



MOBILE MARKETING AND CONSUMER BEHAVIOUR IN NIGERIA TELECOMMUNICATION INDUSTRY

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Abstract

With the continuous development in cellular phone technology, it has become more than just a tool for making calls. With just a cellular phone and wi-fi, the world is open at the touch of your fingertips. This also means that you are open to the world. Mobile marketing has reached a tipping point where great strides in innovation and possible technology have the ability to transform the power and impact of the consumer. With the fascinating digital trends, the media and strategy, the integration with strong creative strategy or media must become more important, and this is how we create engagement, move audiences and build brand affinity. As a result of the growth and expansion of the mobile network system, there is therefore need to x-ray the impact that it has on consumer buying behavior. In other to achieve this, the study used survey research design that involves opinion sampling to generate data. The target population of interest for this study comprises some selected staff and customers of mobile phone shops in Yenagoa Bayelsa State. After analysing the data, it was discovered that mobile marketing has a positive and significant effect of consumer buying behavior in the telecommunication industry. Hence, it was recommended that companies who use this marketing strategy to send a message via the mobile need to better understand the demographic characteristics of



consumers in order to develop marketing programs via cellular. Also, as Facebook marketing ads have a strong relationship on consumer behaviour, marketers should focus on using Facebook messages as reminders or updates rather than for complete marketing campaigns. They should also focus on offering permission-based customers personalized information.

Keywords: Mobile Marketing, Consumer Buying Behavior, Facebook, Whatsapp, Instagram, Social Networking

INTRODUCTION

Cash and cell phones are the two most common commodities that people most certainly leave their home with in this modern age. These are the two necessary effects needed to get by whenever anyone ventures out of the door. Cash is needed in case of emergencies, and cell phones are needed to remain connected to everyone. Cellphones have become an integral part of people's lives. With the continuous development in cellphone technology, it has become more than just a tool for making calls. With just a cellphone and the internet, the world is open at the touch of your fingertips. This also means that you are open to the world, making mobile phones a necessary and integral tool for marketing efficiency and business strategy. This is the essence of mobile marketing.

Mobile marketing has reached a tipping point where great strides in innovation and possible technology have the ability to transform the power and impact of the consumer. However, this emerging strategy remains unevenly applied. Due to the advancement in mobile technology, along with the rapid proliferation and inherent characteristics of mobile apps/devices, the mobile channel has emerged a new and potential tool for marketing activities (Miluska, Carla and Silvia, S. 2022). Camileri, M. A. (2020) opined that the technical benefits of the mobile channel presents a new marketing environment in which firms take part if they want to survive and flourish. And to support what Miluska and Silvia (2022) said, mobile devices and/or channels have become the mainstream channel for advertising just like the television or newspapers.

It has been suggested that most individual look and use their mobile phones at least 150 times a day. Also most people spend at least 2 hours a day on their mobile phones. Wel, et al. (2010) equate the popularity of text messages as a mobile service application to that of email on the internet. The global penetration of mobile communication devices is only one indicator of high potential of global marketing (Varnali & Toker, 2010). Hans et al. (2015) opined that the attributes inherent in mobile marketing – personalization, ubiquity, interactivity and localization

generate significant potential for innovative commercial communication. It is designed for anyone in mobile business who wants to be sure of success at the end of that transition.

With the advent of different consumer focused apps, one will discover that consumers actually enjoy using them in their daily transactions. Mobile marketing seem to have touched a vast majority of consumer patronage in both the banking and the telecommunication industry in Nigeria specifically and the world generally. Mobile marketing seems to engage users quickly and maximize revenue as some customers sometimes deliver several mobile messages daily to friends, family, and customers.

Statement of The Problems

The mass media has always targeted customers with various digital offerings that is aimed at influencing the thinking, taste, and preferences of consumers. Mobile marketing has not only made it easier for customers to purchase items online, but it has changed the nature of consumer activity and the understanding of what web blogging, social networking and the use of mobile apps involve. How well people are involved in it, and the sites that they often visit have changed utterly in the last 5 years Nigeria. And as with the premiership (football), mobile marketing is set to have a ground-breaking impact on almost every consumer out there. The smart phone is everywhere, but in terms of its influence on the consumer brand relationship, and indeed the product or service itself, it is still in its formative years. Mobile platforms help to renew brand's relevance among target audience. It helps to drive emotional connections and solve problems and helps to pool the right audience, provides audiences with trial experiences, amplify media presence, facilitates a deeper connection with target audience and deepen engagement without ever having to enter a store.

Apps have been a core element of consumer behaviour for a number of years. According to Nielsen, American consumers already spend 85% of their mobile time using mobile apps which will make it easier for new apps to be discovered. It is thus expected that organizations will invest more heavily in apps as a channel to reach consumers, build loyalty and community, drive engagement and provide consumer services. If marketers wish to make the most of apps' potential to foster meaningful and long-term marketing relationship, companies will need to improve their creative and content strategies to deliver lifetime value for their consumers.

With cross-channel communication and geo-localized data, marketers a major challenge to invest more in mobile marketing. Companies will need to focus on reaching target customers through mobile marketing which has become the central figure of cross-channel marketing, which is essential for retailers. Long-gone are the days when mobile's role in commerce was

limited to product reviews, price checks and special offers. Thanks to features such as geo-location, which allow brands to communicate with consumers at the right time with the right messages. Mobile marketing is now a shopping assistant and is reinventing how consumers interact with points of sale. Mobile commerce is expected to grow a rate 300% faster than traditional ecommerce, no doubt due in part to greater social e-commerce integration. It is against this backdrop that the study seeks to investigate the effect and relationship of mobile marketing on consumer behaviour.

