

PERCEPTION OF INTERNET USERS ON DATA DRIVEN ADVERTISING AMONGST STUDENTS IN THE NIGERIA MARITIME UNIVERSITY OKERENKOKO, DELTA STATE

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ABSTRACT

Due to the emergence of the more efficient contemporary technologies and techniques, advertisement has evidenced swift advancement over the years. Among such changes is online data driven advertising. Numerous marketers and businesses are shifting focus to online advertisement as a result of the emergence of information technology and internet availability. Information and communication technology is a tool which fine-tunes communication in various ways in the society including online advertisement. In view of this, the study sought to examine the perception of internet users towards data driven advertisements and how such perceptions influence their purchase-behaviour. To achieve this objective, a survey was conducted among students in the Nigeria Maritime University, Okerenkoko, Delta State, to represent the population of internet users. A total of 248 of these respondents were conveniently sampled for the study. Additionally, businesses prefer online advertisement to traditional forms of advertising due to; cost, wide coverage, the interactive nature of online advertisements which is more appealing to the younger population. However, the extents to which these data driven advertisements affect the purchase behaviour of consumers have not been extensively explored. When a user visits a website, the pages they visit, the amount of time they view each page, the links they click on, the searches they make and the items that they interact with, permit user-data collection. Information and communication technology is now a compound topic, it entails the use of different gadgets which enhance communication in several ways, gadgets such as computer, mobile phone, satellite communication, multi-media equipment etc.

Keyword: Data-Driven, Advertising, Social Media, Information and Communication Technology.

1. INTRODUCTION

It is the millennium of bliss and drastic economic process within the world; the developments in communication technology have expanded the scope of communication through information and communication technology applications (ICT). Unequivocally, modern technologies in communication have transformed our world into a "Global Village". This transformation has assisted us dead knowledge acquisition; it's obvious that the

emergence of contemporary systems has brought connectivity and general enlightenment. Internet technology and general connectivity over the years have developed thanks to the expansion in technologies like computers, mobile phones, satellite communication, media equipment etc. Computers and mobile phones have made it possible to focus on advertising accurately to specific consumer groups by using consumer information to tailor the content of advertisements that suit the changing need of consumers.

Internet Advertising Bureau (2009), defined Advertising as a sort of communication will not encourage, persuade, or manipulate an audience (viewers, readers or listeners; sometimes a particular group) to require or still take some action. Most ordinarily, the specified result's to drive consumer behaviour with regard to an ad offering, although political and ideological advertising is additionally common. Data-Driven Advertising for internet users is that the simplified resource on how their data is employed to serve advertisements to their web browsers either as pop-ups or by other means, where that data comes from, and the way it moves through the ecosystem has been a severe issue of consideration by many computer/internet users and various researches are meted out on this material.

Briggs and Hollis (1997), stated that some quarters have advocated that creating use of consumers' data helps them reach their goals, consumers get the foremost from their online experiences and more profit is generated for the advertiser. This newly found targeting ability is formed possible because of the immense amount of user-generated data that flows through the web, especially on social networks and also the sheer amount of individuals using these platforms per time in line with social media week. However, it absolutely was discovered that as of January 2014 about 74% of all internet users use social networks. Many questions bear the minds of internet users on why he/she is seeing the advertisement while he has not given a command that might warrant that to the pc. Internet users also wonder how the advertisers know what they like, thereby leaving them thinking on. Targeted advertising happens permanently reasons in most cases, some online advertisers have explained how data is employed to create the online more relevant to its users and it will even be for mutual benefit (Gonzales, 2013).

When a consumer visits an internet site, the pages they visit, the number of your time they view each page, the links they click on, the searches they create and therefore the things that they interact with, allow sites to gather that data, and other factors, create a 'profile' that links to it visitor's applications programme. As a result, site publishers can use this data to make defined audience segments supported visitors with similar profiles. When these visitors return to a selected site or a network of web sites using the identical applications programme, those profiles may be accustomed allow advertisers to position their online ads to those visitors who exhibit a greater level of interest and intent for the products and services being offered.

Lester (2013), explains that advertisers may additionally deliver adverts supported a user's suspected geography through geo-targeting. A user's IP address communicates some geographic information (at minimum, the user's country or general region). The geographic information from an IP is supplemented and refined with other proxies or information to narrow the range of possible locations. For instance, with mobile devices, advertisers can sometimes use a phone's GPS receiver or the placement of nearby mobile towers. Cookies and other persistent data on a user's machine may provide help narrowing a user's location further (Patrutiu-Baltes, 2016).

2. ADVERTISING AND ONLINE ADVERTISING

2.1 Advertising

Advertising has been defined in diverse ways. According to the definition given by Kotler and Keller (2001), it is defined as any paid form of non-personal presentation and promotion of ideas, goods or services by an identified sponsor. Though advertising has been criticized from different quarters, it remains one of the most important means of disseminating information about products and services (Akaka, et al. 2010). Various authors have argued that advertising has lost its relevance because its value is easily been overlooked by individuals. According to Spangenberg (2005), "the increasing estrangement of consumers due to advertisement clutter and rising advertising cost; impact of attitude towards advertisement on feat of advertising is of key importance of marketers". One important question that has baffled the minds of many is the effect of advertising on individuals and group. The answer to this question can only be found through another question and that is, why do persons read or watch advertisements and how do they practice it?

Various reasons have been assigned for why individuals use advertising. The reason why people use advertising can be categorized into three in literature. The first is information seeking. The second is entertainment, while the third is societal communication (Delvin et al. 2007; Gordon, 2006). Advertisement helps individuals to gain information about a product or service. According to Devendra (2010), information seeking involves an attempt to gain information with the view of bridging a knowledge gap. In the view of Bates (2002), those who seek information do so to bridge a knowledge gap. The author describes various ways of seeking information such as monitoring, searching, browsing and observation. Because information is used by individuals to make informed decisions, high value is attached to information that is accurate, accessible, updated and reliable.

