

APPRAISING NIGERIA READINESS FOR ECOMMERCE TOWARDS: ACHIEVING VISION 20: 2020

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ABSTRACT

The cardinal point of vision 20:2020 of Federal republic of Nigeria is that “By 2020 Nigeria will be one of the 20 largest economies in the world able to consolidate its leadership role in Africa and establish itself as a significant player in the global economic and political arena.” [NV2020].

To attain this overarching goal of reaching the top 20 economies by year 2020, the Country will need to enhance her economic development performance under the key parameters of Polity, Macro-economy, Infrastructure, Education, Health, Agriculture, and Manufacturing. Suffice to say, these parameters are not exhaustive. [NV2020].

While this program sounds laudable both in theory and in practice, and could be seen as a right step in the right direction, the question however is considering the political situation, infrastructure development, Macro-economic policies in the country, “how prepared is Nigeria in attaining these lofty goals by year 2020”?

Nigeria is one of developing countries that are yet to enter the mainstream of eCommerce, yet is having a dream to become a significant player in the global economy by 2020. Given the prevailing situation in the global market today eCommerce is one of the key global marketing strategies and Nigeria is yet to enter the market.

This paper is written to sensitize the Nigeria Computer Society (NCS) which is the umbrella body for Information Technology in Nigeria, the eCommerce stakeholders in Nigeria, such as Nigeria Internet Group (NIG); Internet Services Providers’ Association of Nigeria (ISPAN); The Nigerian Cyber-crime Working Group (NCWG), the Nigerian Communications Commission (NCC); National Information Technology Development Agency (NITDA), banks, businesses, technocrats and the Federal Government of Nigeria to wake up from their dream and join this global economic train towards achieving the vision 2020 goals.

Keywords: *eCommerece, Macro-economy, Economy, Polity.*

1. BACKGROUND

Electronic commerce is now an alternative and convenient way of conducting business both nationally and internationally. This revolutionary way of conducting business has since broken down the geographical boundaries of the market, where people originally visited markets to buy or sell. Internet Technology Driven Business (eBusiness) has continued to be a catalyst to accelerate economic growth in many developed countries around the world such Singapore, Denmark, Swiserland, United States of America, China, just to mention but a few. It is now a form of globalization.

Business-to-Business (B2B) e-commerce – 2001 annual on-line sales USA \$995 billion (93.3% of all US e-Commerce), EU ca.\$200 billion, Asia-Pacific est.\$300 billion by 2004, Latin-America est. \$12.5 by 2003 and Africa est.\$0.9 billion by 2003 with South Africa accounting for 80 to 85 per cent stats. UNCTAD/SDTE/ECB/2003/1

One of the most important factors hindering developing countries from achieving maximum economic potential from ICT includes the absence of adequate legal and regulatory frameworks (United Nations Conference on Trade and Development 2003).

Nigeria, being giant of Africa not only in numerical strength but also in economic power and intellectualism has not really proved her leadership role in championing technological advancement in the black continent of Africa. Nigeria is a blessed nation both in human and natural resources, but economic growth of this country does not reflect the endowed capabilities in terms of the standard of living and social status. For Nigeria to realize her envisaged vision 2020, it is no doubt that Information Technology must play a vital role. One of the areas in which this vision could be realized is for Nigeria to move its economic activities to the Cyberspace through eCommerce.

According to [Ribadu, 2011], “A country determined to compete in a 21st century marked by globalization, fiercely competing markets, job opportunities, and rapid technological advances, must have commensurate infrastructure to drive its vision”. Several developed nations of the world have plunged into eCommerce in order to improve their economic activities. In fact eCommerce is now seen as one of the areas developed nations are now gaining competitive advantage over developing nations like Nigeria. Any nation that refuses to join this global trend cannot be a significant player in the global economy that will be driven by high powered e-Technology in the foreseeable future.

A look at the preparation of Nigeria as a nation in terms of the technology infrastructure, legal framework, payments systems, banks readiness, entrepreneurs' readiness, and public readiness in joining this global economy with the hope of promoting her economic activities beyond the frontiers of the nation motivates us to carry out this research. The recent significant developments in Nigeria which include the re-delegation of .ng TLD (an Internet top-level domain generally used or reserved for a country, a sovereign state, or a dependent territory), the budding e-Payment services and the emerging international fiber cable from MainOne and Globacom are pointers that Nigeria is about taking his place in the committee of nations in using eBusiness strategies for attainment of his economic recovery [NIG 2009].

This paper shall examine Nigeria readiness for eBusiness. Factors that pose as problems to Nigeria in adopting eCommerce shall be examined. This issue shall be examined in line with the followings technical and operational critical success factors to operations of e-Business.

1-Infrastructure availability for ecommerce in Nigeria.

An appraisal of available and well-established telecommunications and Internet infrastructure needed for development of a successful and vibrant e-commerce in Nigeria.

2- Available Payment Mechanisms for eCommerce operation in Nigeria.

An appraisal of secure forms of payment in e-commerce transactions which include credit cards, checks, debit cards, wire transfer and cash on delivery .

2-Availbale Delivery Infrastructure in Nigeria.

An appraisal of available delivery infrastructures. Successful e-commerce requires a reliable system to deliver goods to the business or private customer.

