E-Business Adoption and Consumer Attitude in Nigeria

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Abstract
This paper seeks to investigate if there is relationship between consumer attitude and adoption of e-business. The cross-sectional design was adopted in this study. The researchers judgmentally, chose three commercial banks and three shopping centers in Port Harcourt, as study area. The justification for this choice is that e-banking and online shopping are the most common forms of e-business that is gaining prominence in Nigeria. Five staff each, from the chosen organizations were randomly selected giving a sample size of 30. Structured questionnaire was employed to gather data from respondents. Likert scale designed in the form of: Very high rate (4), High rate (3), Moderate rate (2) and Low rate (1) were used to measure the dependent variable (e-business adoption) and independent variable (consumer attitude). It is hypothesized that consumer attitude has no relationship with adoption of e-business. Qualitative and quantitative data analysis was carried out; the data were organized, presented and analyzed using simple percentages. Pearson Product Moment Correlation statistical tool was employed to test the hypothesis. Result shows that there is relationship between the measured variables; e-business adoption and consumer attitude. Following the result of our findings, we conclude that there is relationship between e-business adoption and consumer attitude. Apart from psychological, social, technological and situational factors, literature review indicates that other externalities such as; early or late adoptors, early or late majority, experiencers, fulfilleds and laggards influences consumer attitude and were found to play significant role in e-business adoption. Thus, the result of this study signifies the scenario of e-business adoption in Nigeria today.

Keywords: E-business, Adoption, Consumers, Attitude, Mental budgeting, Psychographic, Technophobia,

1.0 Introduction
Electronic business (e-business) is gaining more attention today more than ever before. It has remarkable impact on a wide number of industries and businesses with its amazing abilities to offer goods and services so conveniently. Electronic business is here with us and of course, most of us are already connected to its driver – the internet.

In the past, businesses were linked to their local areas and to the people who could physically get to them. These days, the story has changed; businesses are operating beyond the reach of their local areas; the physical presence of those involved is no longer a barrier. For the fact that consumers expect better service delivery from businesses, this put businesses on their toes looking out for ways of filling consumer needs. The new economy demands that business must develop or reassess strategies if they are to operate successfully and serve customers satisfactorily. Hence, business needs continuous improvement and transformation. To be precise, business success in today’s changing world calls for improvement in the way business is run.

The advent of internet and its technology has provided great opportunity for the improvement in the way business is run today. As a vast network of people and information, the internet is an enabler for e-business; it allows firms to showcase and sell their products and services. E-business describes the information systems and applications that support and drive business most often using the internet and its technology. The rationale for this is to present goods and services in ways that would be expedient for consumers to access them and to increase bottom line result for firms.

When new goods and services or technology are introduced into the market, consumers make decisions whether to accept it or not. A force drives the acceptance or rejection. This force propel consumers to make purchase decision which translates in their behaviour to achieve satisfaction of certain needs. Electronic business is one of the emerging business models which businesses adopt to have global customer reach. It facilitates business transaction with minimal delay and greater comfort. Electronic business has not only come to stay but it is increasingly gaining prominence and also competing with the traditional business model.

1.1 Problem Presentation
Electronic business has come a long way to the society and the manner with which people embrace this innovation has varied. It is obvious that e-business facilitates quick and easy purchase and sale of products or services. In Nigeria for instance, students apply for admissions into tertiary institutions and other examinations online, check results online without crowding the offices of examining bodies. Many job applications and tests
are done online these days. Fund transfer, air ticketing, payment of utility bills, online shopping and payment for goods and services and so forth, are done using electronic platform at one’s convenience thus, reducing stress, time and cost.

It is understood that studies have been carried out on e-business specifically in the following areas: adoption problems by O’Connell (1996) in Nwokah, Hamilton and Ugorji, (2006) and Odueyungbo (2006), e-business relationship with revenue generation in Anderson Consulting in e-marketer (2000), Balogun (2010), on the challenges of e-business. But research effort has not been directed to find out the relationship between consumer attitude and e-business adoption. This is to say, that the relationship between consumer attitude and e-business adoption has not been established. You may probably agree with me that consumers have been guided by some factors that make them embrace or not embrace a new product/service or introduction of innovative technology. You may also recognize that as a novel business model, consumers learn about it and may decide whether to adopt it or not. The reason for their decision to adopt or not, is feared to hinge on certain factors which influence their attitude. Adoption implies that consumers have accepted the novelty and use it on a regular basis. It is on the backdrop of the above that this study is designed.