Objectives of the Study

The general objective of this study is to ascertain the effect of mobile marketing on consumer behaviour. However, the specific objectives are to:

1. To ascertain the extent of relationship between Facebook and consumer behaviour.
2. Ascertain the influence of Whatsapp on consumer behaviour.
3. Determine the association between Instagram and consumer behaviour.
4. Investigate the connection between social networking and consumer behavior.

Research Hypotheses

In light of the above objectives, the study shall be guided by the following hypotheses:

H₁: There is no significant relationship between Facebook and consumer behaviour.

H₂: There is no significant relationship between Whatsapp and consumer behaviour.

H₃: There is no significant relationship between Instagram and consumer behaviour.

H₄: There is no significant relationship between social networking and consumer behaviour.

LITERATURE REVIEW

Conceptual Framework

The concept of mobile marketing and Mobile Advertising

There seems to be no universally accepted definition of the concept of mobile marketing. However, the mobile marketing association (2008) defines mobile as a set of practice that enables organizations to communicate and engage their audience in an interactive and relevant manner through any mobile device or network. Mehra, A., Pane, J. and Kaurav, R. (2020) refer to mobile marketing as the act of using a wireless medium to provide consumers with time and location-sensitive, personalized information that promotes the production and distribution of goods, services and ideas to benefit all stakeholders. It may also be seen as the concept of marketing through the mobile media. Grewal and Levy (2016) posit that mobile marketing has the potential to bridge the gap between offline and online strategies and become a more

immediate way for brands to reach consumers. Mobile marketing is the newest form of marketing that enables business entities to use mobile devices as an definitive marketing medium to establishing a long lasting presence in the life of their customers always and everywhere (Varnali & Toker, 2010).

With the advances and diffusion of mobile technologies, mobile advertising is attracting more and more attention from industries and academic scholars (Sharke, 2014). Mobile advertising has raised considerable interest as mobile technology has advanced and companies world-wide are starting to use not only text messages, but also multimedia messages in their mobile commercial communication. This interest is evident in newspapers (e.g. Waheel & Yang, 2018; Taulavuori 2005), trade press (e.g. Cooke and Zubcsek, 2015; Bellman, S., Potter, R., Treleaven-Hassard, S., Robinson and Varan, D. 2011), and in research (e.g. Lovett et al., 2013; Leppäniemi & Karjaluo 2005; Salo & Tähtinen, 2005; Ozmus, 2019). Mobile advertising allows retailers, service providers, and manufacturers to provide consumers with increasingly relevant offers. The success of such campaigns depends on an ever better understanding of environmental, consumer, and technological context variables; a strong focus on advertising goals; accounting for market factors related to the nature of stakeholders and market environment; and the use of appropriate mobile ad elements to improve relevant outcome metrics. Mobile advertising facilitates and increases access to mobile inventory, firms often form relationships with various intermediaries, such as media agencies, social networks, aggregators, mobile ad networks, exchanges, and mobile carriers.

Consumer behaviour

Consumer behaviour has various constructs independently or in relation with each other in order to validate existing models in the mobile context. Mobile consumer behaviour enables further classification of the mobile consumer behaviour literature based on the constructs the articles prominently focus on. It is found that usefulness is not the top concern for mobile consumers; instead mobile services are used primarily for convenience (Kim, Chan, & Gupta, 2007; Magura, 2003; Mahatanankoon et al., 2005).

Several authors have argued that the acceptance of a mobile marketing message is likely to be influenced by consumers' personal predispositions, tendencies, attitudes and individual-level perceptions (Waheel & Yang, 2018; Ozmus, 2019; Gisyela, 2016; Junhong et al., 2021; Sulaimon & Vorobyova, 2021; Ismail et al., 2022; Cho & Ji, 2021; Hsu, Lu, & Hsu, 2008; Junglas, Johnson, & Spitzmüller, 2008; Khalifa & Shen, 2008; Masech et al., 2021; Mahatanankoon, 2007; Marez et al., 2007; Pagani, 2004; Pedersen, 2005; Wang et al., 2006;

Wu & Wang, 2005; Yang, 2005), demographics (Bigne et al., 2005; DeBaillon & Rockwell, 2005; Hanley et al., 2006; Karjaluoto et al., 2008; Suoranta & Mattila, 2004), social/peer influence (Kim et al., 2008; Lee & Murphy, 2006; Newell & Meier, 2007; Rohm & Sultan, 2006), cultural dimensions (Gressgard & Stensaker, 2006; Harris et al., 2005; Manai & Rahin, 2022; Muk, 2007; Sultan & Rohm, 2008; Sundqvist et al., 2005; Wanmohd & Norzalita, 2022), acceptance of the mobile medium itself (Bigné et al., 2007; Heinonen & Strandvik, 2007), the relevance and the credibility of the content (Choi et al., 2008; Haghirian & Inoue, 2007; Karjaluoto et al., 2008; Ogury, 2019; Wang et al., 2006), the level of trust towards the message sender/wireless service provider (Kumar & Kumar, 2017; Lin & Wang, 2006; Lu et al., 2004; Luarn & Lin, 2005; Benrita et al., 2021; Zhang & Mao, 2008), the context of the marketing message (Barnes & Scornavacca, 2004; Zaynep et al., 2022; Karjaluoto & Alatalo, 2007; Knutsen, 2005; Lee, 2005), user permission, and user control over content, delivery timing and frequency of the marketing message (Carroll et al., 2007).