4- eCommerce Business Laws in place in Nigeria

An appraisal of the business laws to the Internet available in Nigeria. These laws will serve to promote consumer protection and merchants.

5- Buyers Attitude to E-commerce in Nigeria.

An appraisal of the buyer's attitude toward using e-commerce in daily life is a significant factor in the success of ecommerce.

6- Entrepreneurs Attitude to E-commerce in Nigeria.

The willingness of companies to move away from traditional ways of doing business and develop methods and models that include e-commerce is essential to eCommerce adoption.

2. ECOMMERCE

Advances in information and communication technologies and emergence of the Internet have revolutionized business activities enabling new ways of conducting business referred to as electronic commerce (Zwass 2003). Electronic commerce, commonly known as e-commerce, or e-business consists of the buying and selling of products or services over electronic systems such as the Internet and other computer networks. The amount of trade conducted electronically has grown extraordinarily with widespread Internet usage. The use of commerce is conducted in this way, spurring and drawing on innovations in electronic funds transfer, supply chain management, Internet marketing, online transaction processing, electronic data interchange (EDI), inventory management systems, and automated data collection systems. Modern electronic commerce typically uses the World Wide Web at least at some point in the transaction's life cycle, although it can encompass a wider range of technologies such as email as well.

A large percentage of electronic commerce is conducted entirely electronically for virtual items such as access to premium content on a website, but most electronic commerce involves the transportation of physical items in some way. Online retailers are sometimes known as e-tailers and online retail is sometimes known as e-tail. Almost all big retailers have electronic commerce presence on the World Wide Web.

Electronic commerce that is conducted between businesses is referred to as business -to- business or B2B. B2B can be open to all interested parties (e.g. Commodity exchange) or limited to specific, pre-qualified participants (private electronic market). Electronic commerce that is conducted between businesses and consumers, on the other hand, is referred to as business -to-consumer or B2C. This is the type of electronic commerce conducted by companies such as Amazon.com. Online shopping is a form of electronic commerce where the buyer is directly online to the seller's computer usually via the internet. There is no intermediary service. The sale and purchase transaction is completed electronically and interactively in real-time such as Amazon.com for new books. If an intermediary is present, then the sale and purchase transaction is called electronic commerce such as eBay.com.

Electronic commerce is generally considered to be the sales aspect of e_business. It also consists of the exchange of data to facilitate the financing and payment aspects of the business transactions.

http://en.wikipedia.org/wiki/Electronic_commerce

3. ECOMMERCE READINESS IN NIGERIA

Nigeria readiness for ecommerce aims to look at how far Nigeria is preparing in joining this global market with the aim of boosting her economic activities. We shall be looking at the from different perspectives in this section.

3.1 eCommerce Technology Infrastructure readiness in Nigeria

3.1.1 Internet readiness in Nigeria

According to Business Times (2010), there were just a small number of dial-up e-mail providers in Nigeria Before the year 1998 (see the appendix). These days more than 400 ISPs have been licensed. The present ISPs offer users with online advertising chances as well as Internet banking security and very-small-aperture terminal (VSAT) services. Thousands of youthful people are getting the internet contact from their WAP-enabled mobile phones, smart phones and from their PC drawing on their phones as a modem, reproduce the importance and need of internet connectivity in the country.

Nigeria Internet Group (NIG) was conceived as a non-Governmental organization with the mission statement of promoting and facilitating full access to the Internet in Nigeria. The Nigeria Internet Group was formed in 1995 after the first Internet Workshop organized by Yaba College of Technology in collaboration with a number of organizations including the Nigerian Communications Commission, National Data Bank, Literacy Training and Development Program for Africa (University of Ibadan) and Administrative Staff college of Nigeria (ASCON), with the direct assistance of the United States Information Service (USIS), Regional Information Network for Africa (RINAF) and the British Council. The Workshop was put together in order to raise the level of awareness of the benefits of Internet in Nigeria and provide a forum for discussing the future of networking.

According to <http://itrealms.blogspot.com/2008/06/e-readiness-nigeria-ranks-94.html>

Nigeria has been rated the 94th networked readiness nation otherwise known as e-readiness in the 2009-2010 Global Information Technology Report (GITR) sponsored in 2010 by Cisco Systems as a series of joint project between the World Economic Forum and INSEAD.

The Global Information Technology Report 2009–2010, the ninth in the series, measures the extent to which 133 economies from both the developed and developing worlds leverage ICT advances for increased growth and development through the methodological framework of the Networked Readiness Index (NRI). The NRI identifies the most relevant factors facilitating ICT readiness, providing policymakers, business leaders, and all other relevant stakeholders with a unique tool in drawing national roadmaps toward increased networked readiness, one that they can use to benchmark their country's performance over time and vis-à-vis other economies.

First launched in 2001, GITR has become a valuable and unique benchmarking tool to determine national Information and Communication Technology (ICT) strengths and weaknesses, as well as to evaluate progress, just as it also highlights the continuing importance of ICT application and development for economic growth.

The latest GITR framework indicated that a total of 133 economies in 2009-2010, were measured using the Networked Readiness Index (NRI), based on the degree of preparation of a nation to participate in and benefit from ICT developments.

