

## Determinants of Patronage of Smartphone Among Female Students of Tertiary Institutions in Ekiti State

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### Abstract

Telecommunication industry has reconfigured our big world to a small village through the availability of swift devices for easy communication. One of the best gifts ever presented to humanity by this industry is Smartphone. However, irrespective of the sound and impressive job done by this industry, there is a need for the purchase of this device for proper usage. This therefore brings us to a marketing platform where demand and supply agreement need to be fulfilled between manufacturer and consumers. This study examined the determinants of Patronage of Smartphone among the Female Students in Tertiary Institutions in Ekiti State. Stratified and convenient random sampling technique were used to select the study area and the respondents in order to make sure that every member of the selected faculties in the university evenly represented. The population for this study was 21,827. The sample size for the study was 399 using the Taro and Yamane (1992). Three hundred and ninety-nine questionnaires were administered to the respondents. Data obtained was analyzed using descriptive statistics and multiple regressions. The article therefore established smartphone brand awareness through usage, brand perception through price and brand quality through designs contributed significantly to the patronage of Smartphone among female students of tertiary institutions in Ekiti State. It is therefore recommended that the above mentioned factors should be taken into consideration for better patronage of smart phone among female students of tertiary institutions.

### Keywords

Smartphone, Brand Name, Design, Features, Price and Tertiary Institution

## 1. INTRODUCTION

The majority of our working time is spent communicating, which entails both giving and receiving information. This can be done in a variety of ways, including speaking, writing, listening, and reading materials. As a result, information is disseminated or absorbed. The social transaction model of communication entails getting one's thoughts across to listeners. It entails making oneself understandable to the person or people to whom the information is targeted. This suggests that communication's purpose is to implant ideas in the minds of those who hear it (Ogwumike, Ndimele and Innocent, 2015). All living beings on the planet have a similar habit of communicating. Humans, on the other hand, have more sophisticated and enhanced communication routes than animals. Traditional and modern communication methods can be divided into two categories. This can be traced back to the communication sector's new technological breakthrough. On a day-to-day level, technology also improves communication. Examining the communication environment, enhanced mobile phones known as Smartphones have greatly aided in the improvement of human communication. Richard and

Joel's efforts laid the groundwork for the creation of mobile phone communication. Smartphones are now recognized as one of the most prevalent information sources.

The first Smartphone, known as a Simon Smartphone, was invented by International Business Machine Corporation (IBM) in 1992. (UKEassys, 2018). This was a significant technological advance, as well as a response to market demand, because people desire to communicate with one another in a short amount of time. With the use of a Smartphone, it is now able to send messages and emails to one another in a more efficient and timely manner. It's incredible to think that a single technical product may revolutionize a customer's culture, way of life, and entire society. After the advent of the Smartphone, a significant shift occurred in human life, paving the way for advancement in the realm of technology. In this generation, finding someone without a smartphone is nearly difficult. Because of its numerous purposes, such as the capacity to communicate with clients, family members, and coworkers in a variety of ways, the smart phone has become an indispensable gadget. To put it another way, a Smartphone is a Personal Computer (PC) with increased features and capabilities. Smartphones are currently one of the most widely used information sources. According to 2006 Country Statistics from the Population Reference Bureau, mobile phones are one of the most frequent information access devices, with about 31% of the global population having access. People use mobile phones for a variety of functions, including voice communication, Short Message Services (SMS), Multimedia Message Services (MMS), recording, calculating, playing games, and more. When it comes to new media, the importance of networks cannot be overstated. The entire planet is connected to each other thanks to networks.

## 2. LITERATURE REVIEW

Jisha and Jebakumar (2018) looked at how female college students felt about their Smartphones in terms of reliance. The research employed a qualitative approach. The findings revealed that today's female college students rely on their smartphones to organize their daily lives. From the government's perspective, it is suggested that pupils be educated about the dangers of excessive reliance on mobile phones. Alternatively, some form of intervention, either from the family or from the college side, is essential to keep such reliance under control. As a result, a "the sooner, the better" strategy should be implemented from both internal and external sources. Jisha and Jebakumar (2019) investigate the average Smartphone usage among female college students in Coimbatore, Tamil Nadu. A questionnaire was used as part of the survey method. According to the findings, female college students regard their smartphones as an integral part of their lives, without which they feel unsatisfied. According to the report, female college students primarily utilized their smartphones for social media contact. Olusegun (2016) investigates the perception of smartphones among Nigerian undergraduate college students. A Qualitative Approach was also used in the research. The content revealed the development of the Smartphone as a self-concept among Nigerian college students.