Facebooking and Consumer Behaviour

Facebook as a social media app is best suited for organizations that hope to reach a younger demographic and a large audience. Businesses that use this platform have access to consumers who have higher income and higher spending power, depending on what the organization is offering. Facebooking has increasingly become a form of mainstream and seamless marketing tool to reach consumers and for other production and distribution activities. It is usually web-based, designed for individual use, usually automated and updated frequently, user-friendly, and access via a web browser. They allow a product to provide videos, photos, and longer descriptions, and testimonials as other followers can comment on the product pages for others to see, access, and purchase.

Whatsapping and Consumer Behaviour

Whatsapp Messenger is a proprietary cross-platform instant messaging client for Smartphone that operates under a subscription business model. It uses the Internet to send text messages, images, video, user location and audio media messages to other users using standard cellular mobile numbers. As of September 2015, Whatsapp had a user base of up to 900 million, making it the most globally popular messaging application. Whatsapp Inc., based in Mountain View, California, was acquired by Facebook Inc. on February 19, 2014, for approximately US\$16 billion.

Social networking and consumer behaviour

According to the mobile benchmark report in the Adobe Digital Index (2015), mobile marketing and social networking are indissoluble. This meeting point is creating not only mobile-first but mobile-only behaviours. Social networking can simply be seen as where individuals with similar interests converse and connect with one another through their mobile devices which could be a phone or tablet. Social networking occurs in virtual Communities. A current trend for social networking websites is to create mobile apps to give their users instant and real-time access from their device. In turn, native social networking apps have been created like Whatsapp, Instagram etc and communities which are built around mobile functionality. Major players like Shazam, Instagram, twitter, Whatsapp, Facebook, skype, Snapchat, etc offer innovative ways for brands to deliver content and drive interaction with consumers.

Instagram

The Instagram is a social media platform of quick, instant, and immediate camera and telegram-like app. The introduction of hash-tags by Instagram, in January 2011, assisted users discover both photographs and each other. Many brands are now heavily using this mobile app to boost their marketing strategy. Instagram can be used to gain the necessary momentum needed to capture the attention of the market segment that has an interest in the product offering or services. As Instagram is supported by Apple and android system, it can be easily accessed by smartphone users. Moreover, it can be accessed by the Internet as well. Thus, the marketers see it as a potential platform to expand their brands exposure to the public, especially the younger target group. On top of this, marketers do not only use social media for traditional Internet advertising, but they also encourage users to create attention for a certain brand. This generally creates an opportunity for greater brand exposure. Furthermore, marketers are also using the platform to drive social shopping and inspire people to collect and share pictures of their favorite products. Many big names have already jumped on board: Starbucks, MTV, Nike, Marc Jacobs, and Red Bull are a few examples of multinationals that adopted the mobile photo app early.

Empirical Review

Sulaimon and Vorobyova (2022) studied the influence of the contemporary mobile marketing strategies on the purchase Behaviour in shopping via Mobile Apps in Nigeria. The population of the study was all the residence in Nigeria who used Mobile apps for shopping and it comprise of 106 million of adults as estimated population and the targeted sample size is 385 subjects that respect the Kerjici and Morgan formula, but the plan is to collect 150% of the

sample to secure enough proper sample after data screening. Data obtained from the survey is analysed by utilizing the software Statistical Package for the Social Sciences (SPSS 25) and SmartPLS 2.0. Findings show that the proposed model or the prediction constructs related to the variable can explain more 58.0% of the purchase behaviour (PB) variance. However, the complement percentage (more than 60%) shows that some other variables maybe causing this uncovered variance.

Junhong et al. (2021) examined the effect of mobile marketing design on consumer mobile shopping. The study used the methods of literature review and structural equation to explore the effect of mobile marketing design factors on the continual intention of consumers in mobile shopping by using the S-O-R model and its extended theories. The conclusions of the research showed that interface quality of mobile sales terminal and integrity of mobile sales terminal had significant positive impacts on consumption emotion; sales promotion in mobile sales terminal had a significant positive impacts on continual intention of mobile shopping; consumption emotion had a significant positive effect on continual intention of consumers in mobile shopping; consumption emotion played a significant mediating role in the relationship between interface quality of mobile sales terminal and continual intention of mobile shopping and between integrity of mobile sales terminal and continual intention of mobile shopping.

Ozmus (2019) investigated the effects of mobile marketing technologies on consumer behavior through business directors. The study was conducted by using questionnaire among the quantitative analysis methods. Factor analysis and correlation of the factors were analyzed. According to the results, it is proved that all the participants organizations were using at least one of mobile marketing platform out of website, mobile application or social media accounts. However 93.6% of these organizations have website, 86.2% of them have social media accounts while holding mobile application of the company is 58.7%. For the respondent of effect of mobile marketing strategies on consumer behavior section business directors are highly agree that mobile marketing strategies have positive effect on consumer behavior.

Waheed and Yang (2018) investigated the relationship between mobile marketing and online consumer buying behaviour within the contextualisation of Pakistan. The study adopted survey research design through questionnaires which were distributed among 1000 consumers between January 2016 and June 2016. Structural equation modeling method of data analysis was employed. The findings revealed the significant correlation between mobile marketing and online buying behaviour. The profound examination affirmed the positive relationships of each element of mobile marketing such as MMS, WAP, and SMS marketing. It was suggested amongst others that, several managerial implications together with future directions for

academic researchers and practitioners should continuous to carry future studies on the subject matter.

