UNIZIK Journal of Marketing (UJofM), Vol. 1(1), Sept. 2024 ISSN xxxx-xxxx

https://journals.unizik.edu.ng/ujofm

Social Media Marketing and Purchase Decision of Samsung and Apple iPhone Smartphone Users in Lagos, Nigeria

[1]Alaneme, G. C. and Adegoke, O.A. D[†2]

Article Information

Keywords
Social Media, Social Media Marketing, Purchase Decision, Facebook, Instagram, Celebrity Endorsements, Brand

Article History

Received: June 14, 2024
Accepted: Aug. 12, 2024
Published: Oct .3, 2024

Copyright
© 2024. The Authors.

Abstract

This study examined social media marketing and purchase decision of Smartphone users in Lagos State, Nigeria, with a focus on Samsung and Apple iPhone. Quantitative research method and descriptive survey design were adopted. The population of study consists of all users of Samsung and Apple iPhones in Lagos, whose population size is undefined. The one hundred sample size considered for the study was determined via Fisher's formula for undefined population, and participants were sampled through an online survey; out of which 94 responses was retrieved. Purposive technique was employed in drawing members of the sample and collected data was analyzed with descriptive and inferential statistics. The study found and concluded that there is significant relationship ship between Facebook advertisements and consumer choices of smart phones; that there is significant relationship between Instagram postings and brand choice of Smartphone users; that there is no significant relationship between celebrity endorsements of Smartphone on social media and consumer's brand choices; and that a significant relationship exists between social media marketing and purchase decision of Smartphone Users in Lagos Nigeria. Against this background, the study recommends that Management of Samsung and Apple iPhones among other Smartphones in Lagos Nigeria should leveraged on pushing out positive e-Word of Mouth on social media to promote sales and brand performance. Additionally, marketers of smart phones should give incentives to encourage consumers to share/post their positive experiences; as well as recommend their brands on social media.

affiliation: [1]Department of Management Sciences, DLI, University of Lagos, Nigeria.
[2] School of Management and Business Studies (SMBS) Department of Business Administration, Yaba College of Technology, Lagos Nigeria.

email: [1]alaneme@unilag.edu.ng; [2]solaadegokeola@gmail.com

[†] *corresponding author*

Introduction

In recent times there has been an increased interest by researchers in social media marketing as a component of integrated marketing communications (IMC) that enables marketing organizations to bond effectively with their consumers (Perera, Nayak & Long, 2019). It has been noted that social media platforms such as Twitter, Instagram, LinkedIn, Facebook and WhatsApp now, more than ever before, exert greater influence on consumers' purchase behaviour towards different products and brand; and this is not unconnected to social media's recent global popularity (Kemp, 2021). Furthermore, as humans, people are social by nature and will always collect and share information that is important to them (Bashar, Ahmad & Wasiq, 2012). Today, billions of people are now active users of multiple social platforms, sharing their brand experiences and by so doing, influencing other users' purchase decision process (Goel & Diwan, 2022).

Nowadays, social media advertisings have been widely explored by marketing organizations to promote their goods and services and influence consumers' purchasing decisions. It has advanced the traditional marketing practices by offering marketing organizations more affordable option of interactive communication with their targeted via diverse social media platforms. Social media marketing rides on social media technologies to connect with customers and increase patronage and sales to build brand loyalty. Several inherent merits in the use of social media as an engine for marketing are its affordability compared to other forms of media, accessibility to all which increases brand awareness among customers and increases brand loyalty; and capability to connect with large number of users at the same time (Goel & Diwan, 2022).

Globally, mobile phone has evolved from being a wireless device with which a user may only make and receive calls to being a tool for marketing. With contemporary technical advancements and breakthroughs, many mobile phones now operate as portable digital media players, digital cameras, browsers, gaming devices, storage devices, video and voice recorders, virtual assistants, and GPS navigating systems, among other things. These mobile phones known as smartphones may benefit their users by offering an instantaneous response, information, and knowledge on politics, economics, education, entertainment, tourism, finance, healthcare, lifestyle, photography, religion, and social networks; all of which impacts their decision-making process.

In Nigeria, it is estimated that there are 103.0 million internet users as at the start of 2024, while internet penetration stood at 45.5% (DataReportal, 2024). Nigeria is home to 36.24 million social media users in January 2024, equaling to 16.2% of the total population. A total of 205.4 million cellular mobile connections were active in Nigeria in early 2024, with this figure equivalent to 90.7% of the total population. However, not lesser than 40 million customers' lines has been blocked by the Nigeria Communications Commission (NCC) due to failure to register and link their National Identification Number (NIN) to their lines (NCC, 2024).

