

Digital Advertising and Consumer Buying Behaviour in Lagos State, Ojo Local Government Area

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ABSTRACT

This study examined the effects of digital marketing on consumer buying behaviour of Lagos State, Ojo local government area. As a result of the foregoing, this study will critically examine the use of digital advertising dimensions conceptualized as social media advertising, blogging advertising and search engine optimization on consumer purchasing behaviour in Nigeria's modernized environment (Lagos State). To assess the situation, this study uses social media advertising, blogging advertising, and search engine optimization as indicators for digital marketing. This study adopts a survey research design and multi-stage sampling techniques. To determine the sample size for an infinite population, one hundred and thirty-eight questionnaires were distributed to respondents, who are residents of the Ojo Local Government area. The data collected were analysed using a statistical package for social sciences and presented in descriptive statistics, Pearson correlation. The result showed that social media advertising has a positive and significant effect on consumer buying behaviour with a coefficient of determination ($R^2 = 0.309$) given as 30.9%. Blogging advertising accounts for a 59.1% variance in consumer buying behaviour. Search engine optimization has a significant effect on consumer buying behaviour with a coefficient of determination ($R^2 = 0.818$) given as 81.8%. therefore, digital advertising has a significant effect on customer buying behaviour in Lagos State and the study recommends among others that organizations should improve on their level of utilization of digital advertising to trigger positive consumer purchase behaviour.

Keywords: Digital Advertising, Social Media Advertising, Blogging Advertising, Search Engine Optimization, Consumer Buying Behaviour.

INTRODUCTION

Modern-day digital marketing is a vast network of channels into which marketers must simply integrate their brands; but digital advertising is far more sophisticated than the channels alone (McGruer, 2020). Marketers must go deep into today's huge and complicated cross-channel world to identify methods that create an effect via engagement marketing in order to realise the actual potential of digital marketing (Kumar & Kumar, 2020). The approach of building meaningful relationships with new and returning consumers based on the data collected over time is known as engagement marketing. By engaging customers in a digital environment, brand recognition may be increased, an establishment may be thought an industry leader and a company positioned at the top of the customer's minds when they are ready to buy (Gao, 2018).

According to Chukwu, Kanu, and Ezeabogu (2019), Advertising is a marketing tactic used to raise customer awareness of a product and encourage them to make a purchase. Marketers employ advertising, sales promotion, and public relations to reach their target audience. Advertising in the mass media has a long-term impact on audience attitudes, behaviour, and lifestyle, as well as on national culture (Latif & Abideen, 2011). To reach their target consumers and fight their own advertising "battle," advertisers and marketers have idealized conventional media until now (Otugo, Uzuegbunam, & Obikeze 2015).

Digital advertising, often known as online advertising, has become a multi-billion-dollar industry because of the widespread use of the Internet (Gao, 2018). Making an informed purchase choice easier than ever before, thanks to the power of digital advertising (Kautish, Paul & Sharma, 2021). The term "digital advertising" refers

to advertising that makes use of computer networks (McStay, 2016). Advertising in the digital era includes online, mobile, tablet, social, location, wearable, as well as other networked technologies that may be used to enhance advertising experiences. Durmaz (2011) defines digital advertising as the use of information and communication technologies (ICTs) to transmit an advertisement's message, and the sorts of ICTs used include television, radio, and the Internet. Mobile phones, tablets, laptops, and desktop computers that can connect to the internet carry advertising messages to the target audience. As a result of marketers paying for advertising space to be displayed on blogs and applications, this occurs when these gadgets are used (Durmaz, 2011).

The term consumer behaviour has been defined as the behaviour that consumers display in searching for, purchasing, using, evaluating and disposing of products and services that they expect will satisfy their needs (Kekhrietshunuo & RajKumar, 2017). Consumer behaviour is the study of how people make purchases and how they behave when they do so. It is possible to get insight into consumer behaviour by examining why people purchase products and services from the market and why they do not.

An individual's actions and choices in making a purchase are referred to as their "consumer buying behaviour." Customers' buying habits and product preferences are studied by businesses and marketers in order to better understand what drives a person's purchasing habits and product preferences (Oke, Kamolshotiros, Popoola, Ajagbe, & Olujobi, 2016). Increasingly, organizations need to do research into current consumer buying habits since customers are growing more powerful, more aware, and smarter. Promoting a better customer experience by delivering a better environment, product, service, and policy is critical for organizations looking to attract and keep customers today (Shende, 2014). Additionally, advertising produces messages that connect with people on an emotional level. Brand cueing and category-based processing can be triggered by positive emotional appeals, which are powerful brand cues (Abideen & Latif, 2011). The impact and ideas associated with this category in memory are communicated to the objective itself when categorization is successfully completed. When confronted with thousands of items, customers attempt to classify the brand linkage with their existing memories, which can lead to a repositioning of memories to a brand image and perception of new products. As a result, people will be able to organize their memories and save new information on a certain brand and location (Chukwu, Kanu & Ezeabogu, 2019). This study would integrate contrasting strands of literature in order to paint a holistic picture and postulate that digital advertising is multi-dimensional with social media advertising, blogging advertising and search engine optimization etc, being its three constituent dimensions. This research challenge, which has significant managerial implications in terms of the development of product configuration or product design capabilities and consumer purchase behaviour, has not received sufficient attention in the extant literature