Gisyela (2016) determined the effect of mobile marketing on consumer attitudes among mobile phone users in Sam Ratulangi University students and to examine the influence of entertainment, information and credibility on consumer attitudes to marketing via the mobile. The study employed survey research design and data collection method was primary sources through a questionnaire. Multiple regression analysis was used to test the stated hypothesis and to find out the influence of dependent variable with independent variables. The Result of this research found that entertainment and credibility has a significant influence to the consumer attitude by using mobile marketing (except for information). The study recommends that: For companies who use this marketing strategy to send a message via the mobile need to better understand the demographic characteristics of consumers in order to develop marketing programs via cellular.

METHODOLOGY

The study used survey research design that involves opinion sampling and it is usually concerned with the systematic gathering of data from respondents to better understand and/or predict some aspects of consumer behaviour. Survey design is more appropriate to the study since it incorporates the use of questionnaire and field observation in the study area. It was chosen since it deals with opinions, perceptions and attitudes of individuals which cannot be measured in reality. Both qualitative and quantitative approaches were adopted to capture a wider range of in-depth analysis with special reference to the study population.

The target population of interest for this study comprises some selected staff and customers of mobile phone shops in Yenagoa, Bayelsa State. the study aimed to sample the opinions of these individuals as it relates to the dimensions of the independent variables. 100 staff and customers were randomly selected from the population of the study. The simple random sampling technique was adopted for the study because it is fundamental and most used scientific method of sampling in most researches. It ensures that at each point of selection there is an equal and independent opportunity of each member of the population to be included in the sample.

The questionnaire was designed to enable the researcher collect primary data from the respondents. These were exclusively used to solicit the views of the respondents on the research topic. The questionnaire will have two parts (Parts A and B). Part A will be the bio-data of the respondents while Part B will cover the variables selected for the study. The questionnaire would be designed using the modified five (5) point closed ended question which

are categorized as 5= strongly agreed, 4= agreed, 3= undecided, 2= disagreed, 1= strongly disagreed. The data collected for the study was analyzed using the regression analysis. It was used to test hypotheses with the use of statistical package for social sciences (SPSS) version 22.0. The test would use a 5% level of significance.

ANALYSIS AND DISCUSSION OF FINDINGS

This section was designed to enable the researcher to present the primary data collected from the survey research work and the results obtained are analysed with the help of statistical package for social sciences (SPSS). In addition, the researcher also provided a conclusive discussion of the results and establishing necessary inferences and implications based on the relationship between mobile marketing and consumer behaviour in Nigeria telecommunication industry.

Table 1 Questionnaire Distribution Rate

	Frequency	Percent	Valid Percent	Cumulative Percent
Number of Questionnaires Return	85	85.0	85.0	85.0
Valid Number of Questionnaire not return	15	15.0	15.0	100.0
Total	100	100	100.0	

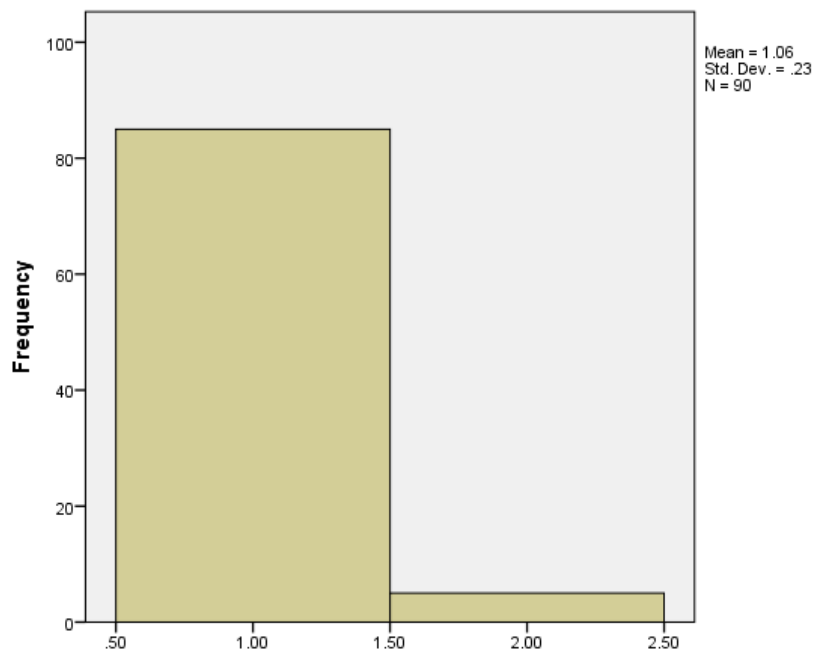


Figure 1 Questionnaires Distribution Rate

The above table 1 and figure 1 presented a total of hundred (100) copies of the questionnaire distributed to some selected staff and customers of mobile phone shops in Yenagoa, Bayelsa State. The researcher was able to retrieved eighty-five (85) copies, representing 85% of the total number of questionnaire distributed. Thus, fifteen (15) copies representing, 15% were not retrieved due to time constraints the researcher could not continue waiting for the respondents who were not available to return their questionnaire at the appointed date. Therefore, eighty-five (85) was used as new respondents sample size for the study.