The widespread acceptance and use of social media have no doubt brought about phenomenal improvement in social media marketing and this has revolutionized marketing communication, offering marketing organizations more possibilities to

promote their products and services with relative ease; as well as provide marketers with a new set of tools to interact directly with current and prospective consumers.
However, because social media is open to everyone, myriads of information are being uploaded and exchanged daily from both trusted and untrusted sources. Hence, there is the issue of proliferation of social media space by fraudsters. Closely related to that is the issue of too many fake and untrue posts/broadcast messages and advert claims which cannot be relied upon entirely by social media users for their purchase decision process.
There have been studies on consumer purchasing decision process in buying smartphones among the youths in Nigeria (Olowogboye, 2017; Ayodele, 2016; Isibor, Okhawere & Ogbonnaya, 2018). However, there seems to be dearth of research focusing on the nexus between social media marketing and purchase decision among Smartphone Users in Lagos Nigeria, thereby creating an empirical gap in literature which this study has set out to fill. Accordingly, this study examines the relationship between Facebook advertisements, Instagram posting, and celebrity endorsement of smartphones and consumer choices of smart phones.

Literature Review

Concept of Social Media

The term social media was described as the use of web-based and mobile technologies to turn communication into an interactive dialogue. It can take many different forms including magazines, video, wikis, podcasts, internet forums, social and micro blogging etc. Social media is a form of interactive communication for all users to be producers of contents, as against the traditional form of communication which involves one-way information transmission. To Chopra and Gupta (2020), social media is seen as a group of internet-based applications built on the ideological and technological foundations of the Web, that allow the creation and exchange of user-generated content. Social media has become and is impacting positively on ability to connect people around the globe as well as exchange of information. Statista (2024) stated that as of April 2024, there were 6.44 billion internet users worldwide, which amount to 67.1 percent of global population. Of this total, 5.07 billion (52.6%) of the world's population, were social media users. The most popular social media platforms in Nigeria are WhatsApp, Tiktok, Instagram, Facebook, Twitter (X), LinkedIn and Telegram among others.

Social Media Marketing

Social media marketing is a new and fast-growing approach adopted by marketers to connect with their target markets seamlessly and economically. Bansal, Masood and Dadhich (2014) defined social media marketing as the act of using social media channels to promote a business and its products. Social media is a powerful marketing medium that has redefined the way people interact and share their products or services experiences.

The arrival of social media marketing has significantly improved marketing organizations' communication strategies. It also allows consumers to generate media and contents, as well as open up varieties of new sources of online information that are circulated among current and potential consumers, and which influences their various

buying decision processes. With such possibilities, customers now consider social media as more reliable sources of information compared to the former exclusively corporate-sponsored communication (Chopra & Gupta, 2020).

Social Media Marketing

After identifying their marketing plans and goals, marketing organizations develops their websites, creates social media accounts like Facebook, Twitter (X), and YouTube, synchronize both together and keep updating both with latest information, pictures, company news, latest developments, product and service information etc. The update is tagged along with the search engines such as Yahoo, Google, Bing etc., so that when people are looking for related marketing organization, products or services, the link and profile should come up at the top (Hajli, 2015). Social media marketing also allow marketing organizations to promote/advertise their products and services; create fun, contests and varieties of other events through which they create awareness and get patronage. Through social media, marketers could also monitor and evaluate customers' post purchase comments, suggestions and experiences; and they could also create different blog in discussion forums, where people share their ideas and this makes the businesses to gain healthy ideas and creative recommendations which mainly turn out to be very beneficial for them (Hajir, 2012).

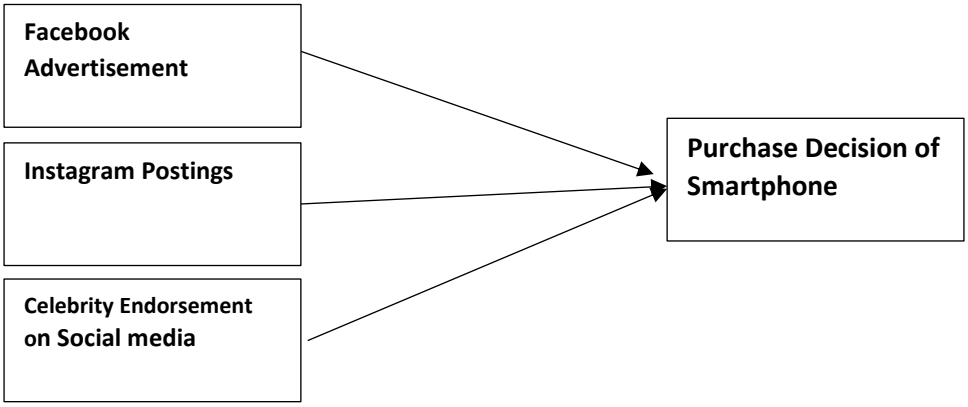
Nigeria's Smartphones Market

In Nigeria, the major development in the telecommunications industry did not occur until the year 2001 when mobile phones and mobile networks were introduced into the country. Before the introduction, Nigerians simply purchased landlines provided by the sole accessible telecommunications firm, Nigerian Telecommunications Limited (NITEL). These analog landlines were big and connected to several wires and this made them impossible to carry around. The narrative changed with the introduction of mobile phones into the country. At first, only a few mobile phones were sold as not many people could afford them. The available types were the ones that performed the basic functions of making and receiving calls as well as sending and receiving text messages. Some years after, with rapid technological advancements, smartphones began to be in circulation in the country.