2.2 Online/Web Advertising

Online advertisement has become an important means of disseminating information about a product or service to intended audience. These are usually commercial contents delivered in the form of audio, video or print. According to Ducoffee, (1996), online advertisement in its broad form ranges from e-mail, text-based hyperlinks to authorized websites, logos, banners, and pop-up messages. In the view of Bakshi and Gupta (2013) online advertisement involves delivering advertisements to Internet or online users through Web sites, e-mail, ad-supported software and Internet-supported smart phones. According to Aziz and Ariffin (2010), web advertisements are commercial contents which are usually paid for by businesses and organization who want their products/services to be known by others. According to the authors, online advertisement is usually delivered through audio, print and video.

The purpose of the internet ads is to inform users on the wide range of products and services on offer. Examples of online advertising include contextual advertisements on search engine result pages, banner advertisements, rich media advertisements, social web advertising, interstitial advertisements, online classified advertising, advertising networks and e-mail marketing, including e-mail spam. Online ads may be classified into floating ads, expanding ads, pop-ups, wallpaper ads, trick banner, pop- under, among others (Bakshi & Gupta, 2013).

Research suggests that that online advertisement is gaining ground in various parts of the world compared to other traditional ways of advertising. According to Kotler and Keller (2009), over 52 percent of Europeans access the internet from their homes, over 36 percent of internet users have reduced their television viewing and newspaper reading, while 17 percent have reduced their radio monitoring since going online. This result clearly shows that online advertisement can be the best source of information to sizeable number of people. This is because with the emergence of smart phones, many people can access the internet from different places. As a result of the resurgence of online advertisement, traditional broadcast and print media are faced with the challenge of effectively competing in the media front for advertisers. According to Hanafizadeh, et. al. (2012), advertisers and marketers are now shifting their attention to online advertisement because of its resurgence.

Available data indicates that internet advertisement has witnessed increased substantial amount of revenue growth since its establishment in the 1990s (Hollis, 2005). Internet advertisement can take diverse forms. The main forms of online advertising include banner and rich media advertisement and search advertisement. A report delivered by the Internet Advertising Bureau (IAB) in conjunction with PricewaterhouseCoopers in 2009 shows that, online advertising traders were reported to have a cumulated turnover of \$23.5 billion in the year 2008 as compared to \$21.2 billion for the year 2007. Furthermore, the third quarter of 2002, turnover has increased 22 out of the past 25 consecutive quarters, which shows a clear rising pattern and increasing significance for the field. The increasing pattern of advertising proceeds is clearly illustrated in the revenue diagram of Figure 2.1, which has been adapted from (IAB, 2009).

2.3 Forms of Online Advertising

Online advertisement can take various forms. For the purposes of this study, floating ads, pop-up ads and banner ads are examined. According to Bakshi and Gupta, (2013), "A floating ad is a type of rich media Web ad that appears uninitiated, superimposed over a user-requested page, and disappears or becomes unobtrusive after a

specific time period (usually 5-30 seconds)". The most common floating ad merely shows on the net page, the entire display or in a small rectangular window. They may or not provide a means for escape, such as a close button. More refined versions can come in any shape or size and include sound, animation, and interactive components.

Pop-ups are adverts that show up in a detached window on the top of the content a user is viewing. Usually, the pop-up ad remains on the screen until the user decides to close it. A pop-up ad appears on a separate small window at the top of a visitor's screen when navigating from one Web page to another. It is usually intrusive because it interrupts with the visitor's Web navigation (Cho and Cheon, 2004) especially when the material displayed does not match a visitor's interest. The annoyance factor combined with the availability of the software to block pop-ups means that their use is not increasing, and the share of pop-ups is a little over 5 to 7 percent of the total BA market (Koegel, 2004). Cho, et al (2001) has observed that pop-up ads have become common as a result of users' friendly attitude towards it. The authors observe that pop-up ads command higher purchase motive than standard banner adverts. Moreover, Edwards et al. (2002) explain that pop-up adverts are acknowledged as annoying and frustrating. The reason why people have negative attitudes towards pop-up is that they interrupt the web activities of users. For instance, in a study by GartnerG2 (2002), it was observed that in relation to other forms of online advertisement, pop-up ads are regarded by consumers as the most annoying. From an advertiser's point of view, moreover, frustrating ads are sometimes little beneficial. A number of Internet advertisers uses pop-up adverts for the reason of the "in your face" impact they have (Dillabough, 2002).

Moreover, most online service providers including EarthLink and America Online have lately answered to customers complaints about pop-ups by using new software that permits users to block pop-up adverts (America Online, 2003). Pop-up ads are being made less annoying by advertisers. One method is to use it in circumstances where users are probable to be online for diversion or to avoid boredom rather than where they are focused on a specific goal. Alternative scheme to decrease the level of irritation is to increase the cost of pop-up adverts. Edwards et al. (2002) established that, when pop-up adverts give value to consumers, they are regarded as less annoying.

Banner ads may be categorized into static animated, dynamic and rotated. A static banner ad does not move or change its contents with every loading page and includes only one GIF or JPEG image file (Hussain & Fenech, 2004). It is described as passive for the reason that it does not disturb visitors' Web activity (Chatterjee et al., 2003). On the other hand, animated banner ad comprises many GIF or JPEG files that are displayed in fast sequence to create animation effects (Hussain & Fenech, 2004). By definition, "animation is a process of generating and presenting the illusion of movement by manipulating, successively and at a certain rate. According to Diao and Sundar (2004), animated banner ads are preferred by online advertisers because of its success in getting attention and creating awareness.

