ABSTRACT

In the mobile phone industry today, the success and failure of any company largely depends on its ability to identify its customer's diverse needs and wants, particularly when teenagers form a significant portion of its customers.

This study identifies consumer preference toward product attribute of a mobile phone and acceptance of the mobile technology. These preferences are influenced by the technological advancement been witnessed in the mobile phone industry, the evolution of technology to the 4G it is today. Mobile phone companies in the world need to understand the teenage consumers' perception towards the 3 key elements in product attribute i.e. Product quality, features, style and designs. And they need to understand the importance of the elements of the Unified theory of acceptance and use of technology (UTAUT) model so that the companies will know how their potential customers feel about acceptance of technology. Various studies have reported that customer satisfaction is often influenced by Product attribute. The intention to purchase, be it the first unit or repurchase is more often than not influenced by high quality, feature packed models and being the youth as they are, consumers are intrigued by the style and designs of each brand and model.

The eight dimensions of product quality have significant roles in consumer's purchasing behavior. The study of correlation between product attribute, UTAUT Model with customer satisfaction helps mobile phone companies to stay ahead of competition by coming out with the best quality, most advanced features and the most in fashion styling and designs.

The findings will have to be analyzed for the data collected to be useful to anyone. Demographic profiling, analysis of gender perceptions, consumer preferences towards product attributes and UTAUT Model are among the statistical analysis to be performed.

Regression analysis is used to determine any significant difference of the Hypothesis while the results might be adopted in product development programs various mobile phone companies thereby satisfying consumer preference.
ACKNOWLEDGEMENT

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LIST OF ABBREVIATION

3G – Third Generation
4G – Fourth Generation
CDMA - Code division multiple access
EDGE - Enhanced Data rates for GSM Evolution
GSM - Global system for mobile communications
GPRS - General packet radio service
IDC - International Data Corporation
MMS – Multimedia Messaging Services
OFCOM - officially the Office of Communications
PDA – Personal Digital Assistant
UTAUT – Unified Theory of Use and Acceptance of Technology
SMS – Short Messaging Services
TAM – Technology Acceptance Model
TDMA - Time division multiple access
TPB – Theory of Planned Behavior
TRA – Theory of Reasoned Action
UMTS - Universal Mobile Telecommunications System
WAP – Web Access Portal
WIMAX - Worldwide Interoperability for Microwave Access
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CHAPTER ONE
INTRODUCTION

1.1: Industry Background
The 21st century has witnessed evolutions and great innovations including the introduction of various kinds of technological products, e-commerce, mobile phones, 3G, and the World Wide Web was made to be experienced like never before. The Mobile Phone industry has been ranked among the industries with the fastest growth rate in the world, which is expanding at a rapid rate with fast access to developing countries.

Major changes and improvements have been witnessed since the introduction in 1994 with scholars referring them to the three turning points. These turning points includes the introduction of the first colored screen mobile phones in 2002, followed by multimedia services in 2002, and the major one termed the smart phone era in 2007 (PRLog). The evolutions of mobile phones would continue and every expectations been exceeded due to increasing consumer expectations, and the nature of today’s ever changing wants and needs combined with emerging technology, innovations, and creativity in the industry.

The mobile phone has become a necessary and often a major part of our lives, which has contributed to the non-stop growth been experienced in the industry. The need to possess one or more mobile phones depends from a parent purchasing one for their loved family members to aid communication, share pictures and videos on vacations, emergency reasons, and more which made it a staple item in our daily life. According to Chen (2006), the wireless service providers have made it so much easy by adding value through the availability of plans that allow members stay connected while younger children own these devices thereby increasing worldwide market share.

Historically, consumers tend to purchase smaller phones with light features and basic functionality, however nowadays they prefers mobile phones with enabled packed features such as the smart phone which is already very common. The mobile phone has experienced phenomenal growth with functions and form been the main transformer
from a simple object with a screen to ones with enabled multimedia services and also to
smart phones with 3G or 4G services (Boon, 2010).

Mobile phones of this age are not to be considered as a mere tool of communication but
rather a device capable of performing all functions and capabilities of a personal
computer. This is because traditional phones have been slowly replaced with smart
phones with features such as Multimedia Message Service, full internet capabilities,
GPRS, WAP services and much more (Wills, 2011). Other functions include email
services, calendar and organizer, memo, calculator, music player, camera and video
recording capabilities. All these modern services are not enough, as new technology
such as EDGE, 3G and 4G are been witnessed/developed to further enhance consumer
services and experiences.