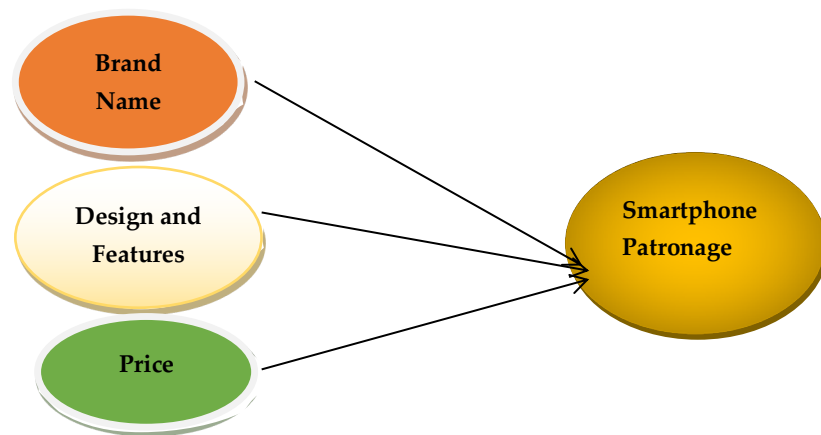
At the University of Ghana, Noah (2019) investigates the use and impacts of smartphones as learning tools in remote education. Sampling Techniques were used in the survey research. The findings highlighted certain restricting problems in the usage of Smartphone, including Smartphone freezing crucial learning moments, inconsistent internet access, and distant education undergraduate university of Ghana. According to the study, there should be a constant strong Wi-Fi connection, constant power, and the University of Ghana's distance education unit should train students on how to effectively use their Smartphones for academic activities with minimal distractions. The goal of Manvin and Narina (2018) is to analyze relevant literature on Smartphone usage patterns in order to determine the harmful and beneficial effects of smartphones on students. The survey method was employed. The findings

examine the use of smartphones among 21st-century university students, as well as the impact of smartphone use on student life, both positively and negatively. In Lagos State Tertiary Institutions, Patrick, Mufutau, and Olushola (2018) examine the impact of Smartphone qualities on student purchasing decisions. The study used a descriptive research design. The findings revealed that all of the study's Smartphone features were shown to be favorably and significantly associated to students' purchasing decisions. Firms should focus on upgrading their technology in order to introduce innovative features and applications, as well as adopting a variety of pricing methods, while not overlooking image and design aspects, which were viewed as secondary factors in determining consumers' Smartphone decision. Azira, Siti, Law, Nurliyana, and Meriam (2016) investigate the factors that influence smartphone purchase intentions among Malaysian university students. It was decided to employ a survey questionnaire. The results demonstrate that three variables, namely product characteristics, brand name, and social influence, have a substantial link with purchasing intention, with the exception of one variable, Product sacrifice, which has no meaningful relationship. Tokelo and Joshua (2018) explore the impact of smartphone use on the learning processes of university students in a developing country. The researchers used a quantitative research methodology. Smartphone use has a good effect on student academic advancement, according to the study.

Amine and Berkan (2019) wanted to describe the purposes, patterns, and situations of smartphone use among university students in developing countries, with a focus on Turkey. The research used a cross-sectional survey method. The findings have implications and considerations for practitioners who want to use Smartphone learning for educational purposes. In addition, Arif, Aslam, and Wajeeha (2014) used a structural equation model to investigate students' reliance on smart phones and their impact on purchase behavior in Iraq. In this investigation, a survey questionnaire was used. The findings show that students' reliance on smartphones is influenced by social needs, social influence, and convenience. There was also a link between a student's reliance on a smart phone and their purchasing habits. Siti, Junainah, Seri, and Suhaila (2017) investigate the factors that influence smartphone usage among students at Malaysian institutions of higher learning. The method employed was descriptive research. Three factors of Smartphone usage were discovered (entertainment, learning process and social interaction).

Rahul (2017) seeks to determine the frequency of cell phone use among female students in India, as well as the purpose of cell phone use. The study employed qualitative and qualitative methods. Female communication students at Amity University used their phones mostly for sociability, privacy, safety, online presentations, and escapism. Female mobile phone users are agitated when their phone is not in their hand or is turned off, according to the study. This is due to a problem with addiction. The method employed was descriptive survey research. It discovered how students' connectivity in class and out-of-class involvement may be influenced by their use of educational Smartphones. Olabusuyi and Adeniyi (2014) look into the factors that influence Smartphone demand among students at the University of Ibadan in Nigeria. The ex-post-facto survey research design is used. The survey discovered that the most crucial element in a student's decision to purchase a smartphone is the design and functionality of the device. Eserinune (2015) investigated the impact of mobile phones on students in tertiary institutions in Abraka, Nigeria, as well as the positive and negative consequences of their use. The study used a survey research design that was modified. According to the findings, the use of mobile phones by university students has resulted in a vast and diverse pool of knowledge. According to the report, university officials in Nigeria should take a more active part in reducing the negative consequences of mobile phone usage among students in terms of examination malpractices. Chew, Lee, Lim, Thai, and Wong (2012) look at the factors that

