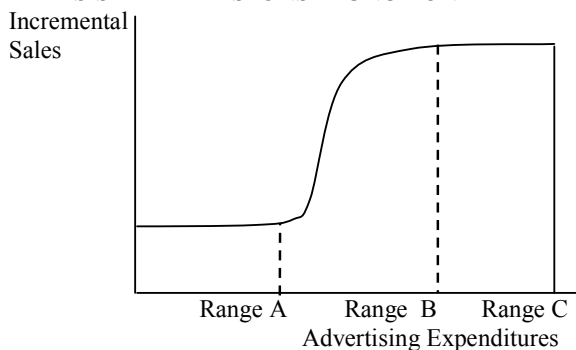


Figure 2:- The S shaped response curve. Source: George E. Belch (2003)

METHODOLOGY AND ANALYSIS

Data used for this was collected from the company's financial reports and accounts. This is in terms of sales and advertising cost. The student 't' test was used to test hypothesis 1 because it assists us to determine whether sales volume improved in the

company due to advertising. The linear regression using ordinary least square was used to test hypothesis 2 because it helps us to determine whether there is any relationship between advertising and sales volume. A period of eleven years was adopted for this study ranging from 1999-2009. The analysis was done with the aid of statistical package for social sciences (SPSS).

DATA PRESENTATION AND ANALYSIS

Data collection from annual reports and accounts regarding sales and advertising cost were used to test the two hypotheses formulated for this study.

Table 1 : Annual Reports & Accounts

YEAR	SALES (#)	ADVERT (#)
1999	20 333 072	7 116 575
2000	20 608 901	7 213 115
2001	34 943 856	5 760 879
2002	41 169 789	6 604 512
2003	43 900 832	7 616 548
2004	49 672 368	12 879 345
2005	55 444 504	14 970 016
2006	59 674 516	20 886 081
2007	68 529 128	23 985 195
2008	80 080 688	14 602 803
2009	90 195 981	16 144 048

Annual Reports & Accounts (1999-2009)

TESTING OF HYPOTHESIS

Two hypotheses were tested in the course of this study.

Hypothesis 1

There is no significant improvement in sales of the company as a result advertising.

Hypothesis 2

There is no significant relationship between advertising and sales of the company.

DISCUSSION OF FINDINGS

The data on sales and advertising cost is used in testing this hypothesis by computing the t-value using statistical package for social sciences as stated below. Based on the hypothesis set which was to examine the improvement in sales as a result of advertising. Based on the result from the analysis examined, the result from the table showed that the t-value in the upper limit shows a value of approximately 6.967. This result showed that the value of t-tabulated was less than the calculated value of t-falls in the rejection area at 95% level of significance then the Null hypothesis that there is no significant improvement sales as a result of advertising is rejected. Hence, H₁ is accepted which states that there is a significant improvement in sales of the company as a result of advertising. Based on hypothesis 2 which was formed in order to determine if there exist a significant relationship between advertising and sales of the company. A linear regression using ordinary least square was used. The result confirmed that a

positive and significant relationship existed between advertising and sales. The positive relationship showed that an increase in advertising can lead to an increase in sales. Based on the result however, it is clear that advertisement was significant. This shows that advertisement is significant in explaining sales.

The result from R-square showed that sales in the company is explained by about 52% of advertising and it was confirmed by the adjusted R-square of about 46%.

Dependent Variable: SALES
 Method: Least Squares
 Date: 06/27/10 Time: 18:49
 Sample(adjusted): 1999 2008
 Included observations: 10 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	14516685	11822346	1.227902	0.2544
ADVERT	2.555931	0.868672	2.942342	0.0186
R-squared	0.519732	Mean dependent var		45605765
Adjusted R-squared	0.459699	S.D. dependent var		22815571
S.E. of regression	16770626	Akaike info criterion		36.28501
Sum squared resid	2.25E+15	Schwarz criterion		36.34553
Log likelihood	-179.4251	F-statistic		8.657377
Durbin-Watson stat	0.941950	Prob(F-statistic)		0.018643

CONCLUSION

Experience has shown that for any organization to succeed or grow and at the same time keep abreast with the rapid changes in today’s business and technological environment, the laws of success must be observed and obeyed as a guiding principle. Otherwise, failure will subsist. Advertising policy is one of the inevitable laws of success in an organization. It is a truism that success or otherwise of any company lies in its ability to evolve the right strategies at the right time. Right strategies at wrong time can spell doom for an organization. Even the right strategies and right timing are not sufficient, the implementation, evaluation and monitoring of the strategies are germane to the success of the company. Advertising is one of these strategies. From the analysis and the findings, it is crystal clear that there is improvement in the sales of the company as a result of advertising. Not only that, the second hypothesis proves that relationship existed between advertising and the sales of the company.

industry management and companies with similar characteristics and Nigerian managers in respect of advertising. As a result of long term benefit of advertising on the economy, the Federal Government should compel all companies operating in the nation to educate consumers and the general public about advertisement of their products.

The company should embark on companywide awareness of advertising through seminar and workshops to educate and intimate all categories of the employees on the strategy. Top management should be involved in the continuous evaluation and monitoring of advertising to ensure that the goals and objectives set are achieved and appropriate corrective actions are taken in the event of deficiencies. The company should harmonize all departments so as to realize the goals and objectives of advertising.

There is no doubt that as the products is sold, the overall organization’s performance and/or productivity also increases. This study has therefore confirmed the contribution of Jefkins (1995) who defines advertising as the aim to persuade people to buy and also the works of Kazmi (2005) who believes that modern advertising is largely a product of the twentieth century, however, communication has been an art of selling process ever since the exchange of goods between people started. All the advertisers should therefore ensure that advertising strategies are successful.

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RECOMMENDATIONS

Based on the findings, we hereby make the following recommendations to the Government, the soft-drink

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