Smart phones are defined as traditional cellular telephones however with built in
capabilities, applications, large memory pool which provides voice services, short
messaging service (SMS), email services, browsing experience, video and digital
camera and more. It has the ability to support myriad applications, which made the once
single and straight headed device into a mobile computer (PMC, 2011).

According to mobile review (2011), smart phones with these features are considered
important today due to the portability and ease of use while noting the ability to combine
the functions of many devices such as cameras, mp3 players, video camcorders,
personal computers as they can use all these functions from a single and portable
device enabled with all. They give consumers the convenience of leaving extra gadgets
and other technical and heavy devices when going to any social/formal events.

1.1.1 World Mobile Phone Industry
The worldwide mobile phones industry has been experiencing phenomenal growth
since its inception (Gartner, 2012). This is true because the market experienced a
growth of 6.1% between the 4th quarter of 2010 and that of 2011. This is evident when
you look at the statistical data of shipment by vendors in the same period which also
increased by 6.1% years over year (402.8 to 427.4 million units sold), this surpassed
the forecasted growth rate which was initially at 4.4%. This trend however faced a
decline as the worldwide market for phones suffered a decline of 1.5% year over year in the 1st quarter of 2012 as vendors shipped 398.4 million units as compared to that of 1st quarter of 2011. This is coming at a period when Samsung ousted Nokia the longtime leader to become the top mobile phone vendor in the world. According to a market research by Gartner (2012), the major brands of mobile phones in the market as determined were Nokia, Apple, Samsung, LG, and ZTE.

Based on preliminary results as released by IDC (2012), market share and phones shipments for the 4th quarter indicated a total shipment of 427.4 million where Nokia carries 26.6%, Samsung 22.8%, Apple 8.7%, LG 4.1%, and ZTE 4.0%.

The slowing growth rate been experienced is caused by the reduced demand for feature phones; however analysts have anticipated further high growth rate in coming years due to the smartphone market gaining greater acceptance and capturing a greater segment of the overall market (IDC, 2012).

The market for smartphones shows a different picture as total shipment in 4th quarter of 2012 shows 219.4 million units representing 45.5% of overall mobile phones shipment (the highest ever). 712.6 million Smartphones are shipped on an annual basis in the world in 2012 recording a 44.1% increase than in 2011. This high growth experienced in the smartphone market though dominated by Samsung and Apple still presents opportunities for challengers with unique offers such as low cost can gain rapid market share. An excellent example is Huawei which overtook LG to join the league of top 5 vendors in the mobile phone market and surpassed HTC in smartphone vendors.

**Top Five Smartphone Vendors, Shipments, and Market Share, Q4 2012 (Units in Millions)**

<table>
<thead>
<tr>
<th>Vendor</th>
<th>4Q12 Unit Shipments</th>
<th>4Q12 Market Share</th>
<th>4Q11 Unit Shipments</th>
<th>4Q11 Market Share</th>
<th>Year-over-Year Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Samsung</td>
<td>63.7</td>
<td>29.0%</td>
<td>36.2</td>
<td>22.5%</td>
<td>76.0%</td>
</tr>
<tr>
<td>2. Apple</td>
<td>47.8</td>
<td>21.8%</td>
<td>37.0</td>
<td>23.0%</td>
<td>29.2%</td>
</tr>
<tr>
<td>Vendor</td>
<td>Market Share</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>--------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Huawei</td>
<td>10.8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Sony</td>
<td>9.8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. ZTE</td>
<td>9.5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>77.8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>219.4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Figure (1): Top Smart Phone Vendors** *(Source: IDC, 2013)*

1.1.2 Evolution of Telecommunications
The cellular communications systems has witnessed key turning points including the introduction of a set of generations commonly called 1st, 2nd, 3rd, and 4th generation. The 4th is the latest and popularly called 4G and has been characterized with high speed transmission of data. According to Techweb (2011), the 1G was introduced in 1970-80’s and used an analogue system. They were used to transmit data, with an adapter plugged into a computer and connected to the cellphone.