As of February 2014, there were over 129 million mobile phone users in Nigeria, of which just about 5 million were active smartphone users (Nigerian Communications Commission, NCC, 2014). However, according to GSMA, the mobile internet penetration in Nigeria doubled since 2014, reaching 32% in 2019 (Bahia, Delaporte 2020). Based on reports from various sources, the number of smartphone users in Nigeria is estimated to be between 25 and 40 million, out of a total of 170 million mobile customers (Statista, 2020). The growth of sales and use of smartphones in the country has been phenomenal, with a total of 205.4 million cellular mobile connections were active in Nigeria in early 2024 (NCC, 2024). It should also be noted that many Nigerians use the internet through their mobile phones as Data Reportal (2024), reveals that 92.4% of the total internet users in Nigeria are from smartphones.

The smartphone market in Nigeria has not only been a thriving one, but it continues to display immense potential. In 2019, Nigeria was reported to have the largest smartphone

market in Africa. Smartphones have become more than telecommunication devices and are now status symbols for their users (Liadi, 2016). Some positive and negative uses and impacts of smartphones have been identified. They range from their use for distance learning and research to their aid for cheating in exams. People use their smartphones for online shopping. Online shopping is rather spontaneous and can be conducted in many different places (Saleem, Ali, Mehreen & Mansoor, 2020). Many shoppers relieve stress by merely window shopping online and they engage in this with their smartphones.



Source: Authors' Conceptualization

Hypothesis Relating to Each of the Variables

Ho1: There is no significant relationship ship between Facebook advertisements and consumer choices of smart phones

Ho2: There is no significant relationship between Instagram postings and brand choice of Smartphone users

Ho3: There is no significant relationship between celebrity endorsements of Smartphone on social media and consumer's brand choices

Extant Studies on Social media Marketing and Consumer Behaviour

Social media has aroused a lot of interest among researchers and scholars. Hence, several extant studies on the impact of social media and consumer behaviour abound in literature. For example, Chopra & Gupta (2020) noted that few decades ago, consumers base their decisions on advertisements, expert advice, and some notable influencers. Forbes and Vespoli (2013) investigated consumers who purchase an item based on reviews or recommendation by peers or contacts on social media like Facebook (Meta), Instagram, Tiktok, and Twitter (X), results of the study indicate that consumers also buy based on recommendations from trusted sources, although they may not be opinion leaders so to say. One similarity in both studies is that they pointed to the fact that some people, either physically or virtually, influence consumers' purchase decisions.Also, Pietro and Pantano (2012) investigated to what extent Facebook, influence

Perera, Nayak, and Long, (2019) on e-word of mouth (e-WOM) and consumer behaviour showed that consumers actively exchange opinions, ideas and information about brands

or companies among within online communities such as Facebook, Instagram, Tiktok, and Twitter; and such interactions influences the purchase decisions of members in the online communities.

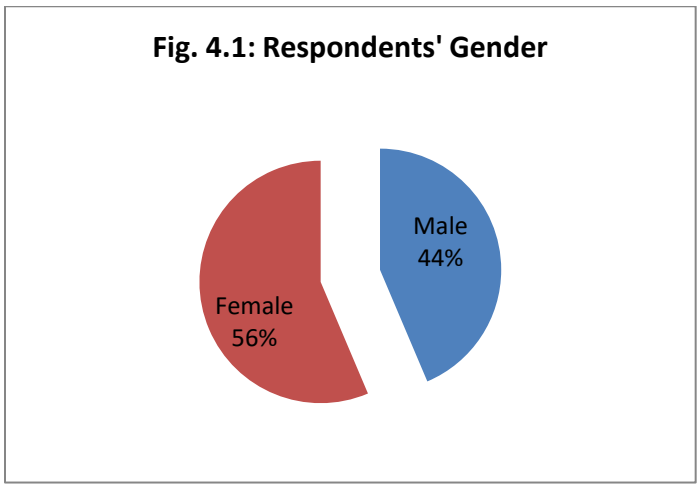
Methodology

The populations for this study constitute utility and window/recreational Shoppers of This study adopted the quantitative research approach through Survey research design. Hence, primary data was utilized in this study. The rationale for this choice is that the method will help to provide a comprehensive view of the result of the study.
The target population of this study consists of all users of Samsung and Apple iPhones in Lagos State; the precise population size of which is unknown/infinite.

In determining the sample size, the Fisher's (2002) formula for infinite population size [n = Z2P(1-P)/d2 = 100] was adopted. One hundred (100) participants were purposively sampled via an online survey, using Google Forms. The links to the Survey was shared to respondents via WhatsApp; out of which 94 (94) responses were well filled and considered for analysis. In presenting and analyzing the collected data, descriptive statistics such as charts were employed to answer the research questions. Pilot study was conducted, to evaluate the validity and reliability of the research instrument. The instrument was validated by marketing scholars in the Faculty of Management Sciences, Department of Marketing, University of Lagos. While Cronbach alpha test was conducted to measure the reliability of the instrument. The Cronbach's alpha coefficient was 0.784 (See table(s) in Appendix). The result agrees with the global standard which states that any instrument with a coefficient 0.70 and above has a high level of internal consistency and reliability. The stated hypotheses were tested using Spearman's Rank Order (rho) Correlation through Statistical Package for Social Sciences (SPSS) Version 20.