1.2 Objective of the Study
The cardinal objective of the study is to ascertain whether consumer attitude has relationship with adoption of e-business.

1.3 Research Questions
The research questions developed to give direction to this study are:

(1) Does something inform consumer decision to adopt e-business?
(2) Do psychological, social, technological and situational factors influence consumer decision to adopt e-business?
(3) What is the rate of e-business adoption in Nigeria?
(4) At what rate does consumer attitude change in Nigeria?

1.4 Research Hypothesis
Based on the study objective and the foregoing research questions, a null hypothesis was designed to give direction to this study:

H₀: There is no relationship between consumer attitude and e-business adoption in Nigeria

1.5 Contribution of the Study
Findings from this study will make the following contributions:
Result from this study will help e-business operators clear obstacles that may arise from changes in consumer attitude. Having the knowledge that consumer attitude directs adoption of e-business, operators of e-business will be guided on how to design, implement and maintain offerings in order to match the needs of consumers. It will also help them know the changes that should be effected on organizational objectives/structure, strategic planning and culture that can deliver the promise and potential of e-business, and keep it moving. This way, bottom lines for businesses will increase, likewise, tax payable to government. When business pay more tax to government, certainly the revenue base of government increases.

2.0 Conceptual Framework
2.1 Concept of E-business
We may not have a better understanding of what e-business mean, not until we conjure up the meaning of its driver – the internet. The internet is a means of transmitting information. It is nothing but the inter-connectivity of computers, i.e., a worldwide network of computers. Computer networks link two or more computers to allow their users share information, programs and equipment, and to communicate with one another. Simply put, the internet is the worldwide connection of many different networks.

Hargittai (1999) defines the internet technically and functionally as follows: “As a technical infrastructure, a global collection of networks, connected to share information using a common set of protocols”. Functionally, it is considered as a network of people using computers that make vast amounts of information available.

The internet is one of the platforms that e-business operates on and it is a strong backbone. Users of the internet can communicate; send e-mail, exchange views, shop for products, and access news, recipes, art and business information. They decide what business information they will receive about which products and services, and under what condition. Internet “search engines” such as yahoo, Gmail, info-seek and excite etc., give consumers access to varied information sources, making them better informed and more discerning shoppers.
An e-business collaborates with customers and other businesses through electronic means. It requires the use of internet technology in order to operate. It is therefore the information systems and application that support and drive business process most often using web technology - worldwide web (www).

E-business concept describes the rationale of the business, its goals and vision, and products or offerings from which it will earn revenue. A successful concept is based on a market analysis that identifies customers likely to purchase the product and how much they are willing to pay for it.

2.2 Meaning of E-business
Many definitions of e-business are found in literature, we will present a few of them here. Electronic business otherwise called e-business is the conduct of business on the internet. It is simply the use of internet to conduct business globally. Electronic business is the administration of conducting business through internet or it is all about the application of information and communications technology to relevant business processes. In other words, e-business is any business conducted primarily using electronic media (http://en.wikibooks.org/w/index.php?title=e-commerce and e-business). It is all about conducting business on the web, not on walls or in the space, not in the store/shop.

To be precise, an e-business enterprise refers to a business enterprise that functions online. Principally, e-business used to describe a number of management approach and a combination of technologies and infrastructures that allow organizations to make use of the internet and internet-related technologies to enable a number of business processes (McMahon 2000). Greenstein and Vasarhelyi (2002) defined e-business as the exchange of information not directly related to the actual buying and selling of goods but activities such as use of electronic mechanisms to distribute information and provide customer support.

To Fletcher, Bell and McNaughton (2004) e-business refers to the application of Information Communication Technology (ICT) to processes within the firm and possibly to transactions with suppliers as well. They are of the view that the term can mean all uses of ICT within business context. A more wide-ranging definition of e-business is given by Balogun, (2010), it says; e-business is, “the transformation of an organization’s processes to deliver additional customer value through the application of technologies, philosophies and computing paradigm of the new economy”. E-business connects business to consumers (B2C), i.e., (business between companies and consumers), and business systems to business systems (B2B), i.e., (business between companies) or consumers to business (C2B) i.e., (business between consumers and companies), using e-mail, phone, fax and letters just to mention but a few.