The 2G was introduced in 1990 which refers to digital voice phone system including GSM, CDMA, and TDMA. Others include 2.5G technology used to provide internet access and email services including GPRS, EDGE for GSM while TDMA for CDMA. The 3G followed which was developed for high speed data transmission and provide advance global roaming services. This meant that consumers can enjoy connectivity when travelling anywhere in the world by automatically connecting to any available system of network. The 4G which was recently introduced offers more functionality and services than 3G with data transmission at an incredible speed and offers excellent data package which uses LTE, WIMAX, and integrating communication using IP protocol technology that provides fast download avenue (Techweb, 2011).

Vendor Highlights

1.1.3 **Samsung**: this company recently established a world record for the number of smartphones shipped in a single quarter and followed by a single year and also
reclaimed the market leadership in the smartphone segment. Its successes are based on the deep and broad product line of Android enabled smartphones, which in particular the branded family of galaxy combined with a sustained demand for its entry level and mid-range models that all together accounts for the remarkable volume of shipments. Also its Tizen smartphone strategy takes shape while the year 2013 continues to be a pivotal year for the company. Even though the move to Tizen will not take place overnight, it is expected that Samsung will continuously rely on Android as its main and primary operating system in the near future (IDC, 2013).

1.1.4 Apple: the company recorded successes of iPhone shipments which were largely driven by improved sales in greater China where shipments doubled and also in the United states where they recorded an activation of 6.2 million units of iPhones on Verizon network alone. The company slipped to second place in the overall market for smartphone but what is interesting about the company is the fact that its success was largely due to older models of the iPhone and particularly the brand of iPhone 4, which the company couldn’t produce enough in the quarter as relative to its demand. The company’s success in sales of older models of the iPhone may portend success in higher growth and emerging markets where the company has performed excellently previously.

1.1.5 Nokia: the company has been on the spotlight in recent years as it has long been on the leadership position till recently. It strengthened its products line with products aimed for entry level, fashion, and business conscious users. Its products such as the Lumia smartphones, asha line have received positive responses in the market place. The Symbian shipments however precipitously declined at last quarter due to drop in demand in key emerging markets such as China. The company also received woes in its current line of smart phone but made a speedy transition by installing the windows phone operating system on its products which is a critical bet upon the future of its line of smartphones (IDC, 2013).

1.1.6 ZTE: the company maintained its spot on the list of the global top vendors which is largely thanks to its continued strategy of international diversification in the last quarter. The company has for the first time shipped more smartphones than feature phones.
This growth in sale of smartphones is as a result of an uptick in lower cost sale of smartphones in emerging markets. The company is based in China and traditionally relied on sales of phones there. However notable progress has been made to improve sales in developed markets. Notable models that enjoyed widespread sales include mid-range skate android smartphones, mass-market blade, and also some windows powered operating system smartphones (IDC, 2012).

1.1.7 LG: this company recorded weak volume of shipments for three consecutive quarters which has seen the company reduce to levels last observed in 2007. The main reason for this decline has been attributed to the waning interest on its aging feature phones as well as stalled smartphone volumes. The company published its highest year over year drop among the leading vendors in the world. This decline has contributed to its fall in the overall ratings for major vendors and faces the risk of been replaced by upcoming companies such as Huawei (IDC, 2012).

Top Five Mobile Phone Vendors, Shipments, and Market Share Calendar Year 2012 (Units in Millions)

<table>
<thead>
<tr>
<th>Vendor</th>
<th>2012 Unit Shipments</th>
<th>2012 Market Share</th>
<th>2011 Unit Shipments</th>
<th>2011 Market Share</th>
<th>Year-over-Year Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Samsung</td>
<td>406.0</td>
<td>23.4%</td>
<td>330.9</td>
<td>19.3%</td>
<td>22.7%</td>
</tr>
<tr>
<td>2. Nokia</td>
<td>335.6</td>
<td>19.3%</td>
<td>416.9</td>
<td>24.3%</td>
<td>-19.5%</td>
</tr>
<tr>
<td>3. Apple</td>
<td>135.9</td>
<td>7.8%</td>
<td>93.1</td>
<td>5.4%</td>
<td>46.0%</td>
</tr>
<tr>
<td>4. ZTE</td>
<td>65.0</td>
<td>3.7%</td>
<td>69.5</td>
<td>4.1%</td>
<td>-6.5%</td>
</tr>
<tr>
<td>5. LG</td>
<td>55.9</td>
<td>3.2%</td>
<td>88.1</td>
<td>5.1%</td>
<td>-36.5%</td>
</tr>
<tr>
<td>Others</td>
<td>737.5</td>
<td>42.6%</td>
<td>716.8</td>
<td>41.8%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Total</td>
<td>1735.9</td>
<td>100.0%</td>
<td>1715.3</td>
<td>100.0%</td>
<td>1.2%</td>
</tr>
</tbody>
</table>

Figure (2) Top mobile phone vendors (Source: IDC, 2013)
1.2 Significance of study
This research will mainly be important to three parties including Academia.