According to the report, NRI is composed of three component indexes which assess the environment for ICT offered by a given country; the readiness of the economy's key stakeholders - individuals, business and governments; and the usage of ICT among these stakeholders. "These are keys not only for spurring networked readiness, but also to lay the foundations for sustainable growth," Mia said.

Published for the seventh consecutive year with record coverage of 133 economies worldwide, the report has been acclaimed as the world's most comprehensive and authoritative international assessment of the impact of ICT on the development process and the competitiveness of nations.

Equally the Networked Readiness Index, featured in the report, examined how prepared countries were, in using ICT effectively on three dimensions, namely the general business, regulatory and infrastructure environment for ICT; whereas the readiness of the three key stakeholder groups covered included individuals, businesses and governments ability to use and benefit from ICT; and their actual usage of the latest information and communication technologies available.

The NRI uses a combination of data from publicly available sources, as well as the results of the Executive Opinion

Survey (EOS), a comprehensive annual survey conducted by the World Economic Forum with its network of partner institutes made up of leading research institutes and business organizations in the countries integrated in the report. The survey provides unique data on many qualitative institutional and business environment issues. This cross-country analysis of the drivers of networked readiness provides useful comparative information for making business decisions and additional value to governments wishing to improve their ICT preparedness.

Country/ Economy	Rank	Score	Rank within income group*	Country/ Economy	Rank	Score	Rank within income group*
Sweden	1	5.65	HI 1	Egypt	70	3.67	LM 8
Singapore	2	5.64	HI 2	Bulgaria	71	3.66	UM 18
Denmark	3	5.54	HI 3	Sri Lanka	72	3.65	LM 9
Switzerland	4	5.48	HI 4	Macedonia, FYR	73	3.64	UM 19
United States	5	5.46	HI 5	Dominican Republic	74	3.64	UM 20
Finland	6	5.44	HI 6	Senegal	75	3.63	LO 2
Canada	7	5.36	HI 7	Kuwait	76	3.62	HI 45
Hong Kong SAR	8	5.33	HI 8	Gambia, The	77	3.61	LO 3
Netherlands	9	5.32	HI 9	Mexico	78	3.61	UM 21
Norway	10	5.22	HI 10	Trinidad and Tobago	79	3.60	HI 46
Taiwan, China	11	5.20	HI 11	Russian Federation	80	3.58	UM 22
Iceland	12	5.20	HI 12	El Salvador	81	3.55	LM 10
United Kingdom	13	5.17	HI 13	Ukraine	82	3.53	LM 11
Germany	14	5.16	HI 14	Guatemala	83	3.53	LM 12
Korea, Rep.	15	5.14	HI 15	Serbia	84	3.51	UM 23
Australia	16	5.06	HI 16	Philippines	85	3.51	LM 13
Luxembourg	17	5.02	HI 17	Botswana	86	3.47	UM 24
France	18	4.99	HI 18	Pakistan	87	3.44	LM 14
New Zealand	19	4.94	HI 19	Morocco	88	3.43	LM 15
Austria	20	4.94	HI 20	Namibia	89	3.40	UM 25
Japan	21	4.89	HI 21	Kenya	90	3.40	LO 4
Belgium	22	4.86	HI 22	Argentina	91	3.38	UM 26
United Arab Emirates	23	4.85	HI 23	Peru	92	3.38	UM 27
Ireland	24	4.82	HI 24	Georgia	93	3.38	LM 16
Estonia	25	4.81	HI 25	Mongolia	94	3.36	LM 17
Malta	26	4.75	HI 26	Albania	95	3.27	LM 18
Malaysia	27	4.65	UM 1	Mali	96	3.27	LO 5
Israel	28	4.58	HI 27	Zambia	97	3.26	LO 6
Bahrain	29	4.58	HI 28	Ghana	98	3.25	LO 7
Qatar	30	4.53	HI 29	Nigeria	99	3.25	LM 19
Slovenia	31	4.51	HI 30	Guyana	100	3.22	LM 20
Cyprus	32	4.48	HI 31	Armenia	101	3.20	LM 21
Portugal	33	4.41	HI 32	Mauritania	102	3.19	LO 8
Spain	34	4.37	HI 33	Libya	103	3.16	UM 28
Barbados	35	4.36	HI 34	Côte d'Ivoire	104	3.16	LM 22
Czech Republic	36	4.35	HI 35	Syria	105	3.13	LM 23
China	37	4.31	LM 1	Honduras	106	3.13	LM 24
Saudi Arabia	38	4.30	HI 36	Lesotho	107	3.12	LM 25
Tunisia	39	4.22	LM 2	Burkina Faso	108	3.10	LO 9
Chile	40	4.13	UM 2	Tajikistan	109	3.09	LO 10
Lithuania	41	4.12	UM 3	Bosnia and Herzegovina	110	3.07	UM 29
Montenegro	42	4.10	UM 4	Benin	111	3.06	LO 11

5.) Sophistication of Use.