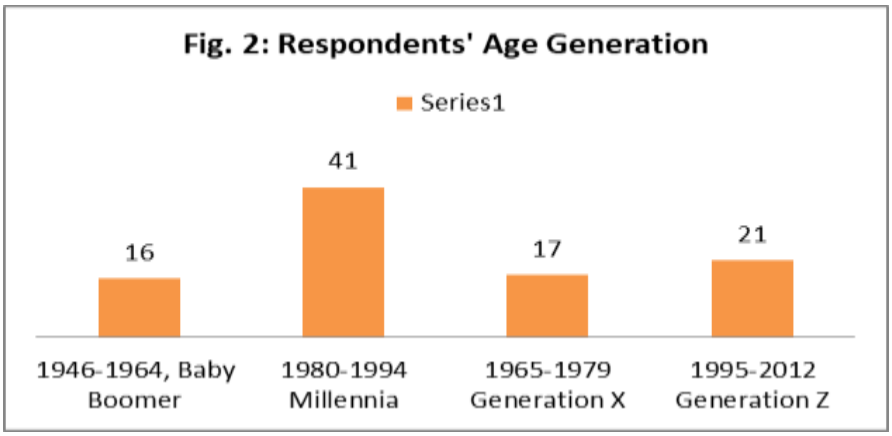
Results

Respondents' Biographic Analysis



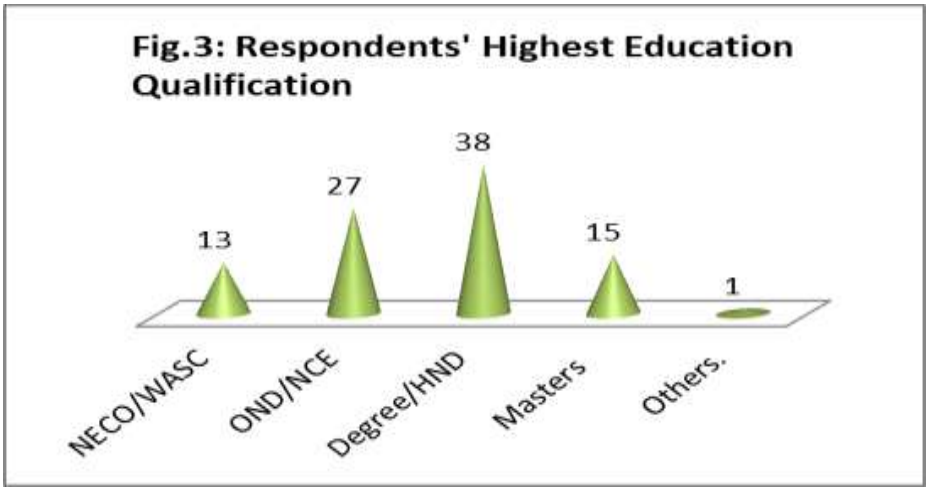
Source: Field Survey, 2024

Figure 4.1 shows that both genders were well represented with 56% of the respondents being female and 44% being male.



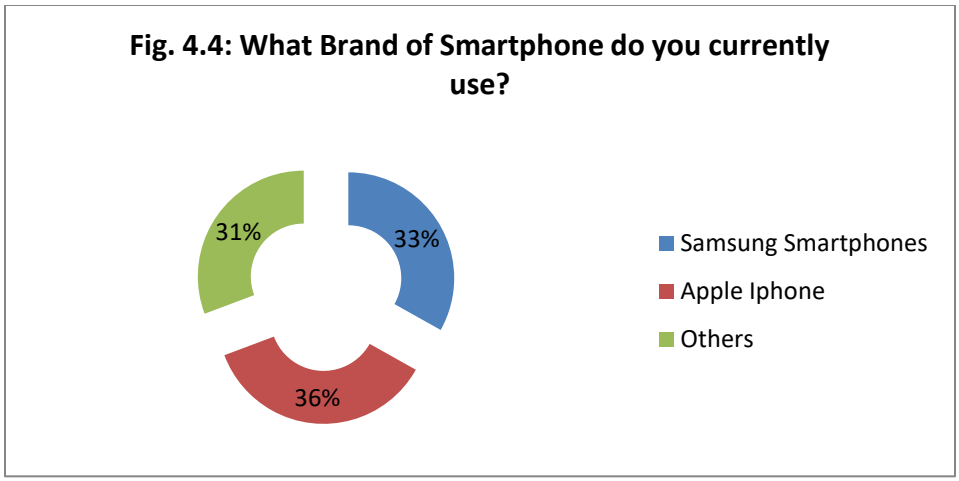
Source: Field Survey, 2024

Figure 4.2 shows respondents' age generation, 21 belong to the Baby Boomer Generation (1946-1964), 17 belong to the Generation X (1965-1979), 41 belong to the Millennia (1980-1994), and 16 belong to the Generation Z (1995-2012). Most of the respondents were Millennial and Generation Z.