Over the years, many companies have downplayed the importance of advertising in influencing customer behaviour and brand choice. For many corporations, promoting their product is expensive, yet they nevertheless maintain that sales are indifferent. In the opinion of Ambler (2000), advertising has a significant impact on both consumer consumption and sales. If done correctly and through the appropriate channel, advertisements may not result in large volumes of sales in the near term, but they will undoubtedly enhance sales and profits in the long term. Some firms do not place a high value on advertising their products, which can have a negative impact on their sales. Others employ a variety of advertising mediums to reach their intended audience, including television, the internet (Facebook and email), newspapers, billboards, and magazines. Advertisement is the primary means by which companies market their products and services. These types of marketing tactics have an effect on the purchasing decisions of their target audience (Abideen & Latiff, 2011).

Statement of the Problem

Digital advertising is crucial for businesses, particularly for start-ups who are still trying to get their products on the market. This will enable businesses to acquire devoted customers, stay at the forefront of customers' minds, and generate steady revenue. Realizing this, digital advertising has emerged as one of the fastest and most efficient ways to market a company's product or service globally at a relatively low cost compared to traditional media. This is because digital marketing makes use of electronic devices such as computers, smartphones, and tablets to interact with and align with consumers, Wind and Mahajan (2001) as cited in Uloko and Elijah (2021) said it is not simply a faster or newer channel It is a unique marketing strategy.

Previous empirical studies on the effect of digital advertising on consumer buying behaviour are mixed and inconclusive. Studies by Tahir (2021) and Ugonna, Okolo, Nebo, and Ojieze (2017) found significant effects. Tahir (2021), studied only one component of brand management namely the digital payment method for firms in India. He discovered that customers prefer to make use of purchases online because they feel more secure doing so.

In the Nigerian context, Udegbe, Ogundipe, Akintola and Kareem (2012), explored the role of communications on firm performance. A gap clearly exists in the sense that there is no integrated approach to the study of digital advertising when it is a multidimensional concept (social media advertising, blogging advertising and search engine optimization) which is a gap which must be closed. Despite the value of digital marketing to an organization's success, it still has drawbacks as a result of some customers' skepticism about the perceived ease of use and usefulness of this channel in comparison to traditional channels of product management and purchase satisfaction.

The use of digital marketing is frequently hampered by problems with trust. It has also been stated that the channel mostly caters to young people who are more technically minded than their elder counterparts, leaving a huge number of generations untapped for this type of electronic product advertising. Making significant strides in the organization's capacity to promote its products online to prospective customers requires managers to be able to anticipate how customer behaviours will change in response to the perceived usefulness and simplicity of use of this channel. This has been one of the biggest problems for digital advertising in terms of consumer behaviour in the research sector. The integration of the concepts and their testing is, therefore, needful to guide practitioners and managers in their quest for being sustainably competitive. Additionally, the research conducted did not feature telecom consumers in Lagos state, Nigeria and hence there is room to contribute to the body of knowledge of corporate branding by developing a comprehensive conceptual framework for digital advertising. As a result of the foregoing, this study will critically examine the use of digital advertising dimensions conceptualized as social media advertising, blogging advertising and search engine optimization on consumer purchasing behaviour in Nigeria's modernized environment (Lagos State).

Objective of the Study

The main objective of the study is to establish the effect of digital advertising on consumer buying behaviour in Lagos State, Nigeria. The specific objectives are to;

1. determine the relationship between social media advertising and consumer buying behaviour
2. examine the relationship between blogging advertising on consumer buying behaviour
3. investigate the relationship between Search Engine Optimization on consumer buying behaviour

Research Questions

1. What effect does social media advertising have on consumer buying behaviour?
2. What relationship exists between blogging advertising on consumer buying behaviour?
3. What is the effect of search engine optimization on consumer buying behaviour?

Hypotheses of the Study

1. Social media does not have any significant effect on consumer buying behaviour
2. There exists no significant relationship between blogging advertising on consumer buying behaviour
3. Search engine optimization has no significant effect on consumer buying behaviour

LITERATURE REVIEW

This section reviews the literature on the variables of the study which are digital advertising and consumer buying behaviour. The section also highlights and reviews the literature on the indicators used to access the dependent and independent variables. This indicator includes social media advertising, blogging advertising

and search engine optimization. The review of the literature is discussed under the sub-heading, conceptual review, theoretical framework and empirical studies.