A country's movement along these dimensions is shaped by a set of determining factors that includes such metrics as teledensity, PC density, per capital GDP, foreign and domestic investment, geography, educational system, and government policy. The analysis focused on major social, economic, political, and legal and regulatory environment as they affect the countries' Internet status. The tool does not define 'e_ready' society per se. but the reasons behind and readiness for growth of Internet infrastructure and usage (which are, by most accounts, requirements of an e-ready Society). The tool uses a combination of statistics, narrative description and comparison to explain the growth of countries Internet, focusing on the six Internet statistics described above.

Pervasiveness: a measure based on users per capita and the degree to which non-technicians are using the Internet. In Nigeria there is high awareness and usage of computer and communication of ICT. The use spans various ways such as communication, information download, research, etc.

Nigeria Rank second in Africa in Internet user penetration with Egypt leading see appendix 3.

Geographic dispersion: a measure of the concentration of the Internet within a nation, from none or a single city to nationwide availability.

There is a wide spread of computers, information and communication technologies across the length and breadth of Nigeria. These include wireless communications, Cybercafés,

Sectoral absorption: a measure of the degree of utilization of the Internet in the education, commercial, health care and public sectors.

In Nigeria, many sectors of the economy now uses ICT in one form or the other. Some Universities have their websites, some health establishments also have websites.

Connectivity infrastructure: a measure based on international and international backbone bandwidth, exchange points, and last-mile access methods.

International Backbone – 6.5 mbps

National Backbone – 2 mbps Built by NITEL

Exchange Point – None

Last mile – ADSL, Wireless (ISM band and MMDS)

Organizational infrastructure: a measure based on the state of the ISP industry and market conditions.

- 136 ISP licensed, 30 operating
- Nigeria Internet Group
- Internet Service Provider Association (ISPAN)
- Internet Society (ISOC)

Sophistication of use: a measure characterizing usage from conventional to highly sophisticated and driving innovation.

- Usage ranges from communication using email, information download, filling online forms, entertainment, webcast, and surfing websites.
- See appendix 2.

3.1.2 Nigeria ePayment Systems Readiness

According to Olatokunbo Kotoye (1997) ePayment implies the electronic payment for goods and services. Simply put, it refers to the transfer of monetary value from one party to another via electronic means, thereby eliminating the use of cash. There are a number of different types of ePayment solutions currently in use worldwide, such as:

Credit Cards- A user is issued with a plastic card and PIN number normally by a bank. This card is assigned a credit limit of a certain amount from the onset. The credit limit on the account is then made available for the cardholder to use to pay for goods and services at any merchant that is registered to accept that particular type of credit card. Examples of these are Visa, MasterCard, and American Express and also the Nigerian Credit Card recently launched by some DBA, Ecobank and Oceanic banks.

Debit Cards - These are plastic cards that are normally linked to a bank account operated by the debit card owner. They operate similarly to traditional cheques as they provide access to funds in the bank account. There is no credit provided here, but the cardholder may spend up to the limit available in his or her account depending on the banks criteria. Examples of these are Barclays Connect cards, Switch

Cards, Visa Debit Cards, Solo Cards and the increasingly popular Nigerian Debit card operated on the Interswitch network.

Electronic Funds Transfer - A transfer of funds is done from one bank account to another.

This may be from one Nigerian bank to another or from a Nigerian bank to any bank in the world. Examples are NEFT, SWIFT, and CHAPS.

Direct Debit/Standing Orders-A fixed or variable amount is deducted from the customers' current account on a periodical basis and automatically credited to the suppliers account. This is typically used for loan repayments, bill payments etc.

Recharge Cards - These are payment cards sold by companies to their customers, they enable customers to purchase goods and services directly from the company electronically.

These cards are typically sold in fixed denominations and they will transfer value worth that amount to the customer at the time of purchase. Examples of these are GSM Recharge Cards, International Calling Cards, PHCN and DSTV Recharge cards also belong to this category.

Automated Teller Machines (AIM) – These are computer-enabled specialised machines that are typically linked via a Switch to the banks network and the account details of the customer. They allow ATM cardholders to withdraw money from the machine directly without interacting with any staff of the bank. Examples of these can be found at First Bank Plc, Diamond Bank, Zenith Bank, GT Bank and Skye Bank amongst many others.

Point of Sale (POS) Terminals -A POS is an electronic device capable of processing credit/ debit cards typically issued by banks. These devices are deployed at commercial outlets where they enable the merchant to collect cards as a means of payment for their goods or services.

Loyalty Cards - These are payment cards normally issued by companies to the customers. It enables the customers to earn "Loyalty Points" each time they make a purchase from the company or any of their strategic partners. These loyalty points are then subsequently converted to value for the customers to purchase goods and services from the company. Examples include Virgin Flying Club cards, Fuel Station Cards etc.

ePayment systems in Nigeria the current status

Current ePayment Systems available in Nigeria today there are a number of different ePayment solutions available to the public. We have had the Valuecard for a number of years. These are payment cards that enable electronic payment for goods at any participating bank or merchant. There have been some limitations with these due to the

fact that they were not online, realtime systems; the merchants had to physically take their terminals to the bank to download their accumulated sales to their accounts on a regular basis.

