

NITEL Internet Gateway & services: Its Opportunities And Prospects In The New Information Age

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1. INTRODUCTION

The INTERNET has turned the world into a global village in which information is transferred across in seconds and has become the favourite information Highway for the global Information Technology (IT) industry. Surviving the emerging information revolution thus depends on access to networks. Access is crucial to any country's meaningful development to take place ; both knowledge and exchange of information and ideas drive the world economic order: It is no wonder that the Internet now dictates the educational and commercial development of national economies.

The INTERNET has been described as global network connecting series of international and local networks carrying information of all kinds and their individual resources via the Transmission Control Protocol/Internet protocol(TCP/IP) as the data transport protocol. The TCP/IP is a set of protocol that allows a reliable end communication between two hosts (computers) over different physical types of networks. The TCP ensures the safe transportation and delivery of data packets to the correct destination in the network, while the IP stipulates how data are arranged in packets for transmission.

The Internet is a cost –effective resource in terms of information sharing and for the Purpose of electronics mail, entertainment, research collaboration and governance. The Internet is reliable, secure accurate, fast, versatile and economical modern global Information superhighway that will provide network access and other value-added service Apart form the need to share and provide a cost-effective resource. Below are the opportunities and prospects that the introduction of NITEL Internet Gateway and service will bring into our country's economy educational sectors, etc.

2. In The Social Sector.

Many of the individual aspects of the way in which the NITEL Internet project will affect our social order are quite

not easy to be described; the overall effect is profound. Much has been written about the Global Information Village, characterized by simple access to broad-based information anywhere in the world and instant communication with people all over the globe. For those who have embraced e-mail they will have begun to understand the power of this medium for enhancing communication. It is immediate yet unrelenting in the sense that it can be used for written communication that flows almost in conversation mode and requires rapid response. Whatever you write can be read and re-read in order to absorb exact detail before formulating a response. This is not the case in spoken communication, where although discussion is immediate, detail and perception can be corrected in flow of a conversation. Today's generation of school goers will learn very little about where to place an address on letter or letter writing formalities. The e-mail you are to write or receive a day is so much and may require urgent response that you need on special approach or formality to writing them.

The advent of extensive on-line shopping, brokerage services can now be made possible on the INTERNET. The Internet together with other emergent technologies such as smart cards finally offers the real thing. The social impact of this On-Line shopping (e-commerce) goes beyond the simple convenience of cutting down on the Extent to which you have to get into your car and travel to shops. Consider the effect on the design and deployment of shopping centres and the accompanying effect on our urban Environment. The Internet On-line – shopping will greatly alleviate this phenomenon on our environment sooner. With the advent of smart cards and associated readers for your PC, you won't even need to use ATM machines to get cash. And of course, all of your account payments and other banking transactions will be taken care of without the need to move away from your desk.

On-line shopping on internet carries with it the implied promise of home delivery of purchased goods; the advent of Internet banking and smart card readers remove the need

to physically visit the bank; and on-line communication cuts down on the need for meetings. The on-line store offers a retailer several areas of economy over a traditional store: no expensive sales force is required; no investments in front shop bricks, mortar and display equipment. In most brokerage type business, such as stock and insurance brooking and travel agencies it is rapidly becoming vital for business to provide genuine added

value, typically in the form of consulting and advice, since the process of procurement will soon be done more efficiently by direct on-line transactions. There are already several very good on-line automated travel agencies and stock purchasing systems that found the Internet useful for this aspect of business (that is, on-line-shopping on the Internet).

The Internet now accelerates the Integration of TV, PC and Telephone into single Communications device. The advent of cheap Internet based telephony systems will probably also provides for viable video telephony systems. Video and music entertainment will also become downloadable to our PC/TV in the near future when we finally embrace the NITEL Internet.

It is becoming relatively common for people to work from home, even when employed by large companies. People can communicate easily with their peers and submit their output (normally written) via the Internet. It will be seen too that increasing numbers of people would like to use their computers as a primary tool for their day-to-day work, for their shopping and personal banking and of recreation.