Table 2 Descriptive Statistics on Facebook

Items	SA	A	SD	D	Total	Mean	SD
1 Facebook marketing helps me keep up-to-day about products I need	40 47%	35 41%	5 6%	5 6%	85 100%	3.294	.8284
2 Facebook marketing is a good source of information	26 31%	15 18%	10 11%	34 40%	85 100%	2.388	1.2918
3 Facebook marketing usually provide the information that I need	34 40%	29 34%	6 7%	16 19%	85 100%	2.952	1.1116
4 Facebook marketing helps to reduce time required for customer-business communication	37 44%	20 24%	15 18%	13 14%	85 100%	2.952	1.1116
5 It is easy to use my Facebook mobile phone to access to the content that I need	42 49%	16 19%	8 9%	19 23%	85 100%	3.023	1.1949

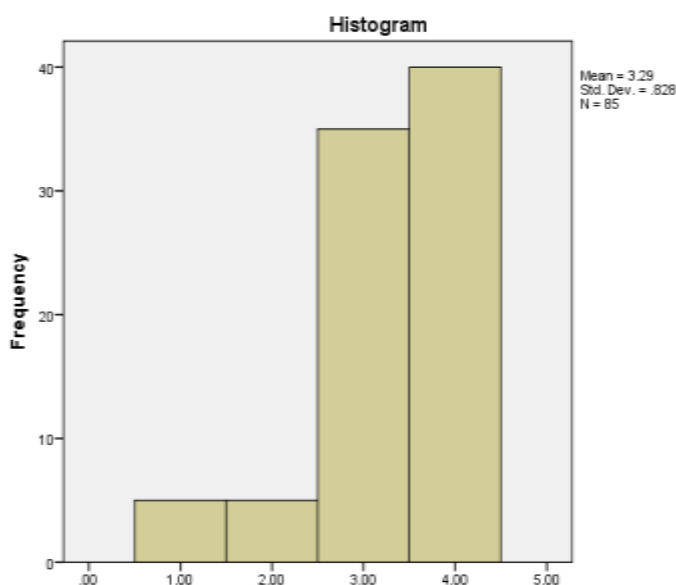


Figure 2 Descriptive Statistics of the related items score of Facebook marketing

The results in table 2 and figure 2 above revealed the response rate of face marketing. The result indicated that majority of the responses agreed that Facebook marketing has relationship with consumer behaviour. The highest response Mean-value of 3.388 came from items 2 statement and the highest standard deviation statistics value of 1.29186 also came from item 2 statement. This implied that Facebook marketing endeavor to meet the set goals/objectives that attract consumer behaviour in Nigeria telecommunication industry. The figure in bar-chart above is the likert scale adopted by the study which indicated the percentage for respondents on those scales and the points on the scale indicate opinions or views about extent of the questions. The bar chart indicates that strongly agreed has the highest percentage about the items questions that related to Facebook marketing and consumer behaviour in Nigeria telecommunication industry.

Table 3 Descriptive Statistics on Whatsapp

Items	SA	A	SD	D	Total	Mean	SD
1 Whatsapp marketing reduce communication expenses	42 49%	14 16%	20 24%	9 11%	85 100%	3.176	1.1252
2 Whatsapp marketing help the business grow its sales force.	17 20%	25 29%	26 31%	17 20%	85 100%	3.035	.9186
3 Whatsapp marketing strategies are easier than classic marketing strategies	35 41%	27 32%	9 11%	14 16%	85 100%	2.952	1.2042
4 Whatsapp marketing allows market research to be cheaper	25 29%	17 20%	22 26%	21 15%	85 100%	2.435	1.1996
5 I think that target market are reachable with Whatsapp marketing strategies	34 40%	25 29%	11 13%	15 18%	85 100%	2.854	1.3432

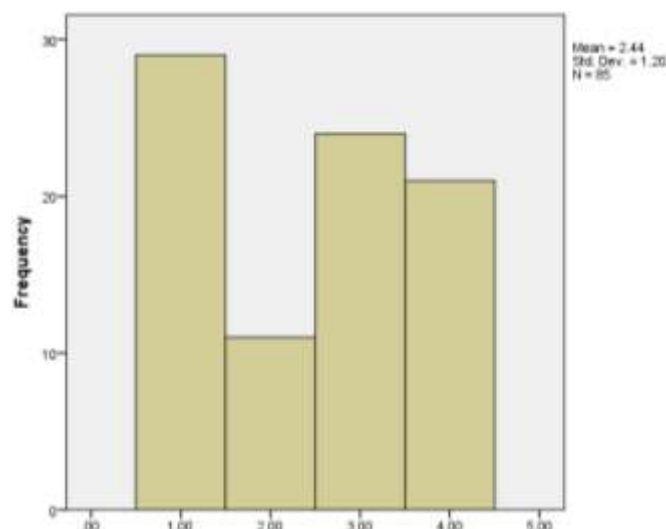


Figure 3 Descriptive Statistics of the related to Whatsapp marketing

The results in table 3 and figure 3 above revealed the response rate of Whatsapp marketing. The result indicated that average number of the responses agreed that Whatsapp has relationship with consumer behaviour while average number of response also disagreed with the statement that, Whatsapp marketing has no relationship with consumer behaviour. The highest response Mean-value of 3.176 came from items 1 statement who agreed with the statement, follow by item 2 with a Mean-value of 3.035 who disagreed with the statement. This implied that Whatsapp marketing may endeavor to meet the set goals/objectives that attract consumer behaviour in Nigeria telecommunication industry. The bar-chart above is the likert scale adopted by the study which indicated the percentage for respondents on those scales and the points on the scale indicate opinions or views about extent of the questions. The bar chart indicates that, strongly disagreed has the highest percentage about the items questions that related to Whatsapp and consumer behaviour in Nigeria telecommunication industry.