This research will be able to contribute into the consumer behavior theory and practice. Also the research outcome might assist academics in terms of pursuing further research on the issue.

Government.
This research outcome might be useful for government in terms of establishing policies for giving license or for import so as to enable them approve the basic ones needed by the society. This is important as every government aims to improve the lives of its citizens through sound policies and other regulations.

Industry.
This research could also help the industry most especially the product development. This is because managers can understand attributes with highest preference of buying power, and also understand those elements that help consumers to embrace technology. Understanding these factors can help in boosting revenue and profitability for the overall industry. The results of this might also help decision makers in the companies to better understand the adoption of its mobile technology.

1.3 Research Question and Objectives
The main aim and objective of this research is to determine to what extent does product attributes and technology use influence consumer behavior towards mobile phones in the context of a developing country. The specific objectives are:
1. To determine the relationship between products attributes and behavioral intention.
2. To measure the differences between product attributes and behavioral intention.
3. To measure difference between performance expectation and behavioral intention.
4. To measure differences between effort expectation and behavioral intention.
5. To measure differences between social influence and behavioral intention.
6. To measure differences between facilitating condition and behavioral intention.

1.4: Problem statement
Consumers of the modern day are facing high availability of different classes, models, and brands of mobile phones which often equip them with an important task in determining the competitiveness of the industry. Nowadays, various individuals prefer phones which are highly equipped and allows interactivity while fulfilling their basic functions such as voice calls, short messaging service (s.m.s), and others such as emails, video calls, and social networking. This therefore makes it difficult for any ordinary mobile device to appease the consumers taste.

Moreover, existing and new manufacturers of mobile phones frequently introduce new and often highly innovative products into the market that mostly appease and further leave the consumers in a state of bewilderment (Shen et al., 2000). So as various features of products take a similar pattern while its technology matures, consumers are unable or unwilling to differentiate between various models and brand offered solely based on rational attributes (Temporal and Lee, 2001). This leaves us with a question of how do consumers make decisions to purchase a particular brand of mobile phone, it is therefore important for companies to create distinctive product attributes due to its linkage with market share, purchase intention, and consumers preferences (Wirtz, 2003).

According to Juricic and Azevedo (2011), mobile phones usage has increased in all age groups and economic sectors with college and university students been identified as the
most important and biggest market for companies. This is because this age group tends
to possess a high potential and current buying power.

However, studies have explored only some faces of mobile phones such as motivation
(Leung, 2007), etiquette (Lipscomb, Totten, Cook and Leasch 2005), psychological and
health effects (Beranuy et al., 2009), campus life impact (Quan-Haase, 2008), and
implication on social network (Subrahmanian et al., 2008). Other studies found on
mobile phone preferences tend to focus on preferences for selected brand/models (Zhu
et al., 2009).

This implies that research in this particular area is limited and leaves an underexplored
area which needs further studies as the importance of this issue cannot be ignored. This
research aims to address the shortcomings by providing a simple and yet reliable
framework which fills in the literature by focusing on the consumers preferences
towards mobile phones based on product attributes and technology.

1.5: Limitation of study

Although this study provided some key insight into the way in which consumer’s
decision making on purchasing a mobile phone based on product attribute and
technology, it had certain limitations as highlighted below

Firstly, there is the issue of lack of resources such as time and finance. This is because
time and finance are of a concern to the researcher as such the sample size could have
been bigger to cover more respondents to provide more validity and reliability.

Secondly, there exist difficulties in collecting data from potential respondents as some
are left unreturned, unanswered, or partially answered. This has also proved as a big
limitation to the researcher since respondents are not willing to fill in questionnaires.