influence smartphone purchasing intentions among young adults in Malaysia's University Tunku Abdul Rahman Perak Campus. It was decided to do a descriptive research study. It was established that, as a result of the present technological trend and evolution of mobile phone innovation, the demand for Smartphones is fast expanding. Smartphones have been a regular need for most people in recent years due to their capabilities and advantages over other technology gadgets.



**Figure1.** Conceptual Framework  
Source: Adapted from Kothari 2004

### 3. METHODS

In this study, the research design used was quantitative survey research. This was put to use. Because determining the patronage of Smart phone among female students in higher institutions in Ekiti state, the adaption of quantitative survey study was used. Four sub-variables were used to measure the determinants of Smartphone patronage (brand name, price, design and features).

All female students at Ekiti State University, Federal University Oye Ekiti, and the Federal Polytechnic Ado Ekiti were included in this study. The total number of people in this study was 21,827. According to Yamane, the sample size for the study was 399.

The Taro and Yamane (1992) model is given as:

$$n = \frac{N}{1 + N(e)^2}$$

Where n = anticipated total sample size

N = population size

E = degree or level of significance (5% i.e. 0.05)

Therefore, the total sample shall be computed as:

$$n = \frac{21,827}{1 + 21827(0.05)^2}$$

n = 399 respondents

Multiple regression analysis was used to analyze the data and its model is shown below:

A model of three (3) explanatory variables was formulated capturing the variables of Patronage of Smartphone.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where;

Y is the patronage of smart phone among female students

X<sub>1</sub> is Brand Name,

X<sub>2</sub> is Design & Features,

X<sub>3</sub> is Price,

β<sub>1</sub>, β<sub>2</sub>, β<sub>3</sub> and β<sub>4</sub> are the corresponding coefficients

ε is the error term

#### 4. RESULTS

##### Multiple Regression Analysis

The followings are the findings of the research as presented in the Tables below:

**Table 2.** Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.979 <sup>a</sup>	.960	.095	1.35013

a. Predictors: (Constant), Brand Name, Design and Features, Price, Preference

##### Interpretation:

**Table 3.** Analysis of Variance (ANOVA<sup>a</sup>)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1767.536	4	441.884	3.617	.005 <sup>b</sup>
	Residual	46418.116	380	122.153		
	Total	48185.652	384			

a. Dependent Variable: Smart Phone Patronage

b. Predictors: (Constant), Brand Name, Design and Features, Price

**Table 4.** Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	38.519	2.619		14.702	.000
Brand Name	4.254	3.563	.243	2.814	.016
1 Design and Features	7.896	1.681	.658	4.697	.000
Price	-2.478	1.027	-.221	-2.412	.027

a. Dependent Variable: Smart phone Patronage

The result of the study showed that brand name has a positive and significant effect on patronage of Smartphone among female students in Tertiary institutions in Ekiti State. Similarly, the result affirmed that for every one unit increase in uniqueness in brand name, there was a 4.3% increase in the patronage of Smartphone among female students of Ekiti State tertiary institutions. Features and designs also exerted a positive and significant effect on patronage and showed that for every one unit improvement on features and designs of smart phones, there was a 7.9% increases in the patronage of smart phones among female students of Ekiti State tertiary institutions in Ekiti State.

Price exerted a negative but significant, this perhaps could be as a result of the economic situations in Nigeria. The result showed that for every one unit increase in price of Smartphone, there was a 2.5% decline in the patronage of smart phones among the female students' participants.

## 5. CONCLUSION AND RECOMMENDATIONS

From the result obtained from the analysis, the study concluded that Smartphone brand awareness through their usage, Smartphone brand perception through their price and factors that influence Smartphone brand loyalty and Smartphone brand quality through their designs and features, corresponding price contributed to the patronage of Smartphone among female students in tertiary institutions in Ekiti State. It is therefore, recommended that every Smartphone brand should seek good reputation in other to build loyalty in their customers, this will later serve them well as it will improve the patronage of their product. The market should not just be flooded with various Smartphones simply because of profit but quality should be the watch word of every Smartphone brand.

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