Table 4 Descriptive Statistics on Instagram

Items	SA	A	SD	D	Total	Mean	SD
1 Instagram marketing help the market segmentation	18 21%	20 24%	17 20%	30 35%	85 100%	2.882	1.0736
2 I think with the Instagram marketing, customers are getting more products and / or services.	15 18%	24 28%	22 26%	24 18%	85 100%	2.376	1.2049
3 I think that the new generation of Instagram marketing increases efficiency of marketing activities.	32 38%	23 27%	17 20%	13 15%	85 100%	2.752	1.0790
4 I think that with new generation Instagram marketing, you run your business online	16 19%	27 32%	25 29%	17 20%	85 100%	2.635	1.1531
5 Learning to use Instagram marketing does not require a lot of my mental effort	32 38%	20 24%	10 11%	23 27%	85 100%	2.988	1.0634

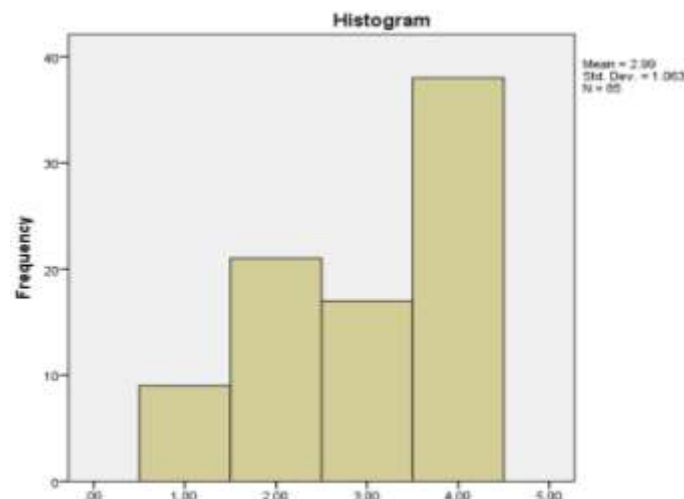


Figure 4 Descriptive Statistics of Instagram

The results in table 4 and figure 4 above revealed the response rate of Instagram marketing. Average number of the responses agreed that Instagram marketing has relationship with consumer behaviour while average number of response also disagreed with the statement that, Instagram marketing has no relationship with consumer behaviour. The highest response Mean-value of 2.988 came from items 5 statement who disagreed with the statement, follow by item 1 with a Mean-value of 2.882 who agreed with the statement. This implied that Instagram marketing may endeavor to meet the set goals/objectives that attract consumer behaviour in Nigeria telecommunication industry. The figure in bar-chart above is the likert scale adopted by the study which indicated the percentage for respondents on those scales and the points on the scale indicate opinions or views about extent of the questions. The bar chart indicates that strongly disagreed has the highest percentage about the items questions that related to Instagram marketing and consumer behaviour in Nigeria telecommunication industry.

Table 5 Descriptive Statistics on social networking

Items	SA	A	SD	D	Total	Mean	SD
1 Social networking marketing improve the company's customer mass	18 21%	20 24%	28 33%	19 22%	85 100%	3.117	.9051
2 Social networking platforms increase company awareness	31 36%	20 24%	18 21%	16 19%	85 100%	2.470	1.2304
3 I think social networking marketing are an effective marketing strategy	24 28%	30 35%	17 20%	14 16%	85 100%	2.964	1.1796
4 Friends and family members have influence on my decision to look into social networking	17 20%	20 24%	21 25%	27 31%	85 100%	3.200	.9734
5 social networking marketing increase brand recognition	30 35%	11 13%	15 18%	29 34%	85 100%	3.164	.9108

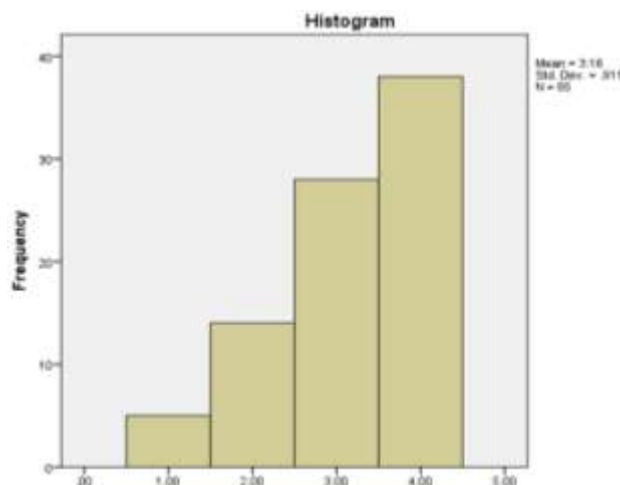


Figure 5 Descriptive Statistics on social networking

The results in table 5 and figure 5 above revealed the response rate of social networking. The result indicated that most of the responses agreed that social networking has relationship with consumer behaviour. The highest response Mean-value of 3.200 came from items 4 statement who agreed with the statement, follow by item 5 with a Mean-value of 3.1647 who agreed with the statement. This implied that social networking endeavor to meet the set goals/objectives that attract consumer behaviour in Nigeria telecommunication industry. The figure in bar-chart above is the likert scale adopted by the study which indicated the percentage for respondents on those scales and the points on the scale indicate opinions or views about extent of the questions. The bar chart indicates that strongly agreed has the highest percentage about the items questions that related to social networking and consumer behaviour in Nigeria telecommunication industry.