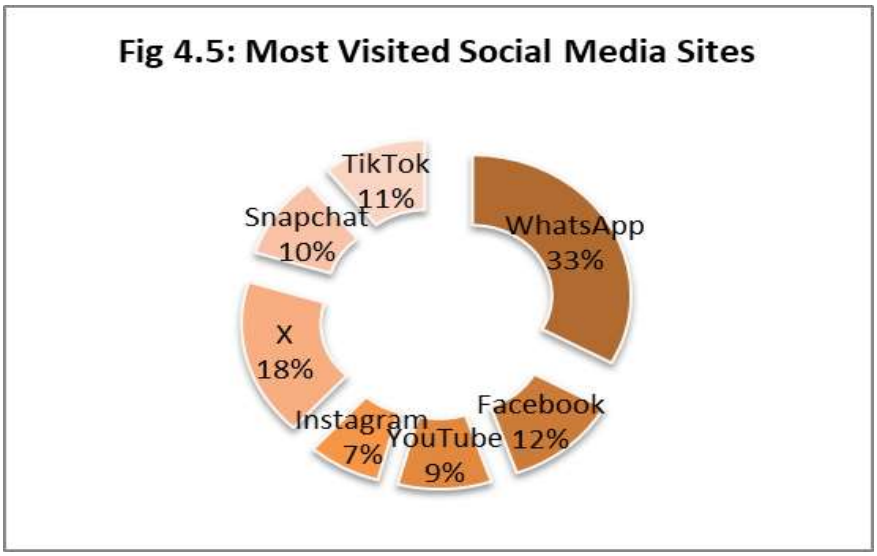
Source: Field Survey, 2024

Figure 4.3 shows respondents' highest educational qualifications, 4 were holders of O' Level certificates, 27 holds OND/NCE, 38 holds BA/B.Sc./HND, 15 holds Masters Degree, 1 holds other qualifications. The vast majority of the respondents were graduates.



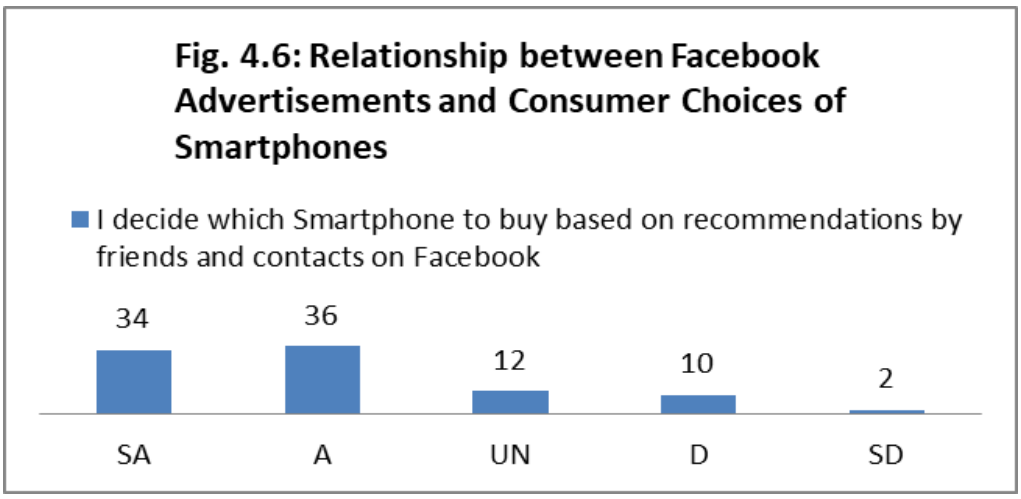
Source: Field Survey, 2024

Figure 4.4 shows the brand of smartphone currently used by respondents. 36% respondents currently use Apple iPhone, 33% respondents currently use Samsung Smartphones, while 31% respondents currently use other brands of Smartphones.



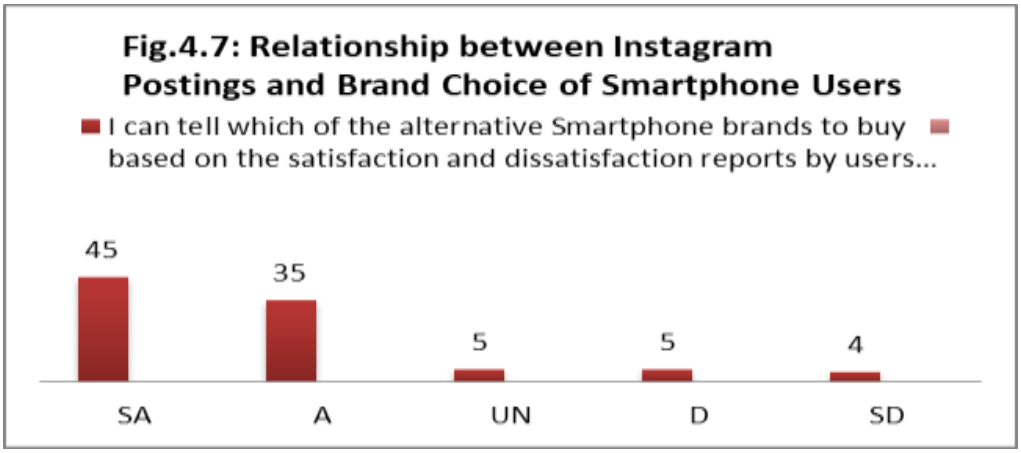
Source: Field Survey, 2024

Figure 4.6 shows the Social Media Site regularly visited by respond33ts. It indicated that majority of the respondents 33% visits WhatsApp the most, followed by X 18%, Facebook 12%, TikTok 11%, Snapchat 10%, YouTube 9%, and Instagram 7%. Although an average respondent visits multiple social media sites but the most visited site according to this study is WhatsApp.