2.3 Benefits of e-business
By utilizing e-business, according to Odueyungbo (2006) and file://localhost/C:/Users/USER/Documents/E-business-impact-benefits.html, companies and consumers can profit in the following ways:

- Improve margins by using a lower-cost online channel
- Reduce paper-based processes: postage, printing, and handling costs
- Through the use of electronic transfers/just-in-time payments reduce float
- Furnish customers faster, more responsive service
- Reduction in Transaction costs
- Disintermediation - elimination of intermediaries and distributors,
- Transparency in pricing - increase in price transparency by making information readily accessible and available to all people
- Economies of scale and network effects - The rapid growth of e-business creates traditional supply-side cost-based economies of scale. The bringing together of a significant number of buyers and sellers provides the demand-side economies of scale or network effects.
- Adoption of e-business promises improved market penetration and direct link to international competitiveness.

2.4 Adoption of E-Business
When a new product or an innovative technology is introduced in the market, consumers learn about it and decide whether to adopt it or not. Adoption implies that consumers have accepted the innovation and use it on a regular basis. Innovations are diffused in the market as individual consumers make their decisions to adopt them at different time intervals. As a result of this aggregation, a normal distribution develops which represents the diffusion process. Consumers in a market adopt the same innovation at different times and for different reasons. Based on the time of adoption, typically five categories of consumers can be distinguished. According to Nwokah, Hamilton and Ugorji (2006) they are:

(1) Innovators: innovators are those consumers who first adopt the new product or innovation. They are very well informed about new products by other innovators as well as by impersonal and scientific sources of information.
Early Adopters: They are typically younger, more educated; belong to a higher social class, read much more specialized magazines about new products and innovations. They frequently get in contact with salespeople of new products and play a crucial role as opinion leaders who influence other consumers.

Early Majority: These are consumers who adopt the innovation right before the average consumer in the market does. These consumers think a lot before they decide to adopt innovation. Their characteristics include: larger age, higher educational level, and higher socioeconomic status than the average member of society. They rely heavily on opinion leaders (early adopters).

Late Majority: These are consumers who delay adoption of the innovation mainly because they are distrustful about new ideas. They decide to adopt after they feel a strong social pressure. They watch electronic media less frequently than others and mostly rely on opinion expressed informally by people they know well.

Laggards: They are consumers who decide the adoption very late. When laggards decide the adoption of a new product or an innovation in general, the product is most likely close to its withdrawal from the market or its substitution from another new one. Laggards are especially distrustful about innovations and are socially isolated. They are older consumers of lower socioeconomic level.

One of the things that guide or direct all of these adoption categories is the consumer buying attitude as enshrined in consumer behaviour theory.

2.5 Theoretical Framework
This study hinges on the theory of consumer behaviour or consumer attitude which according to Hoffman, Czinkota, Dickson, Dunne, Griffin, Hutt, Krishnan, Lusch, Braines, Fill and Page 2013) is the sum of our rational and conscious relationship with the products or services that we buy, and also the emotional and non-conscious influences. Consumer behaviour concept tells us more about consumer attitude.

2.6 Concept of Consumer Behaviour
Consumer behaviour is the sum of experience, intention, perception, and conception of all that we buy. It deals with how consumers behave when buying both goods and services. In the words of Hoffman et al (2005), it is the process by which individuals or groups select, use, or dispose of goods, services, ideas, or experiences to satisfy needs and wants. Psychological, social, technological and situational factors direct consumers to perceive, learn and make decisions to satisfy their needs and wants. Needs in this context, are unsatisfactory conditions that prompt consumers to an action that will make the conditions better, wants are desires to obtain more satisfaction than is absolutely necessary to improve an unsatisfactory condition. It is all about the following:

- Consumer’s decision to buy or not to buy a product and the factors which influence these decisions.
- The motives for buying or not buying and the general and specific goals which the products are intended to serve.
- The specific benefits which consumers seeks to enjoy from their purchase.
- The consideration or evaluation of alternative products and brands and the criteria upon which final choices are based as well as the entire gamut of the buyer or user’s preference and repeat purchase patterns.
- The buyer’s or consumer’s decision processes including his search for information upon which to base his decisions as well as the manner in which the information is processed.
- The formation and change of consumer attitudes towards products and specific brands and the implications of these for his purchase decisions and behaviour.
- The actual shopping or purchase patterns and behaviour of both final and intermediate buyers, and the post-purchase and post product-use, feelings and behaviour of buyers and users of economic products (Agbonifoh, Ogwo, Nnolim and Nkamnebe, 2007).