Table 6 Descriptive Statistics on consumer behaviour

Items	SA	A	SD	D	Total	Mean	SD
1 Mobile marketing strategies have positive influence on consumers purchasing behavior.	17 20%	20 24%	21 25%	27 31%	85 100%	3.200	.9734
2 I think it's easier to reach consumers with mobile marketing	17 20%	25 29%	26 31%	17 20%	85 100%	3.035	.9186
3 Mobile marketing allows brand to have more control on consumers	30 35%	24 28%	17 20%	14 16%	85 100%	3.464	1.1796
4 I think announcements (discounts, campaigns etc.) coming from mobile marketing it reaches the consumer	18 21%	20 24%	28 33%	19 22%	85 100%	3.117	.9051
5 I think that mobile marketing are responding more quickly to consumer complaints.	31 36%	20 24%	18 21%	16 19%	85 100%	2.470	1.2304

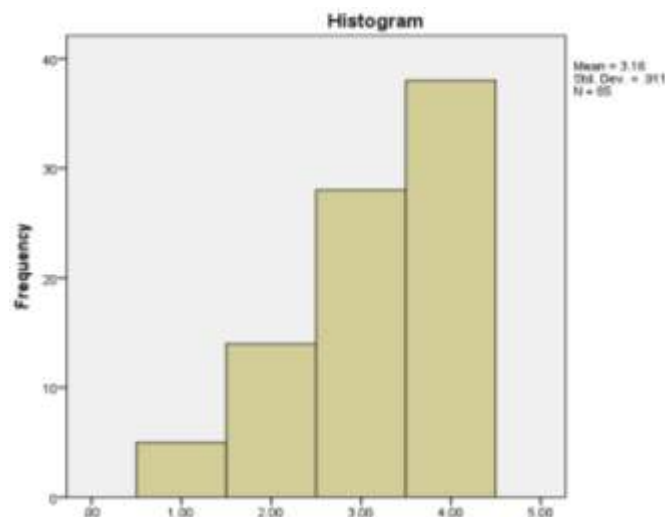


Figure 6 Descriptive Statistics of the consumer behaviour

The results in table 6 and figure 6 above revealed the response rate of consumer behaviour. The result indicated that most of the responses agreed that consumer behaviour has relationship with mobile marketing. The highest response Mean-value of 3.464 came from items 3 statement who agreed with the statement, follow by item 5 with a Mean-value of 3.200 who agreed with the statement. This implied that consumer behaviour endeavor to meet the set goals/objectives that attract mobile marketing in Nigeria telecommunication industry. The figure in bar-chart above is the likert scale adopted by the study which indicated the percentage for respondents on those scales and the points on the scale indicate opinions or views about extent of the questions. The bar chart indicates that, strongly agreed has the highest percentage about the items questions that related to consumer behaviour.

Table 7: Correlations Analysis

		Facebook	Whatsapp	Instagram	Social Networking	Consumer Behavior	
Spearman's rho	Facebook	Correlation Coefficient	1.000	.831**	.985**	.695**	.831**
		Sig. (2-tailed)	.	.000	.000	.000	.000
		N	85	85	85	85	85
		Correlation Coefficient	.831**	1.000	.820**	.615**	.686**
	Whatsapp	Sig. (2-tailed)	.000	.	.000	.000	.000
		N	85	85	85	85	85
		Correlation Coefficient	.985**	.820**	1.000	.704**	.842**
	Instagram	Sig. (2-tailed)	.000	.000	.	.000	.000
		N	85	85	85	85	85
		Correlation Coefficient	.695**	.615**	.704**	1.000	.617**
	Social Networking	Sig. (2-tailed)	.000	.000	.000	.	.000
		N	85	85	85	85	85
Correlation Coefficient		.831**	.686**	.842**	.617**	1.000	
Consumer Behavior	Sig. (2-tailed)	.000	.000	.000	.000	.	
	N	85	85	85	85	85	

** . Correlation is significant at the 0.01 level (2-tailed).

It is imperative to test the hypotheses after completing the univariate analyses. Thus, this section of the study is concerned with the testing of the formulated hypotheses in 1-4. To effectively carry out the testing of the hypotheses, Everitt and Dunn (2001) was adopted as a guide to determine the r value and the extent of the relationship between the variables.

Table 8 Range of Relationship and Descriptive Level of Association of Relationship

Range of r values	Descriptive level of association of r
$\pm 0.80 - 1.00$	Very strong
$\pm 0.60 - 0.79$	Strong
$\pm 0.40 - 0.59$	Moderate
$\pm 0.20 - 0.39$	Weak
$\pm 0.00 - 0.19$	Very weak

If the significant/Probability Value (PV) < 0.05 (level of Significance) = reject the null and conclude Significant Relationship

If the Significant Probability value (PV) > 0.05 (level of Significance) = Accept the null and Conclude Insignificant Relationship.

The results in table 7 revealed a correlation coefficient of R-value (0.831**) which indicated very strong positive relationship between Facebook and consumer behaviour. Correlation coefficient of R-value (0.686**) indicated a strong positive relationship between Whatsapp on consumer behaviour. Correlation coefficient of R-value (0.842**) indicated very strong positive relationship between Instagram and consumer behaviour. And, a correlation coefficient of R-value (0.617**) which indicated a strong positive relationship between social networking and consumer behavior in Nigeria Telecommunication Industry.

