The Impact of Internet Technology Entrepreneurship on the 21st Century Businesses

Sibete.G[1], Worgu.F[2], Waratimi.E[3]

[1]Department of Mechanical Engineering, Niger Delta University, Wilberforce Island, Bayelsa state, Nigeria.
[2]Department of Mechanical Engineering, Rivers State University, Rivers States Nigeria.
[3]Nimasa Science and Technical College, Delta State, Nigeria.
Corresponding Author: godfresibet@yahoo.com

Abstract— The paper examined the introduction of internet technology into the 21st century businesses. A secondary data and content analysis was employed in this study. The internet technology has now been operated by individuals, organizations, universities, countries, businesses, government own the hardwares in sharing feelings and messages in which this technology has turned the world into a global village. The paper shall discuss the various networks and Business network, on the different development areas in the economy, electronic mail, worldwide web and the various methods of connecting to the internet. It is therefore concluded that internet technology entrepreneurship brings about positive impact on 21st century businesses. The researchers thus recommended for strict adherence to the application of internet technology into the modern businesses for optimal productivity.

Keywords— Internet, Technology, Entrepreneurship, Network, 21st Century Businesses.

I. INTRODUCTION

The internet technology entrepreneurship in the 21st century through the Information and Communication Technology (ICT) which exacerbated the larger system of computers from all over the world networked together to share information. The internet is a "network of networks" The internet is a highly advanced computerized information data bank networked to serve other computer networks across the globe. It is a giant network that connects thousands of small networks and individual computers together using telephone lines; fibre optics and high tech digital lines. The systems are run by universities, governments, individuals, libraries and businesses. It contains a multitude of documents, images, sounds, video and anything that can be put into digital format (colle, 2000).

Historically, the United States was involved in a cold war with Russia in 1960 with the threat of nuclear war; it became apparent that there was a need for bombproof communications system. In 1969, the United States Development of Defense funded a project to link together the computers of defense engineers, civilian research contractors and a large number of Universities that were doing military funded research. With this system in place large sections of the country could be bombed and messages would still get through.

With the military taking the lead, universities indicated interest and developed a network called ARPANET (Advanced Research Project Network) and was operated by the Department of Defense's Advanced Research Project Agency (ARPA) in the United States. ARPANET quickly grew to become an essential source for communication and data exchange for hundreds of Military and research contractors (Odutan, 2003). As the use of ARPANET spreads, more and more universities and research institutions setup their own systems. Gradually, the internet changed from a military pipeline to a communication tool for scientists. As more scholars came online, the administration of the system transferred from ARPA to the National science foundation (NSF). The NSF started its own network called NSFNet which was bigger, faster and easier to access (Oslow, 2002).

During the early 1980s, all the interconnected research networks were converted to the TCP/IP protocol (this enables all the networks of the internet to send data back and forth) and the ARPANET became the back bone (the physical connection between the major sites) of the new internet, which comprised all TCP/IP-based networks connected to the ARPANET. This conversion to TCP/IP was completed by the end of 1983 and the internet was born. From there on, the use of the internet entered into the world.

In 1990, HTML, a hypes text internet protocol which could communicate the graphic information on the internet, was introduced. Each individual could create graphic pages (a website) which then became participants of a huge, virtual hypertext network called the worldwide web (www). The enhanced internet was informally renamed the web and a huge additional audience was created (Dumming 1999).

In 1991, the U.S government changed their policies that restricted private and business use of the internet. Businesses began using the internet and administrative responsibilities were once transferred. In1992, dozens of corporate entrepreneurs (companies owners) around the world began offering low cost direct internet access to individuals, schools and businesses (Obi, 2002).