A dynamic ad consists of audio, video, Java, and Macromedia Flash and perhaps other components that make the advertisements more like TV commercials. With the increasing availability of broadband that enables dynamic BAs and the additional dimension of interactivity, it is expected that dynamic BAs will become the standard of Web advertising in the future. A rotated BA is made up of a collection of advertisements shown in different sequences in a single presentation (Hussain & Fenech, 2004). That is, a new BA appears after a pre-specified time and different advertising messages can be conveyed to visitors during a single visit. These messages can be either from one or a number of different advertisers.

2.4 Social Media

Needless to say, social media has made significant inroads in various aspects of our social lives. To comprehend social media, Web 2.0 must first be defined. Web 2.0 is defined as a word that explains a new technique in which end users apply the World Wide Web, a location where content is constantly rehabilitated by all operators in a sharing and collaborative way (Kaplan & Haenlein 2010). "It has much to do with what individuals do a technology than the technology itself, for rather than just recovering information, users now create and consume it, and hence improves the websites that permit them to do so" (Campbell et al. 2011). The use of Web 2.0 has transformed from

basic information retrieval to interactivity, interoperability, and collaboration (Campbell et al. 2011). Kaplan and Haenlein (2010) define social media as “a collection of Internet based applications that build on the conceptual and technical foundations of Web 2.0, and allow the creation and exchange of user generated content”.

2.6 Perception

Perception is defined as a process through which individuals are exposed to information, attend to the information, and comprehend the information (Mowen, 1995). Understanding perception and the factors determining how consumers view products and services is central to effective marketing (Berkman, et. al, 1996). Schiffman and Kanuk (1994) stated about consumer perception saying “as diverse individuals, we all tend to see the world in our own special ways. “Reality” to an individual is merely that individual's perception of what is "out there" - of what has taken place. Individuals act and react on the basis of their perceptions, not on the basis of objective reality. Thus, to the marketer, consumers' perceptions are much more important than their knowledge of objective reality. For if one thinks about it, it's not what actually is so, but what consumers think is so that affects their actions, their buying habits, their leisure habits, and so forth. And because individuals make decisions and take actions based on what they perceive to be reality, it is important that marketers understand the whole notion of perception and its related concepts so they can more readily determine what factors influence consumer to buy.”

2.7 Consumer Attitude towards Online Advertisement

Studies have shown that an individual's behavior including like or dislike of an item or idea is an important factor of that individual's intents and reaction. According to Chen and Wells (1999), “attitude toward advertising is described as an individual's inclination to respond positively or negatively to advertisement”. To this end, the construct has been measured in numerous techniques, and researches have established at an individual's attitude toward advertising considerably influences that person's behavioral outlook (MacKenzie et al., 1986). As it is explained by Heinonen (2011), it is essential for traders to know the issues that affect customer attitudes and intentions because customers are progressively developing content about brands, something formerly controlled only by businesses. Due to that, research has been piloted to examine the aspects of social media sites that affect customer behavior and intentions (Azeem & Haq, 2012). For instance, in a study conducted by Chu (2011), the author observed the relationship between Facebook brands related group participation, advertising responses, and the psychological factors of self-disclosure and attitudes among members and non- members of Facebook groups. The study strong-minded that users who are members of groups on Facebook are more likely to unveil their personal data than nonmembers is.

In the study by Cox (2010) examined the relationship between age and attitude and found that social network user attitude toward online advertising formats (i.e. blogs, video, and brand channel or page) diverged to some extent across age groups. She explains that users within the age range of 18-28 had strong positive behavior towards blogs, video, and brand channel ad formats. As a result of that, users found these advert formats to be appealing to the eye, educative, and entertaining. People within the age of 35-54 desire advertising presentations on video and brand channels because they perceived it to be appealing, educative, and had better location within the online page layout. Generally, online advertising presentations with positive attributes are received by users. The research shows that, ads that interfere with online social networking undertakings like pop up, expandable, or floating formatted ads were disliked by network users (Cox, 2010).

The attitude towards advertising is a key model as it deals with the general attitude towards the broad institution of advertising and can stimulus the way a consumer reacts to any advertising (Mehta 2000, El-Adly 2010). According to Pollay and Mittal (1993), a person's attitude towards advertising is influenced by the person's experiences and belief constructs of the individual about the product information, perceived intrusiveness, entertainment, and perceived credibility.

2.8 Informativeness (Quality of Information)

As indicated by Dutta-Bergman (2006), the main aim of advertising is to be able to properly inform customers/consumers. The quality of information contained in an online advertisement may affect the perception of consumers towards the company and its products/services. Thus, the information provided through advertising must be quality in nature, accurate, timely, and useful for the user (Siau & Shen, 2003). Moreover, the consumer must have easy and fast access to the information he/she is craving for. The message also needs to be tailored to the interest and needs of the user. For instance, e-mail advertising needs to deliver messages that meet the needs of the user. Failure to do this will mean that the user will reject the message and give no attention to it. Information is therefore important and valuable incentives in online marketing since users generally react in a positive way to ads that are informative (Varshney, 2003). Needless to say, advertising information has been found to have a strong relationship with advising value. According to Akihiro et al. (2007), in the view of the information and credibility associated with advertising have the highest effect on the attitude of consumers with regards to advertising and suggest that sellers should do more on its features to improve helpful advertising attitude.

2.9 Consumer-Perceived Intrusiveness

One major criticism against online advertisement is the nature of its intrusiveness. Though all forms of advertisement are seen as intrusive, pop-up advertisement is seen as more intrusive and obstructive. According to Li et al. (2002), is a psychological reaction to ads that interfere with a consumer's ongoing cognitive processes. However, research shows that advertisement values restrain the effects of supposed intrusiveness (Dutta-Bergman, 2006). In addition, perceived intrusiveness is postulated to be a direct originator of advert annoyance and evasion, which lead to undesirable attitudes toward advertising (Cho & Cheon, 2004; Edwards et al., 2002).