Advertising

In the marketing mix, advertising is part of the promotion mix, which includes product, price, venue, and promotion (Goi, 2009). Advertising is a marketing tactic that helps consumers make purchase decisions by promoting a product's awareness in their thoughts (Latif & Abideen, 2011). Marketers take advantage of advertising as a means of communication because it has the power to influence customers' decisions (Latif & Abideen, 2011). Advertising has an impact on people's views, actions, and way of life; it is one of the most important means of communication between the product's manufacturer and its end user. In order for a company's product to become well-known, they must spend money on marketing and advertising (Hussein et al, 2008).

Advertising was characterized by Arens (1996) as a communication process, marketing process, economic process, social process, public relations process or an information and persuasion process. Dunn and Barban (1987) described advertising as a paid, non-personal communication through various media by corporate corporations, non-profit organizations and individuals who are in some way recognized in the advertising message and who want to enlighten and convince members of a certain audience. Zainul-Abideen (2012) believed that advertising message is to develop a fundamental awareness of the product or service in the mind of the potential consumer and to build up information about it. Advertising as a promotional approach is a vital instrument in developing product awareness and conditioning the thinking of a potential buyer to decide eventually on what to buy (Ayanwale et al, 2005; Adelear, Chang, Lanchndorfer, Lee & Morimoto, 2003). Advertising is a non-personal and paid method where ideas, concepts, products or services and information are pushed through media by a specified behaviour (Ayanwale et al, 2005). Advertising through television permits the message of advertising to reach a wide range of audiences or customers and is one of the greatest advertising mediums, especially for goods and services, organizations, concepts etc.

Social Media Advertising

Today, owing to the rising utilization of information and communication technologies (ICTs), social media has penetrated society and become an integral part of everyone's life. As social media permeates the everyday routine of everyone, not only the researchers pay significant attention to the issue, but also practitioners make use of multiple chances of social media. It is believed that the digital advertising market consists of five primary segments: search advertising, social media advertising, banner advertising, video advertising and classifieds (Statista, 2020b). According to this report, the social media advertising market is the second biggest market within digital advertising with revenues of USD 97.7 billion worldwide which accounted for 27.5 per cent of the total digital advertising market in 2020; and it is estimated that the worldwide revenue will increase to USD 138.4 billion in 2025 (Statista, 2020b).

"A series of Internet-based apps that build on the ideological and technological underpinnings of Web 2.0, and that allow the creation and sharing of user-generated content" is how Kaplan and Haenlein (2010) characterized social media in their research. They categorized social media into six categories: collaborative projects, blogs and microblogs, content communities (such as YouTube), social networking sites (such as Facebook), virtual game worlds (such as Warcraft,) and virtual social worlds (such as World of Warcraft) (e.g. Second Life). The distinguishing elements of social media are involvement, openness, dialogue and community, Mayfield (2008) concluded.

Felix et al. (2017) described social media marketing as an interdisciplinary and cross-functional concept that utilizes social media (typically in tandem with other communications channels) to achieve organizational objectives by producing value for stakeholders. "A company's process of producing and promoting online marketing-related activities that deliver value to its stakeholders" is how Pham and Gammoh (2015) described social media marketing. Social media marketing can be defined as the process of companies creating and communicating via social media platforms in order to build and maintain stakeholder relationships that enhance stakeholders' value by facilitating interaction, information sharing, offering personalized purchase

recommendations, as well as the creation of word of mouth about existing and trending products and services (Yadav & Rahman, 2017a). In addition, Pham and Gammoh (2015) asserted that the four elements of social media marketing strategy are variety, diversity, intensity, and connectedness.

Blogging Advertising

As a cornerstone of a digital marketing plan, blogging is an ever-evolving platform that is frequently used by businesses of all sizes. Blogs are used to achieve business goals such as brand exposure, lead generation, sales, and brand preference in the marketing world (Chaffey, 2020). Some 60% of marketers said content marketing was "very essential" or "very important," yet just 24% of marketers expect to increase their investment in content marketing for the rest of 2020, according to a survey by HubSpot (2020).

As a postmodern phenomenon, bloggers' impact on customers has been studied in the literature. Social recommendations account for 26% of purchases across all product categories, according to McKinsey & Company research (Bughin, 2015). An influencer marketing strategy involves a company engaging in an organic engagement with an influential person in order to establish a long-term, real relationship (Smart Insights, 2017). As a consequence, influencers appear more authentic, relevant, and trustworthy when they promote a company they believe in. Tactical use of social media influencers by brands for product promotion and reviews (Evans, Phua, Lim, & Jun, 2017).