Thirdly, some respondents are not committed to answering questions due to privacy
and confidentiality even though the researcher have stressed the importance and
provided assurance for confidentiality of information.
1.6: Scope of study

This research main focus is on the issue of consumer's behavior towards mobile phones with respect to products and technology. The research is based in Nigeria. The sample focus is the university/college students. The unit of analysis is students from three major universities. The students are selected because they cover the majority of youth and this is the age group that has been identified as the most important target market of mobile vendors. Also they are the group with adequate knowledge and desire for frequent or multiple mobile phones. This research is undertaken using the quantitative approach to research.
CHAPTER TWO
LITERATURE REVIEW

2.1: Introduction
The quality of a product is an element which has a direct and strong influence on the preferences and satisfaction of consumers (Olsen, 2002). However the quality of a product is just a part of other elements of product attributes including features, style, and design of products (Kotler and Keller, 2008).

Companies nowadays measure their customers satisfaction based on product attributes to identify and also improve on either existing or potential weaknesses (Wirtz, 2003). This implies that these companies are aware of the other factors besides the quality of product that may influence the preference and also purchase intention of the consumers.

According to Brucks et al., (2000), it is no hidden fact that every organization must understand the importance the ways in which its consumers perceive and evaluate their products and not putting much reliance on company driven objective as a measure of its products. Mobile phones have proved to an efficient and effective method of communicating various new products plus existing promotion for companies to its consumers thereby influencing the decision to adopt a certain product. Hence, consumers with high value of mobile phones and who place much importance are likely to perceive compatibility between lifestyle and preferences to mobile marketing (Roach, 2009).

The overall success and market profitability of a product lies entirely on the attributes of a product and the values it add to the consumer. Hence, companies are as much interested in understanding the preferences of its consumer’s towards the product.

According to Murtazin (2003), females are generally attracted to mobile features such as Bluetooth, voice notes, GPRS, and more while proving that phonebook capabilities and operating times are among the most important features for them. He further noted that a major choice influence is the design of the product, and color while type does not
have any significant impact on them. For a technological product, understanding consumer’s perception is vital in the innovative era.

The consumer behavior theory is a prove to how gender and demographics influences the consumers adoption of technological products while stating that earlier experiences or use of a product has a higher rate of influence on the buying behavior (Citrin et., 2000). Moreover, for a high tech product, prior use and attitude towards technology have higher influence (Mazzoni et al., 2007; Sorce et al., 2005).

In order to understand the various factors that ultimately influence consumer behavior towards certain products, various theories as proposed by scholar are been discussed to allow room to conduct a study of the surrounding factors that assist individual choices. Reviews of these theories are below.

2.1.1: Theory of consumer behavior
According to Brown et al., (2008), this theory revolves around understanding the social and psychological needs of an intended group. It provides a comprehensive investigation of the various factors that affect the consumer buying decision of a product. This theory goes further by segmenting the factors into external and internal that revolves around the consumers thereby affecting the decision.

The internal factors include lifestyle, taste, fashion, demographics, and attitudes while the external ones include peer pressure, social culture, and personal experiences (Maccinis et al., 2010). An excellent example of the influence of the external factors can be the influence of buying a football shoes just because a major player wore the same type or design. This is a very good strategy as organizations capitalize on this strategy to increase the effectiveness of its marketing by signing deals with various celebrities.

2.2: Product Attribute
Kotler and Armstrong (2011) contended that the successful development of a product involves defining its benefits to intended consumers. These include communication and
delivery of these through the product attributes such as quality, features, style and design.

The attributes of a product as defined by Boyle (2003), are the tangible elements of a particular products including aspects such as features, quality, design and style.

The products attributes may influence consumer’s perception towards the relevance of the product to their personal needs (Zhu et al., 2009). It represents the products been offered by a brand and the tangible and intangible aspects the consumer is buying. It is because the consumer must be aware of the product else purchase or even considering to purchase could be nil.

According to Petruzellis (2010), consumers’ expectations formation as well as their perception might lead to different and yet interesting dynamics of adoption. This is because in today’s technological era, understanding consumer perception is very critical in order to provide those needs in the market.

Products attributes might influence purchase intention of consumers when some elements satisfy their perception as studies have found that they may vary with consumption environment or situation. The preference of towards a certain brand might differ from choice behavior because they are largely influenced by the importance the consumer attached towards the brand (Horsky et al., 2004). Furthermore, products attribute are essential to understanding consumer preference due to lifestyle and accompanying changes which are mostly different on individual basis.