The consumers play three roles: users, payers, and buyers roles. As users of a product, consumers are concerned about product features and how successfully the product can be used. As payer, they pay for a product and are concerned with its price and inherent financial considerations. Buyers focus on the logistics of purchasing the product, in the store, by phone or online. An economic down turn may also affect the behaviour of payers, buyers and users. The payer may not have the money to make purchases, buyers who may be working longer hours or at two jobs, may have limited time to shop. Users will have less access and exposure to new goods and services. Consumers have finite resources in terms of money and time, so they have to constantly weigh the possibility of either postponing or forsaking the purchase of a product. An important behaviour at this level that can help is mental budgeting, which means that the budget set for a product category guides their subsequent behaviour. The payer plays the most important role in mental budgeting, as the user is constrained by what the
payer has budgeted and whether the product is within the budget. Hoffman et al (2013) identified a number of psychological factors affecting consumer buying decision, these are:

1. Perception: this is the process by which an individual senses, organizes, and interprets the information he or she receives from the environment, e.g., green colour depicts freshness, white colour, purity etc.

2. Learning: this means the change in the content of long-term memory. Most consumer behaviour is learned behaviour. We learn consciously and subconsciously from a number of sources; from past/prior experience, peers, mass media, family and friends. This helps us respond better to our environment.

3. Motivation: this is the state of drive or arousal that moves us towards a goal-object.

4. Consumer emotions: emotions are strong, relatively uncontrolled feelings that affect our behaviour. Emotions are often triggered by environmental factors or events. Man seeks positive emotional experiences and avoids negative emotional experiences.

5. Involvement: This is the degree to which a consumer finds a product interesting.

6. Attitudes: Attitudes are learned predispositions to respond to object or class of objects in a consistently favourable or unfavourable way. It is our evaluation of objects; people, places, brands, products, organizations and so forth.

7. Psychographics are characteristics of individuals that describe them in terms of their psychological and behavioural makeup; how people occupy themselves and what psychological factors underlie their activity pattern.

One of the most widely used psychographics profiling scheme called Value and Lifestyles (VALS) was developed by SRI international and currently run by SRI Consulting business intelligence (SRIC-BI) (Hoffman, Czinkota, Dickson, Dunne, Griffin, Hutt, Krishnan, Lusch, Braines, Fill and Page, 2013). According to SRIC-BI, people pursue and acquire goods and services, experiences that provide satisfaction, give shape, substance and character to their identities. VALS was divided into eight groups to reflect the changes that had taken place as to improve the segmentation principles for advertising and marketing principles.

Figure 1: VALS Network


At the bottom, are passive consumers who are generally not well educated and have limited resources and are more concerned with safety and security.
Makers are the do-it yourself category of consumers. They are value conscious and buy products they can use to build things they would like to use. They are conservatives and suspicious of government intrusion.

Strivers constantly seek the approval of their peers and people around them. They are typically people of limited means.

Believers have limited but sufficient resources to meet their limited needs, and are conservative in their decision making.

Experiencers are young, enthusiastic, and rebellious. They seek variety and excitement in the product they consume. They are more likely to spend a substantial amount of their money on clothing, fast food, movies and videos. They buy products that enhance their sense of prestige and exhibit their success to their peers.

Fulfilleds are mature, successful consumers who are well educated and are in (have recently retired from) professional jobs. They are fairly knowledgeable about world events and are socially conscious. They are consumers who look for durability and value in products they purchase.

Actualizers are “take charge” people with high self esteem and plentiful resources. Image is important to them but they do not use it to impress others but to reflect their taste and character. They are socially conscious and have diverse and rich life.

Some consumers are influenced by the group of people they look up to and others by members of their family. Culture and subculture also play an important role in some consumer’s decision-making process. Purchase decisions are made on the basis of one’s terminal values (goal one live for) and instrumental values (means of pursuing the goal).