Blogs have transformed how products and services are advertised. Bloggers were able to earn money from blogging as advertisers realized the breadth of bloggers' audience and the potential for reaching new ones via the use of blog advertising (Rettberg, 2013). The dynamic of blogging and advertising has shifted as a result of this growth. Blogs were no longer perceived as a place to promote banner and display adverts (Baltas, 2003), but as thought leaders (Hsu, Chuan-Chuan & Chiang, 2013; Uzunolu & Kip, 2014). As a result, paid sponsorships have been introduced, bloggers provide product endorsements and evaluations, and because they are often perceived as consumers or experts, they gain the confidence of their readers (Alsaleh, 2017). As a result of their suggestions and opinions, bloggers now have the capacity to influence purchases (Hsu, Chuan-Chuan, & Chiang, 2013). The fast expansion of blogs, according to Mutum and Wang (2011), has transformed the marketing and advertising business. Among academics and industry specialists, this assertion appears to be widely accepted as true

Search Engine Optimization

According to Google's Search Engine Optimization Starter Guide (2010), Search Engine Optimization (SEO) is a series of modifications and techniques, which make it easier for search engines to crawl, index, and understand the content of a website. Generally, SEO is divided into two groups: On-page (modifying the structure of a website) and Off-page (techniques independent of the website's structure).

According to Zillican (2015), SEO is an important part of inbound marketing, i.e. marketing focused on being found by customers. That is the biggest difference compared to traditional outbound marketing, wherein the process of attracting a customer works in the opposite direction, and companies focus on finding new customers themselves. Outbound marketing uses techniques that are not easily targetable and often interrupt people, i.e., cold calling, print advertising, TV advertising, junk mail, spam, or trade shows (Burnes, 2008). Research showed that 86% of people skip through television commercials, and 44% of direct mail is never opened (Nakano, 2011).

Consumer Buying Behaviour

Consumer buying behaviour refers to people's decisions about what things and services to buy and how to use them in order to meet their needs and preferences (Schifman & Kanuk, 2009). As part of the trade process, this involves shopping and other consumption-related activities. Individuals and groups select, acquire, use and discard products, services, ideas or experiences to meet their wants and desires (Solomon & Bamossy, 2016). The American Marketing Association (AMA) defines consumer behaviour as the dynamic interaction of cognition, behaviour and environmental events by which human beings conduct the exchange aspect of their

lives with various social and psychological variables at play Kekhrietshunuo and RajKumar, (2017). For the purposes of this study, consumer behaviour refers to what people buy, why they buy it, when they buy it, where they buy it, how often they buy it, how often they use it, how they assess it after they buy it, the influence of that evaluation on future purchases, and how they dispose of it.

Economic factors such as income and expenditure patterns, the price of items, the price of complementary products, replacement goods, and the elasticity of demand all have an impact on consumer purchasing behaviour (Abraham, 1997; Kotler; Weng, Sanders & Armstrong 2001). Psychological factors such as perception, attitude, and knowledge all play a role (Kotler et al, 2001). As a result of societal and cultural variables, individuals' purchasing decisions are altered, but the type of goods they choose to purchase is determined (Perault, Jerome, & Mccarthy (2005; Arnould, Thompson, Perault, Jerome, & Mccarthy, 2005)

Conceptual Framework

This study aims to explore and develop links between Digital advertising and the consequences on consumer buying behaviour. This research shows that the way digital advertising deal with the use and procurement of the product may be fundamentally different.

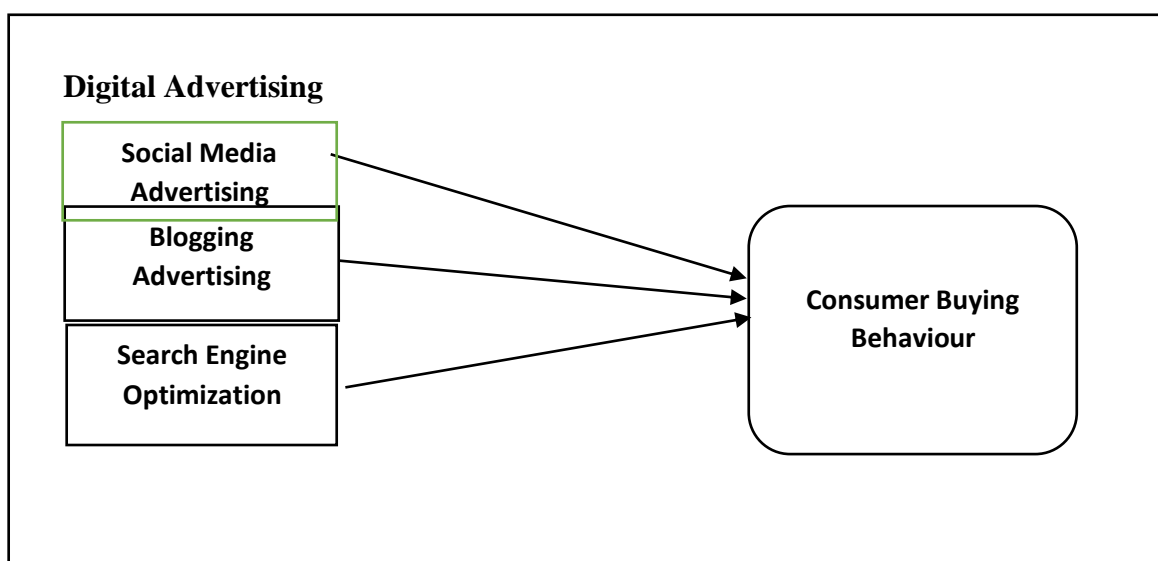


Figure 1 Conceptual Model of Digital Advertising and Consumer Buying Behaviour

Source: Researcher (2022)