Tens of thousands of vacancies exists in the IT industry all over the world. The Global Market means that recruitment easily transcends geographical boundaries. The Information Technology industry is paying increasingly high salaries to suitably qualify IT Professionals throughout the world. Therefore, the NITEL Internet can contributed Immensely to the social and employment rate of our nation.

3. In The Commercial Sector

The Internet within the world of **commerce** is effectively a new medium characterized by the following elements:

The days of Web sites being static on-line billboards are over. The power of this information tool is that it provides for extensive interaction between Web site visitors and Web site owners. With the growth in Information Technology, millions of people and organizations are linked together. As a result of the advent of sophisticated database system, the Web sites on the Internet represents a business opportunity area and it is an open and unconstrained medium for business transaction.

With the NITEL Internet, users will be able to browse the Internet more extensively Through the convenience of the Web, than they can by having to physically visit a Spectrum of stores and merchants.

Much of the leverage that large companies have in the physical world is reduced in The Internet on-line world.

For example, a well-positioned small company has potentially the same accesses to customers as a large company player.

It does not help to build lots of expensive stores all over the trading areas or territory if they are both competing for on-line business.

Electronic commerce is one of the attractions of the Web and already thousands of Dollar transactions such as banking and insurance are done on the web using secure servers to transmit credit card information.

With the vast resources of information available on the NITEL Internet there exist powerful indexes cataloguing it for references. The content of the Internet is dynamic to the extreme, competition for accuracy and efficiency in directories is made possible.

4. In The Education Sector

In Nigeria, with the recently completed NITEL Internet Gateway for the country, the hope has risen very high for a new lease of life for our educational system, courtesy of the INTERNET. The NITEL Gateway will improve the accessibility of the Internet in terms of cost of telecommunications and the quality of the connections in terms of speed and noise level. Internet education resources are particularly valuable to students, teachers and all those who are interested in education. By interacting with the educational resources on the Internet, teachers can benefit from publications on new research findings in any field of human endeavor from the sciences and the social science, to family planning and child related topics. I believe that if every student had a computer, the Internet would represent the second most important educational resource in the world, after the human teachers.

With the recently introduced Internet Gateway in Nigeria, the hope has risen very high for our teachers, students and the life of our educational system. Those who have access to the Internet already have access to well support schools, well-paid teachers and well-stocked libraries. While those who haven't the Internet access lack

the above.

In the past, the case is even worse as student and teachers have little or no access to these valuable educational resources both in the public and private educational sectors.

The Nitel Internet will serve people in the educational sector in Nigeria in ways that are unprecedented. The vast educational materials on the Internet in terms of teaching aids, developmental models, research finding, scholarships, grants and special loans to needy students can be easily tapped and teachers can use the materials to improve the quality of information that is passed to students.

If lecturers have access to the Internet, they can educate themselves and then pass on the training to the students via the usual teaching methods. With increased number of Universities getting linked up with one another locally and abroad via Internet, more teachers are getting connected to the network and more students becoming computer literate and having access to computers.

The dawn of a new era is round the corner in our slightly battered educational system with the completion and introduction of the NITEL Internet Gateway and services.

5. In The Field of Medicine

This area would be feasible with well-managed database systems on which it shall be based. In the near future,

much of the interaction between practitioners and the healthcare schemes will be on-line.

Coming to the use of remote

diagnosis. It has already become a Reality in the field of Radiology. Radiographers at various locations can attend to

patients, the resulting scans or x-rays are then transmitted digitally to a central location where the radiologist can

examine the pictures and provide his or her diagnosis.

This of course can then be made available on-line to whoever needs it. The radiologist and patient could well even be in different countries.

References

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BIOGRAPHY

Engr. (Dr) Frank Ibikunle holds a Bachelors Degree of the University of Science and Technology, Port –Harcourt, River State in Electrical/ Electronic Engineering in 1986. He won the Federal Government scholarship to study for his Masters and Ph.D. degrees in Telecommunications Engineering at the Beijing University of post and Telecommunications, China in 1995 and 1998 respectively. He is a member of the IEEE and Nigerian Society of Engineers (NSE). Have participated papers and delivered lectures at various local and International Seminars, Workshops and Conferences by the IEEE and NSE. He is presently the HOD of NITEL's INTERNET SERVICES UNIT.