The social factors that influence consumer behaviour include: reference groups, family and household and culture etc. The technological factors are: web access, search capabilities, evaluation capabilities, purchase options and post purchase feedback. The situational factors include: physical surroundings, time and mood (Hoffman et al, 2013).

Lynn Kahle, a consumer researcher and his associates, developed a list of values directly relevant to everyday consumer behaviour. These according to him are: self respect, self fulfillment, security, and sense of belonging, excitement, sense of accomplishment, fun and enjoyment, being well respected, warm relationships with others.

Consumers are classified in three groups, depending on which of these terminal values are more important to them. They are internals, if they value self fulfillment, excitement, a sense of accomplishment, and self respect. They take proactive steps, i.e., like to be in control of their lives. The second group external; values a sense of belonging and security and being well respected. These people like to conform and are more likely to buy products they think most people buy. Finally, interpersonal, are those who value warm relationships with others as well as fun and enjoyment.

Some other consumers buy because of self concept – a perception of who they are, including the individual ideas of who she currently is (actual self) and what she would like to become (ideal self). Yet others buy because of their lifestyle. Lifestyle is the way we live. A good way to determine a person’s lifestyle is to look at the product and brand one consumes. Lifestyle is a function of:

1. a person’s personal characteristics; genetics, race, gender age and personality
2. Personal context; culture, institution, reference groups and personal worth.

2.7 Review of Related Literature

Connect Nigeria (2013) reports that Nigeria adopted e-business platform in the 1990s and it has helped to boom products and services and increase the nation’s economic growth. Nigeria is said to have contributed about 34% of economic growth on the e-business platform and it is projecting 45 – 75% of the economic output in the year 2020.

A survey by Connect Nigeria shows that about 120 organizations in Nigeria adopt the e-business platform, ranging from banking, industries to educational sector. Presently, some other sectors such as, the transport sector and those in commerce have joined and awareness is growing. With the cashless policy initiative introduced by the central bank of Nigeria, it is hoped there will be more encouraging growth in e-business in Nigeria.

The internet banking sites, online retail stores and mobile payment delivery systems (POS) are channels used for e-business in Nigeria. However, traditional business is still very common. Traditional business involves physical business process while e-business is based on digital business process. Simply put, the major difference between these two forms of business is that e-business uses extensive technology. Other differences are in the form of targeted audiences; while e-business can target anyone who is connected to internet or other ICT facilities all over the world, traditional business audience is local.

Reaffirming this, Seabury (2010) says, e-business offers some other services that traditional business model were unable to achieve. But Odueyungbo (200) had said “converting from the traditional business to e-
business requires change that may affect the whole organizations structure, culture, staff responsibilities and objectives.


Odueyungbo (2006) says that beyond the issue of qualitative service delivery, the survival challenge and competition remains the reasons why business firms will want to give consideration to embrace e-business.

Anderson Consulting established a relationship between electronic transaction and increase in US government revenue in 2003 (e-marketer, 2000)

International Data Corporation (IDC) estimated the value of global e-commerce in 2000 at US$350.38 billion, which was projected to climb to as high as US$3.14 trillion by 2004. IDC also predicted an increase in Asia’s percentage share in worldwide e-commerce revenue from 5% in 2000 to 10% in 2004.

eMarketer projected an increase in the share of B2B e-business from 79.2% in 2000 to 87% in 2004 and a consequent decrease in the share of B2C from 20.8% in 2000 to only 13% in 2004.

Likewise B2B growth was way ahead of C2B growth in the Asia-Pacific region. According to a 2001 eMarketer estimate, B2B revenues in the region were expected to exceed $300 billion by 2004.

Asia-Pacific e-commerce revenues were projected to increase from $76.8 billion at year-end of 2001 to $338.5 billion by the end of 2004 and it was estimated that worldwide C2B e-commerce revenues would increase from US$59.7 billion in 2000 to US$428.1 billion by 2004.

E-Marketer es Online retailing transactions made up a significant share of this market. eMarketer also estimates that in the Asia-Pacific region, B2C revenues, went up to $8.2 billion by the end of 2001, with that figure doubling at the end of 2002-at total worldwide B2C sales below 10%.

With the above statistics in the emerging global economy, the importance of e-business in business strategy and business processes is now moving from being ordinarily necessary component in the business strategy, to a catalyst for business growth and profitability.