An important aspect of product attributes concerns its division into two namely Functional and Hedonic attributes (Snelder and Schoormas, 2001). These are focusing on aspects of functional quality as well as delivery of benefits associated with the products. This implies that consumer’s lifestyle is related to the product attributes due to the emotional aspect attached or functional attributes as compared to the consumer needs. It is also stated that preferences and purchase intention influences consumer behavior largely determined through marketing mix (4p’s), where the product aspect of the mix have a significant influence (Kotler and Keller, 2008).
The satisfaction of a consumer regarding a product and its associated services is otherwise referred to as the judgment pertaining to the pleasure derived or the level of fulfilling the objectives of purchase (Butte and Burton, 2000). The individual choices of consumers may be influenced by values through product attribute preference as well as its associated evaluation which thereby determines the choice of products (Allen, 2001). So we can say that preferences associated with products attributes influence purchase intention and leading to the choice of a particular product.

Consumer perception of product and its attributes is important for companies due to its powerful impact on overall revenue as studies have proved the link between purchase intention and product attributes. So mobile phone companies involved in the manufacturing process of new and existing products must determine perception of consumers towards attributes of their product in order to realize higher returns.

2.3: Product Quality

This is categorized as a major market positioning tool due its direct impact on a particular product or service performance hence it is highly valued by the consumer. Consumers define quality with satisfaction to a certain product (Kotler and Keller, 2011).

Quality is mostly considered by consumers when making any decision to purchase a certain product. This is because consumers prefer products that offer value and also achieve the objectives of purchase. According to Kotler and Keller (2008), the quality of a product is associated with the level of the primary characteristics it offers. These include brand name, functions, packaging etc.

The quality of a product is often defined as the tangible or intangible aspect that gives consumers the satisfaction of using a product. The higher the quality of a product defines the level and percentage of sales it can generate. This is because studies have confirmed the relationship and inter-relation between quality and satisfaction (Espejel et al., 2009). This implies that when consumers perceive higher quality with a product then it could give them higher satisfaction when using the actual product. Thus, various companies strive to provide high quality products to increase consumer satisfaction to
improve profitability on the long run. It is therefore evidenced that improved product quality ultimately leads to higher consumer satisfaction leading to higher market share.

It is generally accepted that a product's ability to perform its functions refers to as product quality. Therefore it includes several dimensions such as Performance, Reliability, Durability, Features, Conformance, Aesthetics, Serviceability and Evaluation (Magrab, 2009).

According to Olsen (2002), apart from improving satisfaction, the product's quality has the capability to influence purchase intention of consumers. It is therefore important to provide a qualitative product as it has a very high level of influence on preference of consumers and purchase intention. Consumers will not have any preference to a product with no quality hence satisfaction is out of the question. Also producing a qualitative product is said to give an advantage over competitors thereby affecting purchase intention (Grover and Walker, 2003).

Cost and price implications are a major constraint to product development even though consumers prefer products with a recognized brand quality, safety, and friendliness towards the environment (Niem and Kim, 2010). Consequently, low prices and high quality are two separate aspects with either one dependent because companies that offer low prices do not tend to provide the highest qualitative product and vice versa. Consumers put much focus on the quality itself and issues of health safety but pricing is not a vital factor of influencing purchase intention.

2.4: Product Feature

The features of a product concern methods used by companies in order to differentiate from that of competition. It is believed that consumers require products with as many features as possible such as shapes, size, color, and other basic functionality which helps attract consumers and differentiate one product from another. It is also used by companies to increase the awareness of a certain product and significantly influence intention to purchase (Kotler and Armstrong, 2011).

A major and unique way of attracting consumers and competing effectively is through providing and offering products with varying features in supplement to the general basic
functions and adding unique features (Kotler and Keller, 2008). On a mobile phone for example, features include camera, Bluetooth, SMS, touch screen, GPRS, EDGE while those added on a smart phone might be 3G, and 4G services.

According to Rahman and Azhar (2011), the foundation of a new buying habit starts with the right perception concerning aspects of a product such as quality, features, and image at the right price.

Since features supplement some basic functions, most companies offer products with varying features through equipping the product with enhanced features to overcome competition and create differentiation of its products. For example, offering valued features is proved to be effective in overcoming competition as companies differentiate products meant to generate controversies while creating uniqueness of a brand (Kotler et al., 2011).