Despite these issues, it has still proved to be a very effective way for people to safely carry considerable amounts of cash. Standing orders have been in use by many banks for bill payment and the payment of salaries for companies. International Electronic Funds Transfers (SWIFT) has been in use to make foreign exchange denominated transfers to banks abroad. More recently we have seen the launch of Nigerian Electronic Funds Transfer (NEFT) and Bulk NEFT by ePayment for all Nigerians

The Nigerian Inter Bank Settlements System Pic (NIBBS). This solution facilitates direct transfers of funds from one bank to another anywhere in Nigeria within 24 hours.

ATM's are becoming increasingly available with many banks installing them in their branches and other strategic locations. Point of Sale (POS) terminals are also springing up at more locations where the Nigerian Debit card is accepted as a means of ePayment for goods and services, more recently the Vpay card has been launched which is also accepted at merchants and some ATM's.

Recharge cards were made extremely popular by the GSM Operators who saw the prepaid business model as the best way to offer their telecommunications services in a country where there is no established credit system.

There is a major initiative in the country at the moment to issue the MasterCard Credit/Debit card and a number of banks have already started to issue these to their clients. For clients with domiciliary accounts, the card enables them to purchase goods and services whenever they travel abroad. In addition to this, there is a locally accepted Visa card being issued by a number of banks. It can be said that there is definitely increased proliferation of ePayment solutions in Nigeria. It appears that Nigeria is definitely heading in the right direction with a few pioneering companies providing effective solutions to the market.

eTransact

eTranzact was conceptualized, designed and developed in Nigeria. It is the first fully integrated and operational mobile phone, B2B (Business to Business) and Internet payment system in Nigeria. It enables customers shop securely, effect money transfers online, pay bills, make purchases and buy airtime via the mobile phone, POS devices, Bank Outlets and the Internet.

“This “truly Nigerian electronic payment initiative has revolutionized transaction processing in Nigeria since its introduction. eTranzact no doubt is definitely the only functional electronic platform for genuine mCommerce and eCommerce in Nigeria today”, eTranzact is a multi-channel electronic payment system that facilitates financial transactions using the Internet, mobile (SMS & WAP), VoiceXML and bank outlets. While other payment solutions are restricted in their channels, eTranzact offers several choices and flexibility to prospective users. eTranzact has been successfully deployed and is now fully operational in Zimbabwe while plans have been concluded to introduce eTranzact to other countries like South Africa, Botswana and Ghana, Kenya, Zambia, Namibia and Malawi.“eTransact is fully incorporated in UK, USA and Latin American countries. (Sola Fanawopo 2004).

3.13 eCommerce Business Laws in place in Nigeria

The emergence of electronic commerce has also brought with it a number of legal and socio-economic issues, especially in developing nations such as Nigeria, which issues pose significant challenges to the legal regime of electronic commerce in those countries. TI Akomolede (2008)

Data protection in e-commerce

The transmission of information such as the account names, passwords, details of financial assets and other user requests from the browser to the web server, must remain confidential. It is at this stage that the information needs to be transmitted privately, securely and correctly between the bank and the customer. Due to the open architecture and anonymity of the Internet, many people have the potential to access online banking systems and tamper with them. This raises serious concerns for banks and their customers, especially when it involves confidential information.

Information security objective: According to the paper the following were identified as the security objectives

a. Confidentiality is about ensuring that only the people who are authorized to have access to information are able to do so. It's about keeping valuable information only in the hands of those people who are intended to see it.

b. Integrity is about maintaining the value and the state of information, which means that it is protected from unauthorized modification. Information only has value if we know that it's correct. A major objective of information security policies is thus to ensure that information is not modified or destroyed or subverted in any way.

c. Availability is about ensuring that information and information systems are available and operational when they are needed. A major objective of an information security policy must be to ensure that information is always available to support critical business processing.

These objectives are globally recognized as being characteristic of any secure system.

Charl van der Walt (2001).

TI Akomolede (2008) Noted the following concerns about ecommerce security in Nigeria.

Formation of contract on the internet

The determination of the moment when a contract can be said to have come into existence on the internet, giving rise to the existence of rights and duties as between the parties, has been one of the vexed issues in e-commerce. In contrast, traditional commercial transactions do not pose any significant problem because there are elaborate common law and statutory rules that govern such transactions. TI Akomolede (2008).

Legal issues on Payment system in e-commerce

Making payment for goods and services bought through the internet poses unique problems because of the fact that the parties may be thousands of kilometers apart. The problems associated with internet payment are in relation to the inability of the internet to guarantee the safety of such payments and the possibility of duplicating payment, since a computer could potentially become a forger of digital banknotes. TI Akomolede (2008).

Popular methods of effecting payments for goods bought through the Internet include the use of credit cards, smart cards, digital or electronic cheques or cash, and debit cards. The use of credit cards is still not very popular in developing countries, because e-commerce itself is still at its infancy, and the practice is therefore for the sellers to obtain bank guarantees in such transactions. If the goods are supplied and payment is not forthcoming through the bank's guarantee, the seller has a right of action against the issuing bank that has guaranteed payments.

There are many problems associated with obtaining bank guarantees in Nigeria, for payments in respect of goods bought internationally or through the internet. This has greatly hampered the development of e-commerce. However, with the increasing level of sophistication in information technology and the development of the telecommunication sector, the use of credit card and other payment facilities in e-commerce will become increasingly popular, and in the process, some of the problems associated with payment for goods and services in e-commerce will be reduced.