Theoretical Review

Technological Acceptance Model

Fred Davis established the Technological Acceptance Model (TAM) in 1986 and it is specially designed to model the acceptance of information systems by their users. The Theory of Reasoned Action (TRA) developed by Davis in 1989 is the basis for TAM (Davis, Bagozzi, & Warshaw, 1989). It's one of the best ways to track how much time people spend on computers, both in the workplace and in academia. The goal of TAM is not only to anticipate but also to explain why a certain system may be unsatisfactory so that researchers and practitioners may take necessary action. TAM sheds light on how people learn to adopt a new piece of technology. Many factors influence when and how users will make use of new technology, according to this model. When it comes to assessing the perceived value of a product or service, this includes its Perceived Ease Of Use (PEOU) (Al-Rahimi, Othman & Musa, 2013).

According to Davis and Venkatesh (1996), the degree to which an individual feels that employing a given technology would improve his or her job performance is referred to as perceived usefulness. It is possible to

define perceived ease of use as the degree to which a user expects the system to require little effort on their part.

TAM has a few flaws, despite its widespread use. To the best of my knowledge, TAM does not have any predictive power or practical utility. It has been criticized of diverting scholars' focus away from tackling other vital research concerns and creating an "illusion of progress" in knowledge acquisition (Al-Rahimi, Othman & Musa, 2013).

Theory of Planned Behaviour

People's behaviour can be explained by the Theory of Planned Behaviour (TPB). Intentions may be predicted with high accuracy using one's attitude toward the conduct, subjective norms, and perceived control of behaviour, combined, the intentions and perception of change in behaviour account for a considerable deal of variance in the actual behaviour (Fishbein & Ajzen, 1975). Intentions are considered to be influenced by one's attitude toward behaviour and one's own subjective standards for engaging in behaviour. Attitude and the tendency to decline in behavioural performance both indicate how someone feels.

One of the most important factors in determining whether a potential user of technology will actually utilize a certain system or method is the prospective user's general attitude toward using that system. A variety of customer characteristics, including attitudes and purchasing decisions are taken into account in this approach (Buchan, 2005). Personal characteristics can influence an individual's attitude according to the notion of planned behaviour. This suggests that the decisions people make are influenced by their personal qualities. When it comes to choosing an online retailer, TPB illustrates how a consumer's personal qualities and opinions influence this decision (Beauchamp & Ponder, 2010). The ease with which one can do a task impacts the choices made in relation to conduct and behavioural intentions. Customers choose online retailers based on the simplicity with which they may purchase goods and services (Ajzen, 1991). For many customers, saving money and time is of equal importance. These clients, who are strapped for time, have found great respite in online shopping and place a high value on it (Beauchamp & Ponder, 2010).

Empirical Review

A study conducted by Ugonna et al. (2017) in Owerri, Imo State, Nigeria examined the impact of internet marketing on customer behaviour at a number of online businesses. Two structured questionnaires were employed to collect data from a sample of 300 respondents. The study discovered there is a strong correlation between the regularity of visits and consumer loyalty to online retailers and the effectiveness of online marketing. While Ugonna et al. (2017) focused on the impact of internet advertising on consumer behaviour in the regional context, the present study examines the impact of online advertising on consumer behaviour.

Kenyan e-commerce platforms and client attributes were examined by Nyasio (2016). A cross-sectional survey was employed for the study. Questionnaires were used to gather data from individuals with internet access and computer literacy. Descriptive and inferential statistics were used to conduct the research. Consumer attributes were shown to have a favourable correlation with e-commerce use. Contributing to the ongoing research on customer characteristics, this study; the findings of this study show that online merchants' preferences are influenced by a person's personal qualities. There is a gap here because the study focused on customer and product attributes rather than internet advertising's influence on consumer behaviour.

Using the instance of Radio Africa Group Limited in Nairobi, Kenya, Njuguna (2017) examined the impact of internet advertising on consumer decision-making. Variables were described through the use of a descriptive study approach. Analysed data was presented using tables and figures, which were based on descriptive statistics. To sum up, online advertising is critical for a company like Radio Africa, which relies on public relations and marketing to attract attention and grow its brand name recognition. As a result of the marketing methods used, customers are more likely to buy the items and services that are being sold. An additional factor to consider is the sort of attitude displayed by customers, which might impact how they feel about a certain situation. There is a discrepancy between the previous study, which focused on Radio Africa Group Limited, and the current study, which focuses on Internet businesses.