Some studies have established that perceived intrusiveness has a negative influence on a person's experience by interfering with the individual's privacy and reasoning processes (Cho & Cheon, 2004; Li et al., 2002). Advertisers sometimes argue that advertisement in nature is not a cause of interference. In the view of Dutta-Bergman (2006), the main point of advertising depends on its capacity to educate users. As an alternative, advertisement is regarded as intrusive if the individual thinks the demonstration of the advert interferes with his objectives (Edwards et al., 2002). Example, advertisements that create confusing might cause consumers' sense of intrusiveness. This is essential as this circumstance will create a kind of interruption to consumers because of unintended purposes. Consumers also becomes overwhelmed if advert is regarded as been long, loud, or too large (Bauer Greysen, 1968).

2.10 Entertainment

One attribute of advertising, especially online advertising is entertainment. According to Ducoffe (1995), entertainment accompanying advertising may have significant impact on audience. Hoffman and Novak (1996) believe that the pleasure obtained from advertising affects the purchase behaviour. In most cases, if people feel that there is enjoyment associated with the advertising, they feel attracted to it and this can enhance their attitude towards the product being advertised. For instance, some computer adverts provide some level of interaction and entertainment for the audience. In internet marketing, entertainment is extremely vital. When the information is concise, precise and hilarious, it captures the attention of consumers which may improve their attitude towards the product and its message (Katterbach, 2002). Studies on internet advertising suggest that entertainment associated with online advertising can add value to the customer and thereby improve his/her loyalty. It is an obvious fact that naturally people are playful and therefore games and prizes through the internet attract them to participate. Thus, providing games via internet advertising can prove to be a successful way of attracting and keeping customers. According to Lehmkuhl, (2003), the use of interactive games on the internet which involves customers makes their more familiar with product/service being advertised. Based on the above analysis, it can be concluded that advertising that is seen as highly entertaining is perceive more positively by users.

2.11 Perceived Credibility

It has been the subject of long discussion, as advertising is normally criticized for the eroding credibility, manipulation and promotion of materialism (Singh & Bamoriya, 2012). In the view of Brackett and Carr (2001), advertising credibility is critical for the success of online advertising. MacKenzie and Lutz (1989), defines advertising credibility as “consumers” opinion of the faithfulness and credibility of advertisement in general”, while Pavlou and Stewart (2000) refer to it as “predictability and fulfillment of implicit and explicit requirements of an agreement”. Credibility of an advertisement is influenced by different issues, more especially by the company’s credibility and the bearer of the message (Lafferty, Goldsmith and Newell, 2002). But it is also influenced by the advertising medium. There is no experiential proof on the general credibility of information transferred to mobile devices. Considering the outcomes cited above we conclude that the credibility of a mobile advertising message has a positive influence on consumers’ attitude toward advertising via mobile devices and on the perceived advertising value of the consumer.

2.12 The Attitude-Behaviour Relationship

The attitude-to-behaviour relationship is well-documented in the marketing literature (Bagozzi et al., 2000). The principle of Planned Behavior (Ajzen & Fishbein, 1991; Ajzen, 2006) assumed that the more favorable the attitude in reference to a behavior, the stronger will be a person’s intention to perform the behavior under consideration. A research by Wong and Tang (2008) revealed that consumers’ attitude towards mobile advertising became an important element that sways consumers’ intention to receive and read mobile advertisements. Purchase prediction has often been examined effectively within the framework of social psychological theory, the Theory of Reasoned Action (TRA). According to TRA, the best predictor of behaviour is behavioral intention, which is determined by two factors: attitude towards the behaviour and subjective norms (Fishbein & Ajzen, 1975). An attitude toward the behaviour is the overall evaluation of the behaviour and composed of the salient beliefs of the perceived likelihood of particular consequences of the behaviour occurring, weighted by an evaluation of the consequences (Ajzen, 2006). Subjective norm is the perceived social pressure to perform or not to perform the behaviour. The theory has been proved to be effective in several empirical studies in marketing under different circumstances. For instance, Xu, Summers, & Belleau (2004) investigated the impact of attitude on purchase intentions (PIs) for a controversial product, American alligator leather accessories, and found that attitude toward the American Alligator leather accessories was a significant determinant of PI. Furthermore, the theory has also been proven in the business-to-business context for agricultural products such as tractors (Celuch, et. al., 2005). In this research, the impact of attitude on PIs will also be investigated to see if the attitude behaviour consistency holds in the Web environment for a moderate-involvement product. Moreover, a study carried out by Tsang et al. (2004) discovered that consumers’ attitude considerably relates with their intention to receive mobile advertisement. The attitude towards advertisement plays a significant role towards their readiness to access the advertisement (Okazaki, 2004). In fact, the dimension of attitude showed the maximum degree of regression weight thus specifying that it was the most influential factor of consumers’ behavioral intention to click the advertisements (Okazaki, 2004).

2.13 Online Purchase Behaviour

Behaviour refers to the extent of conscious effort that an individual will follow to approve his/her behaviour, intention is also regarded as one of the motivational components of behaviour (Ajzen, 1991). Purchase behaviour will occur when an individual plan to buy a particular commodity or service in the future. In the context of E-Commerce, online purchase behaviour can be defined as a situation when a person desires to buy a particular product or service through the website (Chen, et. al., 2010; Fygenson & Pavlou, 2006). The previous research has indicated that perceived trust plays a vital role in E-Commerce due to the minimal face-to-face interaction between retailers and consumers in the online setting (Mohseni & Sreenivasan, 2014; Lee, et. al., 2011). Trust refers to the consumer perception towards online retailer’s behaviour based on their ability, kindness and honesty (McKnight &

Chervany, 2001; Guo, Wang, & Wang, 2012). Besides, security, reliability and privacy are testified as the main dimensions of online trust (Camp,2001).