Jurisdiction and choice of law issues

The issue of jurisdiction is a crucial one in e-commerce. The question has always been which court assumes jurisdiction in resolving a dispute arising from a contract between the parties, in view of the fact that the parties may be residing in different jurisdictions with different legal systems.

The issue basically is one of Private International Law, and the relevant Convention is the Brussels Convention on Jurisdiction and Enforcement of Judgment in Civil and Commercial Matters. The Convention is applicable to those countries that have ratified it and incorporated its provisions into their municipal laws. However, it is doubtful if the Convention has been ratified in Nigeria, as the writer could not find any evidence of its ratification TI Akomolede (2008).

Evidential issues

The emergence of e-commerce and its growing popularity have provoked fundamental evidential issues especially in relation to the proof of transactions conducted through the internet. The peculiarity of these issues and the confusion that has also greeted their interpretation by the courts have exposed the inability of the Nigerian Law on Evidence to cope with the avalanche of electronically-generated evidence that is the hallmark of electronic commercial transactions.

E-commerce transactions are paperless transactions made through magnetic materials such as tapes or disks. These are in contradistinction to paper-based transactions that are embodied in a permanent form and typically expressed in words and figures usually authenticated by signatures. Such transactions can therefore not be altered without an alteration on the face of the document.

One of the greatest challenges facing the courts in Nigeria is the admissibility of computer-generated evidence, in view of the rule that a party must give the best evidence of facts that are in issue before the courts. In the context of e-commerce, information fed into the computer and posted on the websites of sellers and suppliers of goods and services, when retrieved from the web, would only be copies of such information and at best would be hearsay evidence. The communication between the parties would also be copies as against originals when downloaded from the internet, and for it to be admitted it would have to be put in under any of the exceptions to section 91 of the Evidence Act.

Various sections of the Evidence Act have been explored with a view to determining whether any of them could accommodate the admissibility of computer-generated evidence as an exception to the hearsay rule. These sections include sections 33(b), 38, 39 and 91. These sections have, however, been found to be grossly inadequate for the admissibility of computer-generated evidence, despite the expression of willingness by the courts to interpret the relevant provisions of the Evidence Act liberally. TI Akomolede (2008).

Cyber crimes and e-commerce in Nigeria

Cyber crimes pose many challenges to electronic commerce and have indeed made internet transactions insecure and vulnerable to manipulation by persons who are not parties to such transactions. The extent to which internet crime has ravaged the commercial world was succinctly captured by a learned author as follows: It is also predictable that the proliferation of commerce on the internet will be matched by an expansion of crime on the internet. The rise in the use of digital cash and credit cards over the internet provides a greater incentive to hack than ever before.

Conceptually, Internet crime means the commission of unlawful acts using the computer either as a tool or a target, or as both. It is not defined in any legislation in Nigeria. The most common Internet crimes include hacking and cracking, identity theft, the sale of illegal or stolen articles on the internet, packet sniffing, and the creation of malicious codes such as viruses. These offences are crimes in most advanced countries because of statutory regulations.

In Nigeria, however, these activities are not crimes, because there is no legislation in the country that makes them unlawful. Herein lies the helplessness of consumers in electronic commerce in Nigeria, who may be victims of one or more of these cyber crimes. The solution to cyber crimes in Nigeria is still at the stage of a Draft Law which is presently pending before the National Assembly.

The Draft Law addresses most of the issues that have been identified as constituting crimes in cyberspace, and which consequently threaten electronic commerce. It contains provisions that are similar to or the same as the relevant provisions of the laws on this subject matter in the advanced jurisdictions. The problems and general trepidation associated with cyber crimes will be reduced when the Draft Law is eventually enacted into law to pave way for the emergence of a more friendly and protective cyberspace. TI AKOMOLEDE (2008).

Legal and regulatory framework of e-commerce in Nigeria

Electronic commerce is still emerging in most developing nations and Nigeria is not an exception. There is therefore no elaborate legal and regulatory framework for electronic commerce in Nigeria presently. The fact should, however, be mentioned that as e-commerce is a species of commercial transactions, though a special one, there are pockets of commercial legislation and decided cases that directly or indirectly affect it in Nigeria.

On the international scene, a major recognition and regulation of electronic commerce began with the adoption of the UNCITRAL Model Law on Electronic Commerce in 1996. A cardinal aim of the Model Law was to ensure that the practices of Member States in the area of electronic commerce, as an emerging practice in commercial transactions, should be uniform and of acceptable standard. Thus, Member States were enjoined to enact laws and institutions that conformed substantially to the provisions of the Model Law.

In Nigeria concrete efforts at regulating e-commerce-related activities are still at the stage of Draft Bills before the National Assembly. The relevant bills are the Nigerian Bill on Cyber Crimes and the Electronic Transactions Bill, which is modeled on the UNCITRAL Model Law on e-commerce. The Bill provides for the validity of contracts, matters of evidence, electronic signatures and payment systems, amongst other issues. The Draft Bill on Cyber Crimes provides the legal and institutional framework for combating cyber crime in Nigeria and ensuring cyber security. Provisions are also made for payment of compensation to victims of cyber crimes. The Bill also makes provisions for the establishment of a Cyber Crime and Cyber Security Agency, which is given wide powers to investigate, arrest and prosecute cyber crimes.