Research Methods

For this study, the survey research design was adopted because of its capacity to reach a large audience and elicit responses to research questions on a certain topic (digital advertising and consumer buying behaviour). This research focused on consumers in Ojo Local Government Area (LGA) Lagos State, Nigeria that has access to internet connectivity. Thus, the population of this study is infinite, as the total number of residents of Lagos State with an internet connection cannot be ascertained. To determine the sample size for the infinite population, Cochran's (1977) formula is adopted. Based on the formula, 138 participants were selected as the sample size for the infinite population. Furthermore, a multi-stage sampling approach was adopted for this study. This is in line with earlier studies (Osadebamwen, Adekoya & Akintude 2022; Lucky 2022; Sosina, Adewuyi, Babayemi, & Ayantunde, 2022).

The multi-sampling approach adopted for this study includes convenience, cluster, simple random, and accidental sampling methods. These sampling procedures were adopted on a divisional system based on physical location that is used to split Lagos State into five (5) distinct regions namely Ikeja, Badagry, Ikorodu, Lagos Island and Epe (IBILE). The division that was conveniently sampled for this study is the Badagry Division. This is because the researcher and the research institution are based within the Badagry division. In the second stage, a cluster sampling approach was employed to divide the Badagry Division into four (4) geographic groups (Local Governments). Ojo, Amuwo-Odofin, Ajeromi-Ifelodun, and Badagry are the four (4) Local Governments Areas (LGA) as categorized by the Lagos State Government official website. In the third stage, the Ojo local government was conveniently selected. Finally, simple random sampling and accidental sampling techniques were employed to choose the respondents who were given a questionnaire to fill.

Questionnaires, assessments, organized interview scheduling and checklists are examples of data-collecting instruments (Mbambo, 2009). This study relied on data that came directly from the source. The information generated for this study was from a questionnaire distributed to respondents. Relevant sections from questionnaires developed by De Silva, Fernando and Fernando (2019), Vongurai (2022) and Okon and Kolo (2021) were merged and adopted for this study.

The reliability values for each of the adopted questionnaires were 0.82, 0.7, and 0.81 respectively. For this study, Cronbach's alpha was used to test the reliability of the scale. The reliability statistics table shows the overall Cronbach alpha of 0.805 which indicates that the research instrument is highly reliable because the value is higher than the recommended threshold of 0.70 (Nunally & Bernstein, as cited in Leong, Hew, Lee, & Ooi, 2015).

Table 1: Reliability Statistics	
Cronbach's Alpha	N of Items
.805	20

Source: Reliability Output Computed by the Researcher (2022)

Table 2: Reliability Coefficient of the Extracted Variables

Construct	Number of items	Cronbach's Alpha
Consumer Buying Behaviour	5	0.713
Social Media Advertising	5	0.856
Blogging Advertising	5	0.830
Search Engine Optimization	5	0.819

Source: Reliability Output Computed by the Researcher (2022)

Validating the instrument was to measure if what it was designed to assess was adequately and accurately measured. Before developing and administrating the final draft, the instrument's face and content validity were

verified with the help of the project supervisor and other senior academics who specialise in the field of Marketing. All of the relevant performance metrics were computed using the SPSS software package. For the statistical research of the respondents, basic percentages and descriptive statistics were used for data analysis and interpretation. Analysing data using correlation analysis was found suitable for assessing the hypotheses that were tested. The data analysis results influenced the final decision.

Data Analysis, Results and Discussions

One hundred and thirty-eight (138) copies of the questionnaire were distributed to mobile telecommunication service providers' consumers of which one hundred and thirty-four were returned and valid for the analysis of this study. This value represents a 97.1% response rate which is appropriate for the study.

Table 3: Descriptive statistics of consumer buying behaviour

Items	N	Mean	Std Dev
Voice quality is clear and there is no distortion	134	3.77	.982
Complain process is convenient to use	134	4.23	.837
Internet service packages are appropriately priced	134	4.07	.637
Customers are informed about when services will be performed	134	4.14	.637
Queries are resolved within time	134	3.87	.723
Grand Average		4.02	.763

Source: Field Survey Data (2022)

The average mean for consumer buying behaviour is 4.02 which indicates that on average, the respondents agreed with most of the statements on the high scale as it relates to consumer buying behaviour with an overall standard deviation of 0.763 which implies that the responses were clustered around the mean.

Table 4: Descriptive Statistics of Social Media Advertising

Items	N	Mean	Std Dev
Use of Social media enhances customer relationship management	134	4.96	.597
Content communities are brought together through the Social media	134	4.05	.592
There are increased sales through social media advertising	134	4.72	.500
Use of Social media increases the frequency of interaction with customers	134	3.87	.719
Social media promotes providing customers with time-sensitive information	134	4.50	.646
Grand Average		4.42	0.611

Source: Field Survey Data (2022)

The average mean for social media advertising is 4.42 which indicates that on average, the respondents agreed with most of the statements on the high scale as it relates to social media advertising with an overall standard deviation of 0.611 which implies that the responses were clustered around the mean.