They further stated improving features of product is a strategy aimed at adding value that enhance the safety, convenience, and versatility of a product which thereby attract and increase the consumer loyalty due to those added features. The technology industry is experiencing high evolution at an accelerated rate which also comes with changes in consumer experience, use and now more pervasive in our life. The industry is all about the product and services versus advanced ones rather than the norms of what this have and don’t have. When technology becomes widespread, various companies offer product that are highly undifferentiated thereby making it difficult for consumers to respond to differences based on the product attribute alone (Temporal and Lee, 2001).

So companies now create various models of mobile phones by adding a bit more features to beat competitors and possess a competitive tool to help consumers identify and differentiate from that of competitors. This is because it is highly believed that competitive advantage might be achieved when a company is able to take the first mover advantage or introduce a valued feature that attracts consumers (Kotler and Armstrong, 2008).
This comes to a stage where the company identifies and decides which among the features is needed to add value to a certain product. According to Kotler and Armstrong (2008), a company need to conduct a survey periodically to identify those added value needed by consumers where the survey should focus on questions such as

1. Do you like the product?
2. What features do you like most?
3. What feature could we improve?
4. How much can you pay for the added value?

They further mentioned a company would know and use the answers provided in deciding the features as well as value to needed by their consumers. The company can make a decision based on a review of the answers (features most valued) as against what the company can offer.

2.5: Product style and design.

This refers to physical appearance of the product, it is a process involved in designing the style and attractiveness of the product. It is an effective method of adding value to a consumers when the product possess distinctive design and style (Kotler and Armstrong, 2011). It can build awareness and attract consumers when there is outstanding design and style thereby influencing purchase decision.

Mobile phone companies strive to develop stylish products in order to satisfy consumer taste. This is especially true since most companies strive to achieve differentiation of their product, however others develop stylish phones with slack functions enabled with example including Nokia brand 7200. This particular brand of phones might attract consumers even though the functionality is nothing to take home but design and style are attractive hence consumers are attracted to purchase those products.

Kotler and Keller (2008), further stated that style usually describe the outlook and touch of the product to the consumers as it can easily attract attention. However, an excellent design pertains to the usefulness of a product. Style and design can give a product a strong advantage when it has the ability to attract consumers and improve the
performance of the product in the market. Style and design include aspects such as size, shape, model, color, weight, etc. and these influences the consumers feelings towards the products (Kotler and Keller, 2008).

The style of the product determines how it feels and physical looks to the consumers, it creates a distinctive attribute and inimitable by competitors. However, it is important to note that style and design does not promise higher product performance due to other considerations made by the consumer. This is particular evident as in the case of Nokia 7200 where it has interesting style and design but not high interactive with the user. As such companies must equip functional aesthetic style due to global demand and concern of aesthetics.

According to Kotler and Keller (2008), packaging should be included as part of the styling of a product because it is the first aspect the consumer sees when purchasing and therefore might also have an influence on the decision. This is because in a market faced by rapid development of products, price or technology might not be enough to give a company an edge over competitors; rather they should focus also on design to partly differentiate the product from competitors. It is an important aspect of the product as looks and appearances highly influence consumers and a part of the human requirement.

Design can also be incorporated into the company strategy (Crawford and Benedetto, 2008. This is because products with an excellent design are user friendly and considered with an added value to consumers. Companies such as Apple, and Samsung are recognized as having excellent reputation for providing outstanding product style and design which has given them influence power and competitive weapon in the market.

Design is superior in idea than style (Kotler and Armstrong, 2008) because style has to do with the external aspect of the product while design is usually deeper in meaning that goes beyond look of the product. Style attracts consumer's attention and pleasant aesthetics but do not improve performance while design is the core and usually adds value to the product.
However, when used together a combination of excellent style and an amazing design will definitely attract consumers, improve performance, reduce cost, and gives the product a competitive edge over its most closest rival such as the Apple iPhone 4S.

2.6: ACCEPTANCE OF TECHNOLOGY

Technology has always been an important issue and various researchers have proposed different frameworks for accepting technology. Behavioral intention can be considered as a conceptual psychological process that involves users of consumer decision on adopting or rejecting a particular behavior (Yen ting et al., 2010).

Various theories have been proposed such as the theory of reasoned action, and planned behavior which all seeks to understand behavior choice through behavioral intention, attitude, and normative beliefs. Others include technology acceptance model which seeks to explain behavioral intention but in a general context where it tries to predict adoption of technology in a working environment.

The UTAUT model is a framework developed to sum up all previous studies and consist of core element such as performance expectation (PE), social influence (SI), effort expectation (EE), and facilitating condition (FC) (Vankatesh et al., 2003).