In the E-Commerce environment, most consumers assume that large companies are more reliable and are able to influence their trust feeling and purchase behaviour via online (Koufaris & Sosa, 2004). Consumers „online purchase behaviour may increase when consumers think that their privacy information are protected and insured (Chui, et. al., 2005; Kim & Shim, 2002). As the online transaction is perceived to be riskier, the sense of trust can reduce the fear of uncertainty in online purchase, thus eliminate the psychological concern of customers about the e-retailers“ behaviour (Mohseni & Sreenivasan, 2014). The online merchants should focus on having long- term relationship with their customers by delivering trust and transparency value. In other words, consumers would tend to engage in online purchase behaviour if they perceive the online merchant is trustworthy and confident towards the process of online transaction. Therefore, the first hypothesis is developed to test whether university students possess trust that positively influences purchase behaviour.

2.14 Impact of Advert on Purchase Behaviour

Consumers buying behavior has always been given so much importance and space in the literature study of impact of advertising regarding its effectiveness (Ajzen, 2002). Most of the time consumers buying behavior is influenced by liking or disliking of consumer towards the advertisement of the product, advertised (Smith et al., 2002). Likewise, Allen. et al., (1992) argue that it is actually the emotional reaction which is developed after the advertising, for the product advertised, that influences the consumer behavior. In the words of Gorn, 1982, the consumer behavior towards a product is totally depending on advertising, without any assessment of the quality of the product. Furthermore, Controversies over the impact of advertising on the consumer’s buying trends and habits has always been present (George, 1989). Sometimes the advertisers over exaggerate about the product’s benefits in such a tactful manner that consumer goes psychologically under the pressure of advertising persuasiveness and intentionally decides to buy the advertised product (Smith et al., 2006). In the point of view of some people, now most of the consumers avoid the advertisement, because they consider the advertisement, just annoying and misleading (Bishop, 1997). Advertisements have been attacked on psychological, sociological, aesthetic and political grounds. From the point of view of a common lay man, what is the purpose of advertising? Some critics even criticize and consider advertising very harmful to the collective behaviors of the society (Barbara, J. P 1997). But defenders of advertising always give a strong argument in its favor that basic aim of advertising is to sell the products, rather its effects on cultural values of the society (Gold, 1987). There is a general point of view of many societal members, that advertising may have a negative, unintended or intended influence on consumers“ buying trends (Burr and Burr 1977 and Verbeke, W. 1992). Actually, advertising has a strong potential on changing our social values, as well our buying behaviors through influencing our cultural values (Schudson, 1984). Specifically, advertising may lead a consumer to prefer material objects over more morally and socially oriented alternatives; it may potentially increase conflict and lead to an unhappier and a more disappointed person of the society (Goldberg and Gom 1978). While the major aim of advertising is to give something new, creative and useful to get long term benefits of brand loyalty and image building of the product and company by establishing an emotional relationship and persuasion for buying that product. This is also a debatable issue that which kind of impact of advertising effects the beliefs and collective attitudes of the consumer with respect to the buying behavior (Barbara, J. 1997). In the modern times, it’s really difficult to be successful in persuasion and to mould or effect the buying behavior of consumer in this era of tough competition (Robinson, 1997). With the success of advertising field, now it has been admitted as a universal factor that advertising plays a very influencing role in the consumers“ behaviors (Beil & Bridgewater, 1990).

If the consumers could understand the intention of advertisements, then the potential effect of advertising may be reduced. As the impact of television advertising allows consumers to use the cognitive defenses, such as to produce counter arguments and reasons (Bruck, A, and Goldberg 1988). Likewise, the recognition of the false psychological impact of advertisements, allows them to avoid advertisements or break by zapping to some other channel, as it has

always been shown that majority of viewers Zap at least as much during the advertising as they do during common programs (Heater & Greenberg 1985). For persuading and reaching to the consumer, advertising is considered the most effective and powerful source (Siropolis, 1997). Hence, whether or not impact of advertising on consumers buying trends is a very important issue to investigate, from the consumers or buyers' point of view.

Furthermore, from the advertiser point of view as it will alter the impact and effectiveness of their advertisements. Likewise, George (1989) stated that controversies over the effects of commercials have always been present. Advertising is accused of exploiting the feelings and building of personal anxieties, over emphasizing the material side of life and distortion of human and ethical values in children. At the same time, Aaker, Batra and Myers (1992) argued that advertising has negative impact on values and life Styles of society. While Bryant and Zelman (1994) stated that it is most probably safe to quote that early, advertisers were less concerned with Media choices and affects then they were with simply intending communication. Furthermore Kotwal et al. (2008) insists that television and advertising have proved a great combination together and are now considered as an essential part of modern world. Many research studies have proved that advertising play an important role in the introduction of a new product and help in the buying of a new product and further help in better choices of shopping of useful products. Majority of the viewers of television advertising say that advertising have always forces them to buy that particular product, about which they have watched in the advertisement. Due to the strong impact of advertising, it is the moral duty of advertisers to practice the code of ethics, during the promotion of their products. The purpose of advertising should be the guidance of consumer rather than blackmailing and threatening by pushing forcefully to buy that product. Proper and effective advertising always help the companies and marketers to improve their brand image and increase their share in the market (Ninan, 2008). Effective advertising is actually the other name of persuasion and liking or disliking attitude of consumer towards some particular product or advertising (Mehta, 2000; Stone et al., 2000). There are a number of factors in advertising which contribute a lot in changing the consumers' buying behavior. Like likeability, brand image, persuasiveness, celebrity endorsement, information about the product, entertainment etc.