Table 5: Descriptive Statistics of Blogging Advertising

Items	N	Mean	Std Dev
Micro blogging is a form of blogging that limits the size of each post	134	4.25	.743
Twitter updates can contain only 140 characters.	134	4.28	.742

Blogging is easy, requires very little investment of time	134	3.57	1.241
Blogs can quickly prove worthwhile in increased sales and consumer insight.	134	3.87	.940
Twitter can be used to announce offers or events, promote new blog posts, or keep the readers in the know with links to important news stories	134	4.23	.822
Grand Average		4.04	0.898

Source: Field Survey Data (2022)

The average mean for blogging advertising is 4.04 which indicates that respondents agreed with most of the statements on the high scale as it relates to blogging advertising with an overall standard deviation of 0.898 which implies that the responses were clustered around the mean.

Table 6: Descriptive Statistics of Search Engine Optimization

Items	N	Mean	Std Dev
There are target keywords in the advert that can attract customers' attention.	134	4.16	1.096
Information search is easy	134	4.19	0.780
Search Engine Optimization strategy affects purchase decision	134	4.22	0.994
Feedback mechanism	134	3.93	0.983
Product information	134	4.30	0.705
Grand Average		4.16	0.912

Source: Field Survey Data (2022)

The average mean for search engine optimization is 4.16 which indicates that respondents agreed with most of the statements on the high scale as it relates to search engine optimization with the overall standard deviation of 0.912 which implies that the responses were clustered around the mean.

Hypotheses Testing

Hypothesis one

H1: Social media advertising does not have any relationship with consumer buying behaviour

Dependent variable = Consumer buying behaviour (Y)

Independent variable = Social media advertising (X_1).

$$Y = \alpha + \beta_1 X_1$$

Where α is constant, β_1 is the regression coefficient of social media advertising. Thus, the regression coefficients were executed.

Table 7: Model summary for Social media advertising and consumer buying behaviour

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.556 ^a	.309	.304	.3568
^a . Predictors: (Constant), Social Media Advertising				

The model summary above shows that there is a positive relationship between Social media advertising and consumer buying behaviour ($R = 0.556$). The coefficient of determination ($R^2 = 0.309$) signifies that 30.9% of the variance recorded in consumer buying behaviour is accounted for by social media advertising.

Table 8: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.081	.581		7.030	.000
	Social Media Advertising	.296	.072	.556	.325	.000

a. Dependent Variable: Consumer Buying Behaviour

The simple regression model is given as:

$$CBB = 4.081 + 0.296 \text{ SMA}$$

An evaluation of the unstandardized coefficient of social media advertising in the coefficient table and its associated p-value shows that social media advertising ($\beta_{\text{SMA}} = 0.296$, $p < 0.05$) is statistically significant and *can* used in predicting consumer buying behaviour. This signifies that for every advert placed on social media, consumer buying behaviour is increased by 0.296 units. Based on the results; $R = 0.556$, $R^2 = 0.309$, $\beta_{\text{SMA}} = 0.296$, $p < 0.05$, the study concludes that social media advertising has a significant relationship with consumer buying behaviour.

Hypothesis two

H2: There exists no relationship between blogging advertising and consumer buying behaviour.

Dependent variable = Consumer buying behaviour (Y)

Independent variable = Blogging advertising (X_2).

$$Y_2 = \alpha + \beta_2 X_2$$

Table-2 Model summary for Blogging advertising and Consumer buying behaviour

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.769	.591	.582	.3833

a. Predictors: (Constant), Blogging Advertising

The model summary above shows that there is a positive relationship between blogging advertising and consumer buying behaviour ($R = 0.769$). The coefficient of determination ($R^2 = 0.591$) signifies that 59.1% of the variance recorded in consumer buying behaviour is accounted for by blogging advertising.

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.458	.207		9.007	.000
	Blogging Advertising	.315	.035	.501	.425	.000
a. Dependent Variable: Consumer Buying Behaviour						

The simple regression model is given as:

$$CBB = 2.458 + 0.315 BA$$

An evaluation of the unstandardized coefficient of blogging advertising in the coefficient table and its associated p-value shows that blogging advertising ($\beta_{BA} = 0.315$, $p < 0.05$) is statistically significant and *can* used in predicting consumer buying behaviour. This signifies that for every blogging advertising, consumer buying behaviour is increased by 0.315 units. Based on the results; $R = 0.769$, $R^2 = 0.591$, $\beta_{BA} = 0.315$, $p < 0.05$, the study concludes that blogging advertising has a significant positive relationship with consumer buying behaviour.

Hypothesis three

H3: Search engine optimization has no significant relationship with consumer buying behaviour.

Dependent variable = Consumer buying behaviour (Y)

Independent variable = Search engine optimization (X_3).

$$Y = \alpha + \beta_3 X_3$$

Table 3: Model summary for Search engine optimization and Consumer buying behaviour

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.904	.818	.816	.4228
a. Predictors: (Constant), Search Engine Optimization				

The model summary above shows that there is a positive relationship between **Search engine optimization** and consumer buying behaviour ($R = 0.904$). The coefficient of determination ($R^2 = 0.818$) signifies that 81.8% of the variance recorded in consumer buying behaviour is accounted for by **search engine optimization**.