2.6.1: Theory of Reasoned Action (TRA)

This was developed by Fishbein and Azjen in 1967 and as further implemented for human behavior in 1980. It is a versatile intention based model which has been applied widely in explaining and predicting any human behavior across various domains. According to TRA, an individual behavior is determined by intention which in turn is moved by the attitude towards behavior and subjective norm pertaining that behavior. In short, we can say behavioral intention are determined by two basic elements namely:

- Attitude (positive and negative evaluation)
- Subjective norm (perceived social pressure)

Attitude and subjective norms are theoretically variables of intention. Behavioral Intention is said to be the cognitive representation of an individual’s readiness to
perform a behavior which is therefore considered as the best predictor of behavior (Buck, 2005). Attitude therefore involves personal belief's shaped by the environment and factors such as experience while subjective norms combines desired and perceived expectation from group of individual together with intention to comply with these expectations.

An assumption in this theory is that the behavior of an individual must be totally under his/her volitional control. This is because the theory is at its best when applied to those behaviors which are done within an individual’s conscious locus of control. This implies that an individual without volitional control over the behavior no matter how motivated the attitude and subjective norm might not actually perform the behavior due to prevailing environmental conditions. Thus, perceived control of an individual over behavior is an imperative element in addition to attitude and subjective norms which will strengthen the TRA.

2.6.2: Theory of Planned Behavior (TPB)
This is a theory generally accepted as an extension to the TRA and has proved beneficial in its ability to predict behavior and intention. In a general sense, (Ajzen, 1991) it suggest that human as a rational beings employs a variety of information before making a decision to act. The prediction is based on a premise that behavior is always influenced by behavioral intention. Here behavioral intention acts as a function of attitude (a feeling of favorableness or unfavorable ness against a behavior), subjective norm (perceived perception of other in relation to actual behavior in question), and also the perceived behavioral control (perceived difficulty or ease of use of performing the behavior) as shown in figure below.
Figure (3) Theory of Planned Behavior.

The similarities between the TRA and TPB are that all of these theories operate based on a basic assumption that behavioral intention acts as an excellent indicator of the actual behavior. Also they both seek variances through which they predict intention and thereby link it with a certain behavior.

2.6.3: Technology Acceptance Model (TAM)
This model was developed by Fred Davis in the 1980s where it wanted to measure people's willingness to accept and thereby adopt new innovations of technology in that era including e-mail systems. This implies that the model intended to discover factors that help in incorporating technologies and determines why individual accept or reject the technology.

Furthermore, since the model involves information systems and the understanding of how technology and machinery are been accepted and used by consumers. It seeks to enlighten the utility value that makes the technology accepted by consumers. According to Davis (1989), the model acknowledges that there exist factors which normally shape an individual choice to use or adopt a certain technology. This is why the model proposes two determinants that explained technology adoption which are Perceived usefulness and Ease of use.

Davis defined perceived usefulness as the degree to which an individual believes that using a particular system would enhance job performance while perceived ease of use
was the degree to which an individual believes that using that particular system would be effort free (Pham et al., 2010). However, Davis contradicted the hypothesis by stating that the relationship between perceived usefulness and subsequent adoption was significantly stronger than that of perceived ease of use and adoption. He suggested that a causal relationship exists rather than independence of the determinant noting that perceived ease of use precedes perceived usefulness.

![Diagram of Technology Acceptance Model]

**Figure (4) Technology Acceptance Model**

The figure above suggests that consumers consider the usefulness of a certain technology before making the decision to use it. However, the more it is perceived as been easy to use, and then the consumers will assume its usefulness in their minds thus improving the perception and leading to overall increased use.

**2.6.4: Unified Theory of Acceptance and Use of Technology (UTAUT)**

This theory was developed by Venkatesh et al which seek to predict the consumer's adoption of a technology. The model was developed by integrating eight different theories including TAM, TRA, TPB, innovation diffusion theory (IDT), the motivational model, PC utilization and social cognitive theory. The model has been adopted by researchers seeking to understand the consumers adoption of information technologies such as mobile technology (Par, Yang, and Lehto, 2007), internet banking (Zhu, 2011), location based services (Venkatesh, Thong, and Xin, 2012), mobile banking (Zhu, Lu, and Wang, 2010), and health technologies (Kijsanayotin, Pannarunothai, and Speedie, 2009).