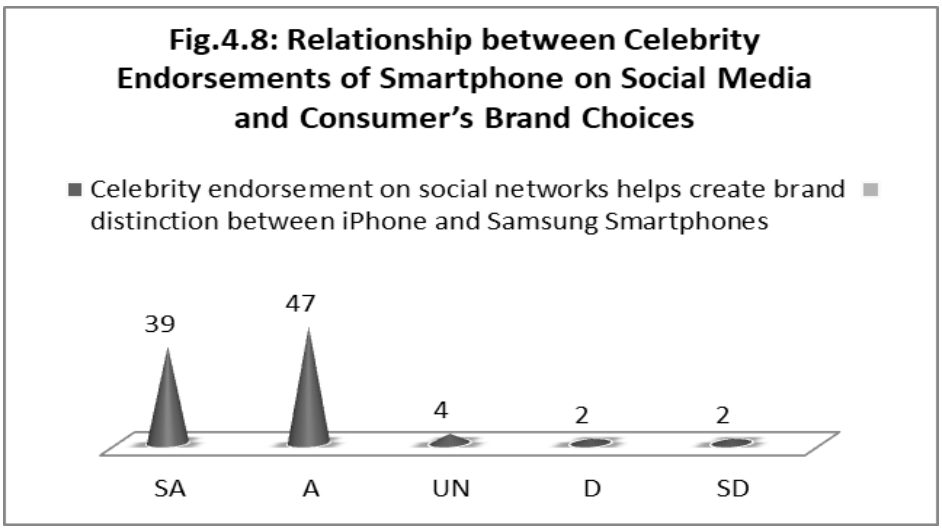
Source: Field Survey, 2024

Figure 4.6 shows the relationship between Facebook advertisements and consumer choices of Smartphones. 14 respondents strongly agreed that they decide which Smartphone to buy based on recommendations by friends and contacts on Facebook, 36 respondents agreed, 12 were undecided, 10 disagreed and 2 strongly disagreed. The vast majority (54) respondents agreed with the assertion.



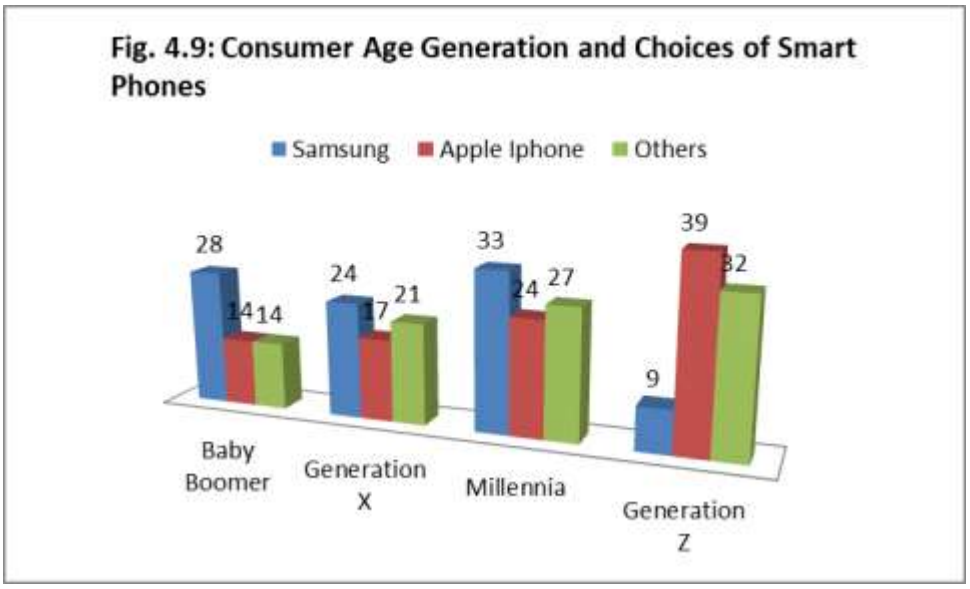
Source: Field Survey, 2024

Figure 4.7 shows the relationship between Instagram postings and brand choice of Smartphone users. 45 respondents strongly agreed they can tell which of the alternative Smartphone brands to buy based on the satisfaction and dissatisfaction reports by users on Instagram. 35 respondents agreed, 5 were undecided, 5 disagreed and 4 strongly disagreed. The vast majority (54) respondents strongly agreed with the assertion.



Source: Field Survey, 2024

Figure 4.8 shows the relationship between celebrity endorsements of Smartphone on social media and consumer's brand choices. 39 respondents strongly agreed celebrity endorsement on social networks helps create brand distinction between iPhone and Samsung Smartphones. 39 respondents strongly agreed, 57 agreed, 4 were undecided, 2 disagreed and 2 strongly disagreed. The vast majority respondents strongly agreed with the assertion.