Conceptual Framework

Internet Technology Entrepreneurship:

This is commonly referred to as a new business model, which uses the application of information and communication technologies (ICT) in support of all the activities of entrepreneurs to achieve their optimal desires. (Sibete and Benemone, 2021). According to Modern Business Scholars, Internet technology entrepreneurship is the ability and willingness of an individual to identity and investing with its resources to succeed profitably with the aid of electronic methods (e-business strategies). Other school of thought sees internet technology entrepreneurship as digital

entrepreneurship whereby the entrepreneurs transact businesses online, in essence, they see it as electronic entrepreneurship (e-entrepreneurship).

II.   NETWORK

Network is the inter-connection of computers and other hardware equipment so that they can share common logical and physical resources. The interconnection is made possible via an agreed and acceptable protocol in a network environment, where there is a host central computer to which all other computers and computer equipments are connected, these resources can be installed and once communication is established, all connected nodes can share the hardware and software resources installed in the host computer.

There are three different types of network which include Local Area Network (LAN), Metropolitan Area Network (Man) Wide Area Network (WAN) Or/International Networking. In Local Area Network, the method of interconnecting devices within a short distance.For example, interconnection within a building, between rooms, hall etc. Whilst Metropolitan Area Network is a type of network protocol, which interfaces different computers peripherals within a wider geographical locations with an aim of effective data transfer. For instance within a geographical mass like town or state. This is mostly used by radio and television stations.

In Wide Area Network, there is an interconnection of computer peripherals or/and other communication devices between two or more different geographical area through many intermediate nodes. For instance between countries; continents etc. This is the type of communication link used for Inter Net. It is also known as international Networking.

Electronic Mail (E-mail)

As the name imply, it is an electronic means of transferring documents from one mode to another. It is an advanced means of posting mails through sound computerized information network.

This is an electronic means of sending and receiving mails delivered into the recipient's incoming "Mail box". You must have an account opened with a website e.g. hot mail, AOL, one box etc. The recipient runs a program that receives incoming messages, allowing items to be filled, listed and printed.

Electronic mail is one of the most useful platforms for internet technology entrepreneurship and is often the application with which people begin.

World Wide Web (www.)

World Wide Web is the most exciting new facility for the internet. It is based on a technology called "HYPERMEDIA" With the hypermedia, information in one document can be linked to another related document. linked information can consist of not only text and graphics, but audio and video information as well.

World Wide Web is an ambitious exciting and powerful attempt to connect information wherever it may be located on the internet, allowing the user to easily access and retrieve related files.

Internet technology entrepreneurship has brought an innovation for business creative types such as web preneur – who specializes in designing business Websites for profitable motives, again, e-business, e-marketing, e-payment, e-commerce, e-news, e-magazine etc.

III.   RESEACH METHODOLOGY

The research design applied in this study is a combination of secondary data and content analysis. The source of the data is issues and trend in technology cybernetics as relevant to related literatures. The technology acceptance of the model and innovation model impact of internet technology entrepreneurship in 21st century businesses,the technical know-how process to business website development. The data is to be presented by means of business model.

Approaches To Internet Technology Entrepreneurship. We shall discuss two major approaches such as: Technology Acceptance Model and Innovation Model.

a)   Technology Acceptance Model

Under this Model, Fishbein and Ajzen (1975) suggest that users voluntary decision to accept (ie use) a new information technology (IT) is based on their rational assessment of its expected outcomes. According to Technology Acceptance Model (TAM), the intention to accept or use a new technology is determined by its perceived usefulness (PU) and perceived ease of use (PEOU) of the technology. In addition, PEOU primarily influences intended acceptance through it effect on PU (Davis 1989).

TAM has a history of use in the e-commerce and is considered robust in a wide variety of contexts. They found that PU and PEOU of the Website were significant antecedents of initial trust in the company. Gefen et al (2003) develop an integrated model for purchase intention of repeat online customer-based businesses.

b)   Innovation Approach

The theory was propounded by Joseph Schumpeter (1963) who believes that an entrepreneur helps the process of development in an economy. He says that an entrepreneur is one who is innovative, creative and has foresight.