It is also important to note the Nigerian National Policy on Information Technology (IT), which has as one of its numerous objectives the cultivation of a culture of electronic commerce which makes business transactions easy, quick and cost effective for both national and international transactions.⁵⁶ The implementation of the IT policy is the responsibility of the National Information Technology Development Agency (NITDA), whose mandate includes the establishment of a National Electronic Commerce Council (NECC) to govern all electronic commerce affairs in Nigeria and to facilitate international trade through an e-commerce infrastructure.

There is no doubt therefore that with the identified developments in electronic commerce in Nigeria, especially the emerging legal and regulatory framework, most of the challenges facing it presently will sooner, rather than later pale into oblivion.

According to Okonigene et al. (2009) Without proper security methods in place, it is just like building a house without locks. Any person can gain access. The category and nature of cybercrime in Nigeria is endless. Cybercrime is a global phenomenal that is threatening the economy of nations. It is a major threat in India as it is in Nigeria. Punjab National Bank suffered a loss of close to Rs. 1.39 crore when the computer recorders were manipulated to create false debits and credits. In bank of Baroda, Rs 2.5 lakh was misappropriated through the computerized creation of false bank accounts.

In Mahanagar Telephone Nigam Limited (MTNL) in Delhi, a junior telecom official was charged for reversing

electronic telephone meter system thereby allowing some commercials export houses to make overseas calls without the charges being directed to their telephone numbers

- ✘ Cyber crimes pose many challenges to electronic commerce and have indeed made internet transactions insecure and vulnerable to manipulation by persons who are not parties to such transactions. The extent to which internet crime has ravaged the commercial world was succinctly captured by a learned author as follows:
- ✘ It is also predictable that the proliferation of commerce on the internet will be matched by an expansion of crime on the internet. The rise in the use of digital cash and credit cards over the internet provides a greater incentive to hack than ever before.
- ✘ Conceptually, internet crime means the commission of unlawful acts using the computer either as a tool or a target, or as both. It is not defined in any legislation in Nigeria. The most common internet crimes include hacking and cracking, identity theft, the sale of illegal or stolen articles on the internet, packet sniffing, and the creation of malicious codes such as viruses. These offences are crimes in most advanced countries because of statutory regulations.
- ✘ In Nigeria, however, these activities are not crimes, because there is no legislation in the country

3.2 Nigerian Banking readiness for eCommerce

3.2.1 eBanking System in Nigeria

These days most banks of Nigeria offer internet banking services to their customers enabling the customers online banking transactions, from the suitable places like their residence or offices. The expansion and getting of Automated Teller Machines (ATMs) and credit or debit cards also control helpfully on the country's e-commerce growth.

There has been a quick growth in Nigeria throughout the last few years in the area of electronic-cash-transfer services such as Moneygram, Western Union, and Travelex. Nigerian citizens can pay, withdraw or transfer funds everywhere in the country.

Nigerian citizens also can buy with their e-cards thanks to such e-payment providers as Interswitch, Master Card, Visa Card and e-transact. The current growth and expansion of Western shopping malls in Nigeria is also awfully significant.

The part of e-commerce that has expanded in Nigeria generally is e-banking. These days the greater parts of the Nigerian banks offer online and real-time banking services. Online banking systems have by now become usual for Nigerian customers as they are provided the flexibility in service their accounts in any branch of their bank's system. Banks are too gradually more looking to card-based payment explanation away from the extensively accepted electronic reward though these are slow to take off such as debit and credit cards. The service to be developed considerably in Nigeria is an ATM system and a few banks initiated the ATM Consortium in 2003 to set up ATMs around the country.

3.3 eCommerce Delivery Infrastructure in Nigeria.

Infrastructure delivery system in Nigeria is very poor. Many houses up till now are not numbered. No good road network to facilitate easy movement of goods and services. The postal system is very slow and insecure. For successful ecommerce implementation in Nigeria, will require a critical overhauling of the delivery systems in Nigeria.

3.4 Buyers Attitude to E-commerce in Nigeria.

Many people in Nigeria are unwilling to trade in ecommerce in Nigeria, for fear of Internet Fraud. Nigeria today is not so safe for Internet market because of lack of trust on the part of customers to put their hard earned currency on a business that is not trustworthy. So there is the need to be for the legal and security infrastructures to be put in place by Government for Buyers to actively participate in eCommerce.

3.5 Entrepreneurs Attitude to E-commerce in Nigeria.

Many business people in Nigeria cannot go to online business now because there is no adequate motivation, education on the potential of this lucrative business. Many also find it expensive to maintain web presence on the Internet. The willingness of companies to move away from traditional ways of doing business and develop methods and models that include e-commerce is essential to ecommerce adoption.