Source: Field Survey, 2024

Figure 4.9 shows the relationship between consumer age generation and choices of smart phones. Among the Baby Boomers, the majority (28) respondents preferred Samsung to Iphone, For the Generation X, majority (24) respondents preferred Samsung to Iphone, for the Millennia's, the vast majority (33) respondents preferred Samsung to Iphone, for

the Gen Zs, the vast majority (67) respondents preferred Iphone to Samsung. Most of the respondent preferred Samsung to iPhone.

Test of Hypotheses

In testing the stated hypotheses to be able to answer the research questions, correlation analysis was conducted via SPSS Version 20.0.

Decision Rule: **Decision rule:** If the p-value is < 5% (alpha = 0.05) level of significance, the null hypothesis is rejected and the alternate hypothesis accepted, and vice versa

The results are summarized in Tables 1 below.

Hypothesis I: H_0: There is no significant relationship ship between Facebook advertisements and consumer choices of smart phones

Table 4.1: PMC Matrix for Hypothesis I

		Consumer choices of Smart phones	Facebook ads
Facebook ads	Pearson Correlatio	1	.220*
	Sig. (2-tailed)		.031
	N	94	94
Consumer choices of Smart phones	Pearson Correlatio	.220*	1
	Sig. (2-tailed)	.031	
	N	94	94

*. Correlation is significant at the 0.05 level (2-tailed).

Decision: From the above test result, the p-value (0.031) < (0.05), hence the null hypothesis is rejected. The result also shows a correlation coefficient of r = 0. 220 which imply that positive association between Facebook ads and consumer choices of Smart phones. It is therefore concluded that there exists a significant relationship ship between Facebook advertisements and consumer choices of smart phones

Hypothesis II: H_0: There is no significant relationship between Instagram postings and brand choice of Smartphone users.

Table 4.2: PMC Matrix for Hypothesis I

		Smartphone brand choice	Instagram postings
Instagram postings	Pearson Correlation	1	.169
	Sig. (2-tailed)		.011
	N	94	94
Smartphone brand choice	Pearson Correlation	.169	1
	Sig. (2-tailed)	.011	
	N	94	94

*. Correlation is significant at the 0.05 level (2-tailed).

Decision: Since the p-value (0.011) is < (0.05), H_0 is rejected. Hence, it is concluded that there is significant relationship between Instagram postings and brand choice of Smartphone users.

Hypothesis III: H_o: There is no significant relationship between celebrity endorsements of Smartphone on social media and consumer's brand choices.

Table 4.3: PMC Matrix for Hypothesis III

		Consumer's brand choice	Celebrity endorsement of Smartphones
Celebrity endorsement of Smartphones	Pearson Correlation	1	.157
	Sig. (2-tailed)		.028
	N	94	94
Consumer's brand choices	Pearson Correlation	.157	1
	Sig. (2-tailed)	.028	
	N	94	94

*. Correlation is significant at the 0.05 level (2-tailed).

Decision: Since the p-value (0. 028) is < (0.05), hence H_o is rejected. Hence, there is significant relationship between celebrity endorsements of Smartphone on social media and consumer's brand choices.

Discussions

This study examines the relationships between Facebook advertising, Instagram postings, and celebrity endorsement, and consumers' brand choice of Smartphones Users in Lagos State, Nigeria.

Results of the Correlation Analysis on tables 4.1 to 4.3 indicated that there is significant relationship ship between Facebook advertisements and consumer choices of smart phones, which concurs with Goel and Diwan (2022) who noted that around the world today, billions of people are now active users of Facebook, sharing various ads and brand experiences, and by so doing, influencing other users' purchase decision making processes. It was also found that there is significant relationship between Instagram postings and brand choice of Smartphone users, and this is consistent with Bashar, Ahmad and Wasiq (2012) who stated that postings on Instagram, exerts great influence on consumers purchase behaviour towards different products and brand; and this is not unconnected to the fact that as humans, people are social by nature and will always collect and share information that is important to them. Lastly, the finding revealed that there is significant relationship between smartphone celebrity endorsements on social media and consumer's brand choices. This agrees with Yogesh and Yesha (2014) who noted that consumers nowadays rely more on experiences, opinions and recommendations of peers and other influences within their social media spaces in making their purchase decisions.

Conclusions

The main objective of this research was to examine the relationship ship between Facebook advertisements and consumer choices of smart phones, to ascertain the relationship between Instagram postings and brand choice of Smartphone users and to evaluate the relationship between celebrity endorsements of Smartphone on social media and consumer's brand choices. The study adopted the survey research design, through

the distribution of online questionnaire to achieve the stated objectives. Based on the empirical findings, it was established that there is significant relationship ship between Facebook advertisements and consumer choices of smart phones, there is significant relationship between Instagram postings and brand choice of Smartphone users, and there is significant relationship between smartphone celebrity endorsements on social media and consumer's brand choices. Based on these findings the study concludes that significant relationship exists between social media marketing and purchase decision of Smartphone Users in Lagos Nigeria.