While according to Halley & Baldinger, (1991) entertainment and information about some product, which are given in advertising, are one of the main reasons of likeability of the product advertised. Entertainment actually helps in involvement of the viewer in the advertisement and product and it is obvious that if the advertiser could be able to create a positive image of the product through entertainment and information, it could get the involvement of the viewer or consumer, rapidly (Mackenzie & Lutz, 1989) which in result affect the consumers' buying behavior. Some consumers give importance to the quality of the product while some consumers are just persuaded by the proper communication techniques and some impactful factors. This likeability which is created by the advertisers, through information and entertainment and involvement of the viewer is later becomes a solid reason of buying intention of the consumer (Smith et al, 2006). The liking and disliking for the advertised product really matter regarding the impact of advertising because it further lead to persuasion and intention of the consumer to buy that advertised product. Rather quality and price of the advertised product also considers very important in consumers buying behavior. After likeability, another major factor is persuasiveness which could be brought in the advertising, through creativeness, brand image and to some extent through the celebrity endorsement as well. Brand personality or celebrity endorsement is also considered as the key element of effective advertising (Aaker, 1996). Therefore, the most common way to build brand image through personality creation is actually the celebrity endorsement. Effective and ideal advertising is that which tries to produce the loyal customers, through the building of powerful brand image, strong persuasiveness and right celebrity endorsement in the advertisement. All these factors are the real contributors towards the impact of advertising on consumers buying behavior. Of course, in the presence of all this some other factors like price and quality of the product also affects the consumers buying behavior to some extent.

3 RESEARCH METHODOLOGY

3.1 Research settings

This study was carried out in Nigeria Maritime University, Okerenkoko, Delta State.

3.2 Sources of Data

The data for this study were generated from two main sources; Primary sources and secondary sources. The primary sources include questionnaire, interviews and observation. The secondary sources include journals, bulletins, textbooks and the internet.

3.3 Population of the study

A study population is a group of elements or individuals as the case may be, who share similar characteristics. These similar features can include location, gender, age, sex or specific interest. The emphasis on study population is that it constitutes of individuals or elements that are homogeneous in description (Prince Udoyen: 2019). In this study the study population constitute of all the students in Nigeria Maritime University, Okerenkoko, Delta State.

3.4 Sample size determination

A study sample is simply a systematic selected part of a population that infers its result on the population. In essence, it is that part of a whole that represents the whole and its members share characteristics in like similitude (Udoyen: 2019). In this study, According to Zikmund (1997), sampling is the process of using a small part of a larger population to make conclusions about the whole population. A sample could be probability or non-probability. In probability sampling, all elements within the population have equal chance of being selected to represent the population. However, in non-probability sampling the elements in the population do not have equal chance of being selected. In this research, a convenience sample of students was drawn, which refers to readily available elements of a population (Aaker et al., 2005). Students were prompted randomly at the two universities and those who expressed interest in the study were selected to be part of the sample.

Saunders et al. (2009) explains that unlike probability sampling where the sample size is a major issue, in non-probability sampling, there are no rules, and as a result, the sample size decision is dependent on the researcher's objectives and questions. Because of time and cost constraint the 300 respondents were chosen.

3.5 Instrumentation

This is a tool or method used in getting data from respondents. In this study, questionnaires and interview are research instruments used. Questionnaire is the main research instrument used for the study to gather necessary data from the sample respondents. The questionnaire is structured type and provides answers to the research questions and hypotheses therein.

This instrument is divided and limited into two sections; Section A and B. Section A deals with the personal data of the respondents while Section B contains research statement postulated in line with the research question and hypothesis in chapter one. Options or alternatives are provided for each respondent to pick or tick one of the options.

3.6 Reliability

The researcher initially used peers to check for consistence of results. The researcher also approached senior researchers in the field. The research supervisor played a pivotal role in ensuring that consistency of the results was enhanced. The instrument was also pilot tested.

3.7 Validity

Validity here refers to the degree of measurement to which an adopted research instrument or method represents in a reasonable and logical manner the reality of the study (Udoyen, 2019). Questionnaire items were developed from the reviewed literature. The researcher designed a questionnaire with items that were clear and used the language that was understood by all the participants. The questionnaires were given to the supervisor to check for errors and vagueness.

3.8 Method of Data Collection

The data for this study was obtained through the use of questionnaires administered to the study participants. Observation was another method through which data was also collected as well as interview. Oral questioning and clarification were made.

3.9 Method of Data Analysis

The study employed the simple percentage model in analyzing and interpreting the responses from the study participants.

4 DATA ANALYSIS AND DISCUSSION OF RESULT

In chapter three of this study, the methodology and sources of data were discussed. This chapter provides that analysis and discussion of the data obtained from the field. The analysis begins by examining descriptive statistics of the variables used. This is followed by the test of reliability and validity of the data. The test of reliability and validity is followed by the regression analysis and finally the result is discussed in relations to the objectives set. Out of the 300 questionnaires administered, 248 was answered which represent 82.7% response rate.

4.1 Characteristics of Respondents

The survey was distributed using questionnaires to postgraduate and undergraduate students of Nigeria Maritime University, Okerenkoko, Delta State. In all, a total of 300 questionnaires were sent out to respondents. From of this number, 248 respondents successfully completed and returned their questionnaires. This constitutes about 82.7 percent response rated. The age of the participants ranged from 15 years old to 35 years old, with 21-25 years old being the most common age group (85.9%). This survey generated 60.5% responses from male students, and 39.5% responses from female students. Majority of the respondents (66.9%) frequently access the internet at least once in a day. Table 4.1 presents a summary of the background of the respondents.