4. CONCLUSION AND RECOMMENDATIONS

In conclusion, from what we have read so far from other authorities, papers and put together in this papers, we found out, Nigeria is gradually getting ready for eCommerce. There is a great improvement in Internet diffusion within the country, The policy is gradually getting better. The Internet Infrastructure in the country is fast increasing both in power and availability. The payment systems especially card payment system is gradually evolving. Enthusiasm

about Internet is growing in Nigeria. Awareness about ecommerce is growing also through seminars and advertisements. However several challenges are still facing this country in implementing ecommerce among which are:

1. Government co-operation at implementing ecommerce is not encouraging. As no Cyberlaws or policies have been put in place by Government to facilitate ecommerce. Presently, in Nigeria there is no specific law to combat cybercrime. The criminals are just operating freely without any specific law to checkmate their illicit activities.
2. The payment system is just evolving, so efforts is still required to build powerful electronic payments infrastructure that will facilitate smooth ecommerce transactions.
3. The Nigeria Electric Energy supply is erratic and this will not make ecommerce transactions function well especially in majority parts of the country where there is no electricity.
4. Although awareness about ecommerce is gaining ground, but majority of Nigerians are Internet Illiterates, so the country needs to organize training for its citizens on Internet usage.
5. Delivery system in Nigeria, particularly the government owned NIPOST needs critical overhauling and facelift so that there would be smooth delivery of products and services to the clients without let or hindrances.

Given the speed with which the Internet is permeating public and commercial transactions in Nigeria, the first priority area is Government intervention in ecommerce by solving the legal issues and problems presently confronting e-commerce in Nigeria. This can be achieved by formulating and enacting ecommerce related bills into law, and establishing a body to supervise or monitor electronic commerce in Nigeria. Government should also provide regular power supply as no industry can survive either electronic business or the brick and mortar business without adequate power supply. The area of Government intervention is highly needed if ecommerce must be successful in Nigeria. The corporate Institutions have been doing their best including the banks but without government serious intervention there is little that can be achieved in ecommerce in Nigeria.

Nigeria problem is not only corruption alone but failure to put in place mechanism or infrastructure that will make life easy for the citizens to work and live well in society. Nigeria needs good energy distribution, good roads, an overhaul postal system, good communication network, and other social amenities. What are the Government policies on these? Nigeria would have been a good market place for eCommerce products in Africa but the reverse is the case. With recent developments in the Nigeria ICT sector and Nigerian banking Industry, Nigeria ecommerce payment systems, Nigeria looks set to join the rest of the world in driving its economy with e-Technology. But will the government provide an enabling environment? Now is the time for Nigeria to wake up and take her position in the global map.

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Appendix

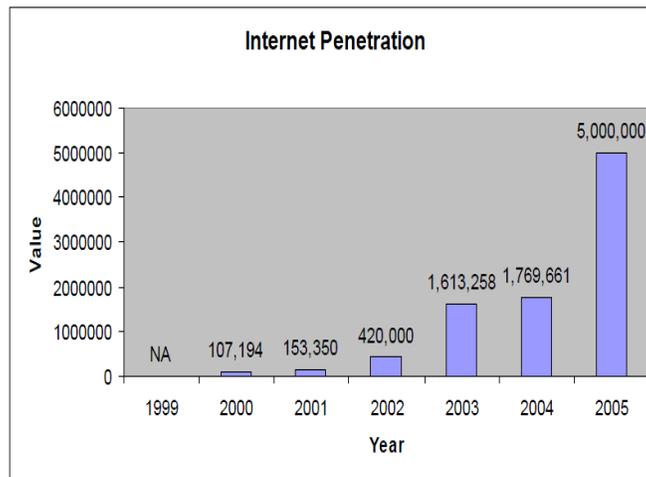
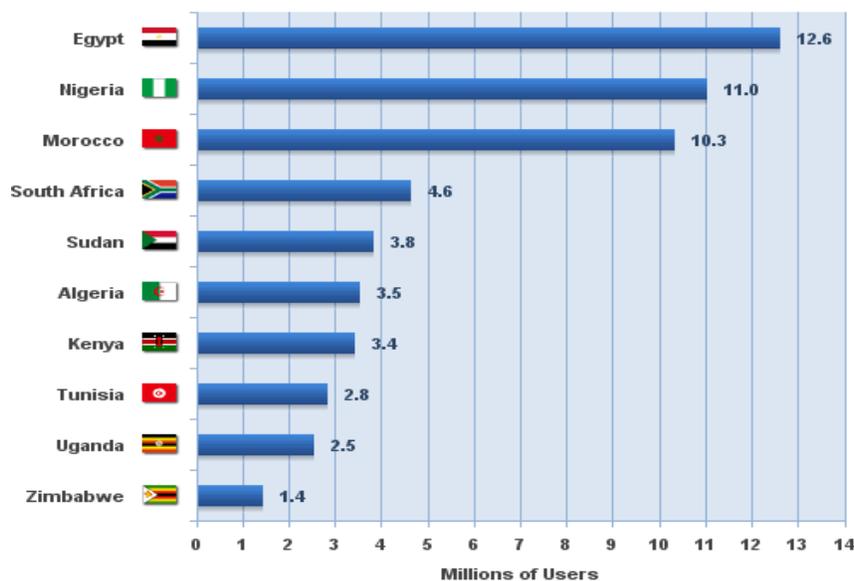


Figure 3: Internet Usage in Nigeria
[Source: <http://www.ncc.gov.ng/subscriberdata.htm>]

**Africa Top 10 Internet Countries
June 2009**



Source: Internet World Stats - www.internetworldstats.com - June 2009
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