Odueyungbo (2006) asserts that e-business implementation requires skills, strategic planning and forecasting, re-discovering business resources, manufactures, suppliers, distributors and other stakeholders.

Some of the major psychological and behaioural factors which affect the adoption of any new innovation includes: consumer awareness, ease of use, security, accessibility, technophobia and reluctance to change, preference to services and cost of adopting the innovation (Nwokah, Hamilton and Ugorji 2006).

(1) Consumer Awareness: creation of awareness among the consumers of the product or service is an important characteristic for acceptance of any innovative service or product. Consumers go through a series of process in knowledge, conviction, decision and confirmation before they are ready to adopt a product or service as adoption or rejection of innovation begins when the consumer becomes aware of the product.

(2) Ease of Use: if an innovation is complex and not user friendly, consumers would certainly reject it. In the words of Cooper,1997 in Nwokah, Hamilton and Ugorji (2006), ease of use of innovative products or service; friendliness of domain names as well as the navigation tool available in the web-sites (web content) and design of the web-site with appropriate use of graphical user interface, are important determinants. Equally, proper navigation attributes, search facility and ease of performing internet business transactions will certainly help consumers when they surf the internet.

(3) Security: the level of security and risk associated with internet transactions is another important factor affecting the acceptance or adoption of new innovation. The continued nefarious activities of web hackers has been an issue of serious concern to e-business operators

(4) Cost Factor: Two types of costs are involved here; cost of computers and cost associated with internet access/connection charges/bank fees and charges. This is to say, if consumers are to use new technologies, the technologies must be reasonably priced relative to alternatives, otherwise, acceptance of the new technology may not be viable form the standpoint of the consumer.

(5) Technophobia: This is the fear of the use of technology. Some consumers have generally been afraid of new technology; others may not have the knowledge or know-how in dealing with computers, yet, others trust human beings more than computers and machines. Their fear for computers and technology generally grows and eventually develops into a phobia for technology which eventually affects customers’ reluctance to opt for e-business (Onyeaghalu 2014).

(6) Reluctance to Change: willingness to adopt technology enhancement, level of awareness of current trends and attitude towards change affects adoption because the existing mode of service or product delivery fulfils the customer’s needs adequately. For customers to change their present ways of operating and take up new technology, it must fulfill a specific need. Unless such a need is fulfilled, consumers may not be prepared to change from the present ways of operating. Provision of personalized customer service personnel to assist consumers in performing transactions via the internet
as well as providing specific value added service, which are currently not provided through traditional business channels, can also help to reduce the customer reluctance to change.

(7) Accessibility: availability of access to the internet is an important prerequisite for the adoption. It must be noted that the ease of accessibility and the more widespread the access to computers and internet, the greater the possibility of people carrying out internet business. In line with that, O’Connell (1996) in Nwokah, Hamilton and Ugorji (2006) identified that lack of access to computers as one possible reason for slow adoption of internet business. Hoffman and Novak, (1996); Mulle et al, (1998) studies revealed that there is a significant correlation between web-site download and web user satisfaction.

Above all, firms from developing countries risk being excluded from global value chain if they cannot establish electronic ties with their major business partners.

3.0 Methodology

A cross-sectional design was adopted in this study. The researcher judgmentally chose three commercial banks and three shopping centers in Port Harcourt as study area. The justification for this choice is that e-banking (Connect Nigeria, 2013), and online shopping are at present the most common forms of e-business in Nigeria. Five staff each, from these chosen organizations involved e-banking and online shopping services were randomly selected giving a sample size of 30. Structured questionnaire was employed to gather data from respondents. Likert scale designed in the form of: Very high rate (4), High rate (3), Moderate rate (2) and Low rate (1) were used to measure the dependent variable (e-business adoption) and independent variable (consumer attitude). A pilot study was conducted to validate the research instrument; six people that did not form part of the final study were administered with the questionnaires. The results from this study lead in the revision of the questionnaire to enhance its clarity and comprehensiveness. Data obtained from respondents on measured dimensions 1 and 2, presented in table 1, were organized and analyzed qualitatively using simple percentages as shown below. Rated responses from respondents on measured dimensions 3 and 4, presented in table 2, were used to derive values for Pearson’s Product Moment Correlation Statistic, employed for test of the null hypothesis.