Table 4.1 Sample Characteristics (n=248)

Variable	Classification	No.	Percent (%)
Gender	Male	150	60.5
	Female	98	39.5
Age	15-20	111	44.8
	21-25	118	47.6
	26-35	19	7.7
Education	O'level degree	117	71.4
	OND degree	71	28.6
Frequency of internet access	At least once a day	166	66.9
	At least once a week	65	26.2
	At least once a fourth-night	12	4.8
	Rarely	4	1.6
Experience with social media platforms	Less than 6 months	24	9.7
	Between 6 months and 1 years	19	7.7
	More than 1 year to 3 years	82	33.1
	More than 3 years to 6 years	54	21.8
	More than 6 years	69	27.8

4.2 To what extent are Nigeria Maritime University, Okerenkoko, Delta State students' aware of data driven advertisement?

Are you aware of the data driven advertisement?

Option	Frequency	Percentage
Yes	211	85
No	37	15
Total	248	100

According to the table above 211(85%) of the total respondents are aware of data driven advertisement. While the remaining 37(15%) are aware of data driven advertisement. We can conclude that major of the respondent are aware of data driven advertisement.

4.3 To what extent is Nigeria Maritime University, Okerenkoko, Delta State students' perception of invasion of privacy reinforced by data driven advertising?

On a scale of 1 to 5 respondents were requested to describe the extent to which they agree or disagree with the following statements regarding the invasion of privacy reinforced by data driven advertising. Five (5) represents strong agreement whiles 1 represents strong disagreement.

Table 4.3 Descriptive Statistics regarding the invasion of privacy reinforced by data driven advertising

Statement	N	Mean	Std. Deviation
online ads interfering	248	3.0161	1.30390
online ads are disturbing	248	2.6935	1.31745
online ads are obstructive	248	2.8266	1.29706
online ads are intrusive	248	2.7298	1.26122
feel forced by online ads	248	2.2903	1.28065
online ads are annoying	248	2.5081	1.23705
Overall Mean		2.6774	

Scale (mean) 0 – 2.5 = low; 2.51 – 3.5 = Average and 3.51 and above

Source; Analysis of field Data,

To what extent are Nigeria Maritime University, Okerenkoko, Delta State students' knowledgeable about data driven advertising?

To what extent do you know about data driven advertising?

Options	Frequency	Percentage
Large extent	161	65
Low extent	62	25
No extent	25	10
Total	248	100

According to the table above, 161(65%) of the total respondents know about data driven advertising to large extent, 62(25%) of the respondents knows about data driven advertising to low extent. While 25(10%) knows about data driven advertising to no extent

Marketer and businesses are shifting focus to data driven advertisement due to the emergence of information technology and cheap access to the internet. Other reasons why marketers prefer online ads to traditional form of advertising include cost, wide coverage, the interactive nature of online ads and its appeals to the younger population. However, the extent to which these online advertisements affect the purchase behaviour of consumers" needs empirical research to understand. Against this backdrop, the study sought to examine the perception of internet users on data driven advertising amongst university students. The study sampled internet users from Nigeria Maritime University, Okerenkoko, Delta State to represent the population of online users. A total of 248 of these respondents were sampled for the study. Descriptive analysis and regression analysis were conducted to answer the research questions. The findings revealed that respondents generally have a positive perception about online advertising. For instance, the respondents described it as credible, less intrusive, informative and entertaining. The study further revealed that perception of users towards online ads significantly influences their purchase behaviour. The implication of these findings is that marketers and advertisers must take steps to design their online ads to attract consumers.

5 CONCLUSIONS

Marketer and businesses are shifting focus to data driven advertisement due to the emergence of information technology and cheap access to the internet. Other reasons why marketers prefer online ads to traditional form of advertising include cost, wide coverage, the interactive nature of online ads and its appeals to the younger population. However, the extent to which these online advertisements affect the purchase behaviour of consumers" needs empirical research to understand. Against this backdrop, the study sought to examine the perception of internet users on data driven advertising amongst university students. The study sampled internet users from Nigeria Maritime University, Okerenkoko, Delta State to represent the population of online users. A total of 248 of these respondents were sampled for the study. Descriptive analysis and regression analysis were conducted to answer the research questions. The findings revealed that respondents generally have a positive perception about online advertising. For instance, the respondents described it as credible, less intrusive, informative and entertaining. The study further revealed that perception of users towards online ads significantly influences their purchase behaviour. The implication of these findings is that marketers and advertisers must take steps to design their online ads to attract consumers.

REFERENCES

- [1]. Aizen, I., 2006. Theory of planned behaviour [Internet] Available from [http://www. people. umass. edu/aizen/tpb. diag. html](http://www.people.umass.edu/aizen/tpb.diag.html). Retrieved July, 18, p.2014.
- [2]. Ajzen, I., & Fishbein, M., 1991. Understanding attitudes and predicting social behavior. *Englewood cliffs*. Toronto, Ontario: Prentice-Hall
- [3]. Akaka, M.A. and Alden, D.L., 2010. Global brand positioning and perceptions: International advertising and global consumer culture. *International journal of Advertising*, 29(1), pp.37-56.
- [4]. America Online (Internet service launches new software that enables users to block pop-up ads), 2003. *Media week*, vol 13 No. 11, pp. 5.
- [5]. Azeem, A. and Haq, Z., 2012. Perception towards internet advertising: A study with reference to three different demographic groups. *Global Business and Management Research: An International Journal*, 4(1), pp.28-45.
- [6]. Aziz, N.A. and Ariffin, A.A.M., 2010. Exploring consumers attitude towards web advertising and its influence on web ad usage in Malaysia. *Jurnal Pengurusan*, 31(2010), pp.55-63.
- [7]. Bagozzi, R.P., Wong, N., Abe, S. and Bergami, M., 2000. Cultural and situational contingencies and the theory of reasoned action: Application to fast food restaurant consumption. *Journal of consumer psychology*, 9(2), pp.97-106.
- [8]. Bakshi, G. and Gupta, K., 2013. Online Advertising and its impact on customer buying behaviour". *IJRFM*, Vol 1 No3 pp. 21-30
- [9]. Bates, M.J., 2002. Toward an integrated model of information seeking and searching. *The New Review of Information Behaviour Research*, 3(1), pp.1-15.
- [10]. Berkman, H.W., Lindquist, J.D., Sirgy, M.J., 1997. *Consumer Behavior*. Lincolnwood: NTC Publishing Group.
- [11]. Briggs, R. and Hollis, N., 1997. Advertising on the web: Is there response before click-through?. *Journal of Advertising research*, 37(2), pp.33-46.
- [12]. Camp, L.J., 2001. *Trust and risk in Internet commerce*. MIT Press.