Recommendations

The following recommendations are made based on the findings for marketers of Samsung Smartphones and Apple iPhones among other Smartphones in Lagos Nigeria:

Since the study has confirmed that social media users are usually driven to make purchase after reading positive brand reviews and posts, and that significance positive relationship between Facebook advertisements and consumer choices of smart phones. Tt is therefore recommended that Management of the above stated marketing organizations should leverage on vast number of users Facebook to push out positive adverts and other promotional campaigns to increase patronage and sales performance of their Smartphone brands.

Smartphone marketers should also spread out their social media marketing tentacles to include Instagram postings as well to capture the attention and patronage of Instagram users who are majorly youths, since the study has shown the existence of significant relationship between Instagram postings and brand choice of Smartphone users.

Marketers of Smartphones should also harness the great sales potentials inherent in celebrity endorsement in their social media campaigns, as the study has further shown significant relationship between celebrity endorsements of Smartphone on social media and consumer's brand choices.

Also, management of the above stated marketing organizations among others should adopt integrated marketing communication (IMC) approach in their social media promotional campaign in order to tap into the advantages inherent in each of the unique social media platforms.

Finally, Smartphone marketers should take age factors into account when calving out their advert and promotional campaigns on various social media platforms as the study has shown that age brackets influence consumer choices of smartphone brands.

References

Ayodele, A. A., & Ifeanyichukwu, C. (2016). Factors influencing smartphone purchase behavior among young adults in Nigeria. *International Journal of Recent Scientific Research, 7*(9), 13248–13254.

Bahia, K., & Delaporte, A. (2020). The state of mobile internet connectivity - GSMA. Retrieved from https://www.gsma.com/r/wp-content/uploads/2020/09/GSMA-State-of-Mobile-Internet-Connectivity-Report-2020.pdf

Bansal, R., Masood, R., & Dadhich, V. (2014). Social media marketing: A tool of innovative marketing. *Journal of Organizational Management, 3*(1), 1-7.

Bashar, A., Ahmad, I., & Wasiq, M. (2012). Effectiveness of social media as a marketing tool: An empirical study. *International Journal of Marketing, Financial Services & Management Research, 1*(11), 2277-3622.

Chopra, C., & Gupta, S. (2020). Impact of social media on consumer behaviour. *International Journal of Creative Research Thoughts (IJCRT), 8*(6), 2320-2882.

DataReportal. (2024). Digital 2024: Nigeria. Retrieved from https://datareportal.com/reports/digital-2024-nigeria

Forbes, L. P., & Vespoli, E. (2013). Does social media influence consumer behaviour? An investigation of recommendation and purchases. *Journal of Business & Economics Research, 11*(2), 144-154.

Goel, R., & Diwan, M. (2022). Influence of social media marketing on buying decision-making process of consumers. *Mathematical Statistician and Engineering Applications, 71*(4), 5525-5533.

Hajli, N. (2015). *Handbook of research on integrating social media into strategic marketing*. Advances in Marketing, Customer Relationship Management, and E-Services (AMCRMES) Book Series. eISSN: 2327-5529.

Hajir, K. (2012). *Welcome to your social media marketing plan*. Retrieved from http://yoursocialmediamarketingplan.com/

Isibor, O. F., Okhawere, N. E., & Ogbonnaya, G. O. (2018). Smartphone purchase intention amongst undergraduates in Edo State Nigeria. *University of Port Harcourt Journal of Management, 3*(2), 15-29.

Kemp, S. (2021). Digital in Nigeria: All the statistics you need in 2021. Retrieved from https://datareportal.com/reports/digital-2021-nigeria

Liadi, O. F. (2016). College students and smartphone ownership: Symbolic meanings and smartphone consumption among Nigerian students. *AUDC, 10*(1).

Nigerian Communications Commission. (2014). 2014 Tele-density percentage. Retrieved from http://www.ncc.gov.ng/teledensity/html

Nigerian Communications Commission. (2024). Why SIMS previously linked to NIN were barred. Retrieved from https://www.vanguardngr.com

Olowogboye, D. T. (2017). *Determinants of consumer purchase decision: A study of purchase choice of the smartphone by students of tertiary institutions in Lagos State, Nigeria* (Doctoral thesis). Horizons University, Paris, France.

Perera, C. H., Nayak, R., & Long, N. V. T. (2019). The impact of electronic-word-of-mouth on e-loyalty and consumers' e-purchase decision-making process: A social media perspective. *International Journal of Trade, Economics and Finance, 10*(4).

Pietro, L. D., & Pantano, E. (2012). An empirical investigation of social network influence on consumer purchasing decision: The case of Facebook. *Journal of Direct, Data and Digital Marketing Practice, 14*(1), 18-29.

Saleem, H., Li, Y., Ali, Z., Mehreen, A., & Mansoor, M. (2020). An empirical investigation on how big data analytics influence China SME's performance: Do product and process innovation matter? *Asia Pacific Business Review, 26*, 1-26.

Statista. (2020). Smartphone users in Nigeria 2014-2025. Retrieved from https://www.statista.com/statistics/467187/forecast-of-smartphone-users-in-nigeria/

Yogesh, F., & Yesha, M. (2014). Effect of social media on purchase decision. *Pacific Business Review International, 6*(11).