<table>
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<tr>
<th>Measures/Dimensions</th>
<th>Alternative Responses</th>
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<td></td>
<td>Yes (%)</td>
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<td>I don’t Know (%)</td>
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<td>Total (%)</td>
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<td>(1) Does something inform your decision to adopt e-business?</td>
<td>26 (86.66)</td>
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<tr>
<td>(2) Do psychological, social, technological and situational factors influenced your decision to adopt e-business?</td>
<td>28 (93.33)</td>
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Table 1: Response from Respondents on Measured Dimension 1 and 2.

Source: Field Survey, 2015

(3) How would you rate e-business adoption in Nigeria?
(4) At what rate does consumer attitude change in Nigeria?

Responses from the above measured dimensions (3 and 4) were rated and presented in table 2 below. The responses in table 2 were used to derive values for Pearson’s Product Moment Correlation Statistic.
Table 2: Rated Responses (X and Y) from Respondents on Measured Dimension 3 and 4.

<table>
<thead>
<tr>
<th>Rate of Change of Attitude (X)</th>
<th>Rate of E-business Adoption (Y)</th>
<th>X²</th>
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ΣX = 70  ΣY = 84  ΣX² = 180  ΣY² = 256  ΣXY = 206

3.1 Test of Hypothesis

For test of the null hypothesis, “there is no relationship between consumer attitude and e-business adoption in Nigeria”, the test statistic, Pearson’s Product Moment Correlation was employed.

Formula for Pearson’s Product Moment Correlation Coefficient (r) according to Onyeizugbe (2013) is given as:

\[
r = \frac{N(\Sigma xy) - (\Sigma x)(\Sigma y)}{\sqrt{N(\Sigma x^2) - (\Sigma x)^2}(N(\Sigma y^2) - (\Sigma y)^2)}
\]

Substituting values of: N = 30, Σx = 70, Σy = 84, Σx² = 180, Σy² = 256, Σxy = 206 in the above equation:

\[
r = \frac{30 \times 206 - 70 \times 84}{\sqrt{30 \times 180 - (70)^2}(30 \times 250 - (84)^2)}
\]

\[
r = \frac{6180 - 5600}{\sqrt{5400 - (4900)}(7680 - 7056)}
\]

\[
r = \frac{580}{\sqrt{(500)(624)}}
\]

84
Decision: The computed value of r (1.038) is greater than table or critical value of r (0.055), for a two tailed test at N-2 degree of freedom and at 0.05 significant levels. We therefore reject the null hypothesis.

4.0 Results and Discussion
Result from test of hypothesis, which shows that computed value of r (1.038) is greater than table or critical value of r (0.055), indicates that there is relationship between the two variables (e-business adoption and consumer attitude).

Findings from table 1, measure number one: (Does something inform consumers’ decision to adopt e-business?): of the 30 respondents, 26 representing 86.66 percent answered “yes”, 2 or 6.66 percent answered “no” and “I don’t know” respectively.

For measure number two in table 1: (Do psychological, social, technological and situational factors influenced consumers’ decision to adopt e-business); 28 representing 93.33 percent opted for “yes”, no body answered “no”, those who chose “I don’t know were 2 or 6.66 percent.

Findings from literature review indicate that some consumers want to enjoy second mover advantage. This explains why adoption of a new product tends to slow down at the introductory stage like any other new innovation. Furthermore, e-business offers a whole of benefits: Furnish customers faster, more responsive service, reduction in transaction costs and so forth. This is in consonance with the findings by Nwokah, Hamilton and Ugorji (2006) which says: for customers to change their present ways of operating and take up new technology, it must fulfill a specific need. Unless such a need is fulfilled, consumers may not be prepared to change from the present ways of operating.

5.0 Conclusion
Following the result of our findings, we conclude that there is relationship between e-business adoption and consumer attitude. According to our review of literature, the factors that influence e-business adoption apart from psychological, social, technological and situational factors were found to include other externalities such as: early or late adoptors, early or late majority, experiencers, filfilleds and laggards, and this actually represents the scenario of e-business adoption today in Nigeria.

REFERENCES
Connect Nigeria (2013) Information communication and technology conference
Hargittai, E. (1999). Weaving the Western Web: Explaining Differences in Internet Connectivity

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