- [13]. Campbell, C., Pitt, L.F., Parent, M. and Berthon, P.R., 2011. Understanding consumer conversations around ads in a Web 2.0 world. *Journal of Advertising*, 40(1), pp.87-102.
- [14]. Celuch, K., Goodwin, S. and Taylor, S.A., 2007. Understanding small scale industrial user internet purchase and information management intentions: A test of two attitude models. *Industrial Marketing Management*, 36(1), pp.109-120.
- [15]. Chatterjee, P., Hoffman, D.L. and Novak, T.P., 2003. Modeling the clickstream: Implications for web-based advertising efforts. *Marketing Science*, 22(4), pp.520-541.
- [16]. Chen, Q. and Wells, W.D., 1999. Attitude toward the site. *Journal of advertising research*, 39(5), pp.27-38.
- [17]. Chen, Y.H., Hsu, I.C. and Lin, C.C., 2010. Website attributes that increase consumer purchase intention: A conjoint analysis. *Journal of business research*, 63(9-10), pp.1007-1014.
- [18]. Chiu, Y.B., Lin, C.P. and Tang, L.L., 2005. Gender differs: assessing a model of online purchase intentions in e-tail service. *International journal of service industry management*.
- [19]. Cho, C.H. and Cheon, H.J., 2004. "Why do people avoid advertising on the internet?" *Journal of advertising*, 33(4), pp.89-97.
- [20]. Cho, C.H., Lee, J.G. and Tharp, M., 2001. Different forced-exposure levels to banner advertisements. *Journal of advertising research*, 41(4), pp.45-56.
- [21]. Cox, S., 2010. Online social network member attitude toward online advertising formats.
- [22]. Devendra, K., 2010. An analytical study of information seeking-behaviour among agricultural scientists in Sardar Vallabhbhai Patel University of Agriculture and Technology. *International Journal of Library and Information Science*, 2(8), pp.164-168.
- [23]. Devlin, E., Eadie, D., Stead, M. and Evans, K., 2007. Comparative study of young people's response to anti-smoking messages. *International Journal of Advertising*, 26(1), pp.99-128.
- [24]. Dillabough, C., 2002. Industry must unite to stop growth of pop-up plague. Retrieved from <http://www.dealgroupmedia.com.au/news28.cfm>
- [25]. Ducoffe, R.H., 1995. How consumers assess the value of advertising. *Journal of current issues & research in advertising*, 17(1), pp.1-18.
- [26]. Ducoffe, R.H., 1996. Advertising value and advertising on the Web. *Journal of advertising research*, 36(5), pp.21-32.
- [27]. Dutta-Bergman, M.J., 2006. The demographic and psychographic antecedents of attitude toward advertising. *Journal of Advertising Research*, 46(1), pp.102-112.
- [28]. Edwards, S.M., Li, H. and Lee, J.H., 2002. Forced exposure and psychological reactance: Antecedents and consequences of the perceived intrusiveness of pop-up ads. *Journal of advertising*, 31(3), pp.83-95.
- [29]. Fishbein, M. and Ajzen, I., 1977. Belief, attitude, intention, and behavior: An introduction to theory and research. *Philosophy and Rhetoric*, 10(2).
- [30]. GartnerG2, 2002. Unpopular pop-ups won't stop.
- [31]. Gordon, W., 2006. What do consumers do emotionally with advertising?. *Journal of Advertising research*, 46(1), pp.2-10.

- [32]. Hanafizadeh, P., Ravasan, A.Z., Nabavi, A. and Mehrabioun, M., 2012. A literature review on the business impacts of social network sites. *International Journal of Virtual Communities and Social Networking (IJVCSN)*, 4(1), pp.46-60.
- [33]. Hollis, N., 2005. Ten years of learning on how online advertising builds brands. *Journal of advertising research*, 45(2), pp.255-268.
- [34]. Hussain, R. and Fenech, T., 2004. The typology of banner advertisement: a content analysis. In *Annual Meeting of the Western Business & Management Association, Las Vegas, Nevada*.
Internet Advertising Bureau, 2009. Internet Advertising Revenue Report: An Industry Survey Conducted by
- [35]. PricewaterhouseCoopers and Sponsored by the Interactive Advertising Bureau.
- [36]. Katterbach, W., 2002. Die SMS-verkäufer. *Impulse*, 1st February, pp. 76
- [37]. Kotler, P. and Keller, K.L., 2009. *Marketing management 13th ed.* New Jersey: Prentice Hall
- [38]. Lee, C.H., Eze, U.C. and Ndubisi, N.O., 2011. Analyzing key determinants of online repurchase intentions. *Asia Pacific Journal of Marketing and Logistics*, 23(2), pp.200-221.
- [39]. McKnight, D.H. and Chervany, N.L., 2001. What trust means in e-commerce customer relationships: An interdisciplinary conceptual typology. *International journal of electronic commerce*, 6(2), pp.35-59.
- [40]. Patrutiu-Baltes, L., 2016. Inbound Marketing-the most important digital marketing strategy. *Bulletin of the Transilvania University of Brasov. Economic Sciences. Series V*, 9(2), p.61.