According to Schumpeter, innovation occurs when the entrepreneur introduces a new product, introduces a new production method, opens up a new market, finds out a new source of raw material supply, and introduces new organization in any industry.

This theory emphasizes on innovation, ignoring the risk taking and organizing abilities of an entrepreneur. Schumpeter's ideology of entrepreneur is a large scale businessman, who is rarely found in developing countries, where entrepreneurs are small scale business men who needs to imitate rather than to innovate.

In this theory, by implication, engineering businessmen are technological entrepreneurs, than to innovate and create wealth as well as to generate income and employment opportunities. The engineering business owners are power houses of industrial development in nations.

c)   Scientific Management Approach

The Scientific Management Scholar, Frederick W Taylor (1856-1915) at the beginning of the 20th century. His work

emerged as the collection of efforts aimed at solving the problems that arose from the expansion of industry following the first industrial revolution and the emergence of "Managers" who operated by the rule of thumb, whims and exploration. The orientation is the scientific analysis of work methods and the development of management principles and practices.

Scientific Management Approach involves definitions of work problems, analysis of work situations, measurement of all facts of work, experimentation, development of work principles and techniques and validation of developed techniques and principles. Taylor prescribed the development of science for each element of a job, the scientific selection, training and placement of workers, remuneration of employees to do scientifically specified work with close co-operation between planners and performers amid sharing of equal responsibilities by management and labour as management continue to plan the work but use workers to actually get the work done technologically (Griffin 1990, George 1992).

The Role of Internet Technology in the 21st Century Business.

The discourse so far indicates that internet is highly relevant for the following as;
1. Internet usage in business can make such administrative and operational activities more unique and efficient in the world.
2. Accessing the internet to easily source information to make further necessary plan for the expansion of the business.
3. It is through internet technology, modern entrepreneurs make purchasing, selling or making advertisement without stress.
4. Reducing the cost of doing business by lowering transactions.
5. The application of Internet Technology gives invaluable opportunities to entrepreneurs to adopt new business models and develop tailored customer support.

IV. CONCLUSION AND RECOMMENDATIONS

The application of internet technology by entrepreneurs in the 21st century is a modern business strategy which promotes economic development and growth of both developing and developed countries. To this end, the involvement of government to provide the required ICT facilities in areas for people to create wealth and reduce the high abject poverty of the countries in the third world. It is therefore recommended that government of Nigeria at the three levels should be designed and organized to create enabling environment to stimulate the emergence of highly enthused techno preneurs who will become creative and innovative in finding solutions to socioeconomic problems in nations.

The Government of the Federal Republic of Nigeria should provide enabling environment for easy practice of internet for all businesses, that is supply constant electricity in every area so as to enhance expanded electricity supply all over Nigeria environment.

REFERENCES

[1]. Frederick W. Taylor (1911) Principles of Scientific Management, New York; Harper.
[2]. Obi, D.G (2002) ICT and Business World in the 21st Century.
[3]. Odutan, D.T (2003) Entrepreneurship and e-business in the 21st Century.
[4]. Oslow, E.F (2002) Small Business and Entrepreneurship e-business, New York, Mc Graw Hill.
[5]. Schumpeter, J.A (1963) Busuness Cycle, Mc Graw Hill, New York.
[6]. Ajzen, I (1985) From intentions to actions. A theory of planned behavior. In J. Kuhl and J. Beckman (Eds) Action Control from cognition to behavior Springer Vertag. New York.
[7]. Colle, J. (2000) the role of Internet in businesses in the 20th century, a paper presented in seminar.
[8]. Davis, F.D (1989) Perceived Usefulness, Perceived ease of use and user acceptance of information technology MIS Quantes
[9]. Dumming, G (1999) The Role of ICT in the Modern Business, a paper published Http//e-journal bus. ed.nug.
[10]. Sibete G.A & Benemone, O.E (2021) Engineering Entrepreneurship: Concepts, Principles and Practice (Unpublished Book).