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.958	.620		3.158	.000
	Search Engine Optimization	.646	.028	.904	23.218	.027
a. Dependent Variable: Consumer Buying Behaviour						

The simple regression model is given as:

$$CBB = 1.958 + 0.646 SEO$$

An evaluation of the unstandardized coefficient of blogging advertising in the coefficient table and its associated p-value shows that Search Engine Optimization ($\beta_{SEO} = 0.646$, $p < 0.05$) is statistically significant and *can* be used in predicting consumer buying behaviour. This signifies that for every search engine optimization, consumer buying behaviour is increased by 0.646 units. Based on the results; $R = 0.904$, $R^2 = 0.818$, $\beta_{SEO} = 0.646$, $p < 0.05$, the study concludes that search engine optimization has a significant relationship with consumer buying behaviour.

DISCUSSION OF FINDINGS

The first hypothesis revealed how social media advertising affects consumer buying behaviour. The empirical result of the correlation analysis indicates that the computed R-squared of 30.9% ($R^2 = 0.309$, $p < 0.05$) indicates that the model is fairly fitted. This connotes that selected determinants (social media advertising) explained about 30.9% variation in consumer buying behaviour in Lagos State. The unexplained variation of 69.1% is attributed to the factors driving consumer buying behaviour in Lagos State which are beyond the specified model. Furthermore, the coefficient of social media advertising is positive (0.296) and the probability value of (0.000), indicates that social media advertising exerts a significant positive impact on consumer buying behaviour in Lagos State. This implies that a unit increase in social media advertising will increase consumer buying behaviour by 0.296 units. The quantitative results here and in past literature agree that social media advertisements have a positive and significant impact on consumer behaviours and purchasing patterns. Today, social media plays an important role in shaping purchase behaviours and the majority of the respondents indicated that they purchase products based on advertisements they see on social media. Thus, social media advertising has a significant impact on Lagosian purchasing behaviour and they appear to prefer buying goods through online sources. This buttressed the findings of Njuguna (2017) and Elisabeta Loanals et al., (2014) that effective social media online advertising will increase the market share of the organization and customers are more likely to buy the items and services that are being sold.

The second hypothesis revealed how blogging advertising influences consumer buying behaviour. The correlation analysis indicates that the computed R-squared of 59.1% ($R^2 = 0.591$, $p < 0.05$) shows that the model is fairly fitted. It also connotes that blogging advertising explained about a 59.1% variation in consumer buying behaviour in Lagos State. Furthermore, the coefficient of blogging advertising is positive (0.315) and the probability value of (0.000), indicates that blogging advertising exerts a significant positive impact on consumer buying behaviour in Lagos State. This implies that a unit increase in blogging advertising will increase consumer buying behaviour by 0.315 units on the axiom that all other factors that influence consumer buying behaviour are held constant. Statistical comparison with social media advertising it is evident that more frequent blog readers trust relevant blog content for purchase decisions than content from social networking sites in Lagos.

The third hypothesis explored how search engine optimization influences consumer buying behaviour. The correlation analysis indicates that the computed R-squared of 81.8% ($R^2 = 0.818$, $p < 0.05$) shows that the model is strongly fitted. This connotes that search engine optimization explained about 81.8% variation in consumer buying behaviour in Lagos State. The unexplained variation of 18.2% is attributed to the factors driving consumer buying in Lagos State which are beyond the specified model. The adjusted coefficient of determination indicates that 81.8% of the variation in consumer buying behaviour in Lagos State is explained by the independent variables after allowing for degrees of freedom. Furthermore, the coefficient of search engine optimization is positive (0.646) and the probability value of (0.000), indicates that search engine optimization exerts a significant positive impact on consumer buying behaviour in Lagos State. This implies that a unit increase in search engine optimization will increase consumer buying behaviour by 0.64 units on the axiom that all other factors that influence consumer buying behaviour are held constant. This corroborates the findings of Ambuli, (2019) and Ghose, Ipeirotis, & Li, (2011) suggesting a significant and causal effect of search engine ranking on consumer click and purchase behaviour. The result implies search engine advertising is growing faster and more effective in influencing consumer buying decisions than other online advertising means in Lagos state which is considered in this study.

CONCLUSION AND RECOMMENDATION

In conclusion, the three online advertisements have a significant effect on consumer buying behaviour in Lagos State. Since the majority of the variables were statistically significant with one another. Therefore, it is strongly recommended among others that organizations should improve their level of utilization of online advertising to trigger positive consumer purchase behaviour. Furthermore, they should launch and advertise more on their corporate websites. Besides, an organisation's online advertising credibility is a factor that affects internet user's purchase decisions. All credibility factors tested, such as privacy, trust, and data security, influence purchase decisions and such attempts must be put into consideration. The study recommended that all organisations should have functioning, attractive, user-friendly and accessible websites. Up-to-date promotional messages and textual/audio-visual information on all organization's products/services should be displayed on their websites.

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