Regression Analysis

Table 9a Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.805 ^a	.648	.642	.79884	1.554

a. Predictors: (Constant), social networking, Whatsapp, Instagram, Facebook

b. Dependent Variable: consumer behavior

Regression coefficient of $R = 0.805$ or 80.5% indicated that relationship exist between independent variables and dependent variable. The coefficient of determination $R^2 = 0.684$ which show that 64.8% of variation in consumer behaviour is explained by Facebook, Whatsapp Instagram and social networking. The adjusted R-square in the table 9 had shown that the dependent variable, (consumer behaviour) is affected by 64.8% by independent variables (Facebook, Whatsapp Instagram and social networking). This implying that there is a positive relationship between Facebook, Whatsapp Instagram, social networking and consumer behaviour in Nigeria Telecommunication Industry. The Durbin-Watson $d = 1.554$ indicate that there is no first order linear auto-correlation in the data and it shows that the model has goodness of fitness.

Table 9b ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	.919	1	.919	8.576	.004 ^b
1	Residual	8.893	83	.107		
	Total	9.812	84			

a. Dependent Variable: consumer behavior

b. Predictors: (Constant), social networking, Whatsapp, Instagram, Facebook

The table 9b had shown a regression significant P-value of $0.004 < 0.05$ alpha level, F-value 8.576 which illustrated that the overall model is statistically significant at 0.05 alpha level between Facebook, Whatsapp Instagram, social networking and consumer behaviour in Nigeria Telecommunication Industry.

Table 9c Coefficients^a

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients Beta		
	(Constant)	.809	.176		4.598	.000
	Facebook	.371	.181	.831	2.042	.000
1	Whatsapp	-.094	.074	.686	1.273	.000
	instagra	.531	.165	.841	3.211	.002
	social networking	-.026	.058	.617	2.456	.000

a. Dependent Variable: consumer behavior

Test of Hypotheses

H₁: There is no significant relationship between Facebook and consumer behaviour.

Decision 1: The coefficient of determination for Facebook and consumer behaviour is positive (0.831) at 0.05 significant levels would increase consumer behaviour in Nigeria telecommunication industry. The P-value 0.000 is < 0.05. Therefore, the null hypothesis is rejected and alternate hypothesis is accepted, which means that there is a significant relationship between Facebook and consumer behaviour in Nigeria telecommunication industry.

H₂: There is no significant relationship between Whatsapp and consumer behaviour.

Decision 2: The coefficient of determination for Whatsapp and consumer behaviour is positive (0.686) at 0.05 significant levels would increase consumer behaviour in Nigeria telecommunication industry. The P-value 0.000 is < 0.05. Therefore, the null hypothesis is rejected and alternate hypothesis is accepted, which means that there is a significant relationship between Whatsapp and consumer behaviour in Nigeria telecommunication industry.

H₃: There is no significant relationship between Instagram and consumer behaviour.

Decision 3: The coefficient of determination for Instagram and consumer behaviour is positive (0.841) at 0.05 significant levels would increase consumer behaviour in Nigeria telecommunication industry. The P-value 0.002 is < 0.05. Therefore, the null hypothesis is rejected and alternate hypothesis is accepted, which means that there is a significant relationship between Instagram and consumer behaviour in Nigeria telecommunication industry.

H₄: There is no significant relationship between social networking and consumer behaviour

Decision 4: The coefficient of determination for social networking and consumer behaviour is positive (0.617) at 0.05 significant levels would increase consumer behaviour in Nigeria telecommunication industry. The P-value 0.002 is < 0.05. Therefore, the null hypothesis is rejected and alternate hypothesis is accepted, which means that there is a significant relationship between social networking and consumer behaviour in Nigeria telecommunication industry.

CONCLUSION AND RECOMMENDATIONS

This study determined mobile marketing strategic and consumer behaviour in Nigeria telecommunication industry using Spearman Correlation Coefficient and Ordinary Least Square (OLS). The study made use of questionnaires which was some selected staff and customers of mobile phone shops in Yenagoa, Bayelsa State. 100 staff and customers were randomly selected from the population of the study. From the research findings, the study concluded that there is a significant relationship between mobile marketing strategic and consumer behaviour in Nigeria telecommunication industry. This conclusion was in-line with Junhong et al. (2021) and their study concluded that interface quality of mobile sales terminal and integrity of mobile sales terminal had significant positive impacts on consumption emotion and also, sales promotion in mobile sales terminal had significant positive impacts on continual intention of mobile shopping. Ozmus (2019) result further agreed that, the effect of mobile marketing strategies on consumer behavior section business directors are highly agree that mobile marketing strategies have positive effect on consumer behavior. Waheed and Yang (2018) also support the conclusion that the profound examination affirmed the positive relationships of each element of mobile marketing such as MMS, WAP, and SMS marketing. Base on the findings of this study, the following recommendations are advanced:

- i. Companies who use this marketing strategy to send a message via the mobile networks need to better understand the demographic characteristics of consumers in order to develop marketing programs via cellular.
- ii. As Facebook marketing ads have a strong relationship on consumer behaviour, marketers should focus on using Facebook messages as reminders or updates rather than for complete marketing campaigns. They should also focus on offering permission-based customers personalized information.
- iii. Also, it is suggested that administrators of telecommunications companies should build a brand management community that that will aid in creating a competitive business advantage, using the mobile marketing strategies as a springboard to facilitate effective marketing communication to customers and the general public.
- iv. Finally, service providers must ensure to put into consideration necessary means of increasing the impact of mobile marketing. This will facilitate and boost of stronger relationship and networking among content developers, social influencers, and the telecommunications community.

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