



http://www.jatlim.org

INTERNATIONAL JOURNAL OF APPLIED TECHNOLOGIES IN LIBRARY AND INFORMATION MANAGEMENT

International Journal of Applied Technologies in Library and Information Management 2 (2) 6-51 - 58 ISSN: (Online) 2467 - 8120 © 2016 CREW - Colleagues of Researchers, Educators & Writers Manuscript Number: JATLIM - 2016-02.2/8 - 06

Use of Internet for Knowledge Communication in Political, Social and Economic Development of a Society: Challenges and the Role of Librarians and Information Managers

Maryam Sali, PhD, CLN **National Universities** Commission, Abuja

Philip U. Akor, PhD, CLN puakor@gmail.com Department of Library and Information Technology, Federal University of Technology, Mina, Niger State

Abstract

The paper examines the use of Internet for knowledge communication in political, social and economic Development of a society using descriptive survey research method. It defined the concept of the Internet, discussed the impact of Internet in social, economic and political development of a society across the globe. It also identified insecurity of businesses, reduction in the chances for development of relationships, copy right issues, development of incompatible relationships, adoption of foreign culture and tendency for incitement of public riot as some of the challenges associated with knowledge acquisition using the Internet. The paper also proffered solutions to the challenges inherent, ranging from the use of encryption and decryption method to transform text or messages, use of digital certificates, digital signatures and scrupulous monitoring of children and adolescent on their activities and what they watch on the net considering their ages. The roles librarians should play in order to curtail abuse on the Internet especially within the electronic resources section of the library are briefly highlighted. This paper concludes with recommendations that librarians and information scientists/managers should play key roles in ensuring proper use of the Internet to the utmost advantage of all categories of users including teenagers and children who have access to the Internet.

Keywords: Internet Technology, Socio-Political Development, Knowledge Communication, Librarians.

1.0 Introduction

Internet plays a very crucial role in knowledge communication the world over. Not only in knowledge communication; it has also brought political cum socio economic development to societies across the globe. It empowers people and organizations through the provision of quick and easy access to information, as in the saying "information is power". Before the advent of Internet technology, sharing of information was very difficult and the access was restricted to limited people or area. Maheswarapper and Ebanza (2003) identified Internet as the largest single source of information at global level covering all aspects of human

endeavours, be it education, health, economic, social, political e.tc. For example, in education, Lumambono and Nane (2004) assert that Internet gives scholars the opportunity to globally disseminate information to a wider audience within the shortest possible time. This assertion was further corroborated by Madhusudhan (2007) whose study on Internet use by research scholars revealed that most researchers use the Internet to locate relevant information.

This paper is therefore going to define the concept of Internet technology, examine the importance of the Internet in knowledge communication in social, political and economic development of a society using descriptive survey reach method. It will also identify the challenges associated with the role Internet play in knowledge communication across the globe and proffer solutions to the identified challenges. Librarians' roles in ensuring proper use of the Internet are also highlighted.

1.1 Origin and Definitional Concept of the Internet

Internet is a computer system that allows millions of computer users around the world exchange information on the net. The idea of Internet began with the development of APRANET which was the first network to use the internet protocol by the US Department of Defence around 1950s and the 1960s. The online Cambridge Dictionary defined Internet as "a large system of connected computers around the world that allows people to share information and communicate with each other". (1999) sees Internet as "a meta-network, a constantly changing collection of thousands of individual networks intercommunicating with a common protocol". Moreover, Madu and Ezeani (2010) defined Internet as, a" communication system which creates room for interconnecting of millions of individuals from millions of places".

2.0 Literature Review

2.1 Importance of Internet in the Political Development

Politically, the Internet has had an unquestionable impact in the 21st century. It has significantly influenced our channels of communication and forms of interaction. The impact of internet on politics can be seen through the lances of political campaigns and rallies for various social issues. The internet and other media like radio and television have always been used to educate, inform and persuade. For example, many political analysts agree that John F. Kennedy won the 1960 elections by taking advantage of television network.

According to the report by Fair Observer (2015), President Barack Obama used the internet to win the presidential elections by communicating his messages to voters over YouTube, Facebook, and Twitter. (www.fairobserver.com/region/north americ a). Still in America, Democrats succeeded in gathering millions of volunteers and small donations through internet campaigns. The contemporary times political campaigns, social movements and web revolutions are indicators that the internet is already changing politics in terms of communication, participation and mobilization. According to Margetts (2013) "the Internet is contributing to increased popular control and hence to democracy", so also in both democratic and authoritarian states by enabling political participation and civil engagement". According to her, not social media such as YouTube, Twitter, Flicker, Facebook, Tumbir and others are used for political activities, but there is evidence to suggest that using the internet makes one more likely to vote or participate politically.

In some countries where democracy is weakened or threatened especially where the

traditional media are directly or indirectly controlled by the government, the internet serves as a medium of expression for opposition and protests which is outside government control such as mockery of political figures through fake photos, wordplay e.tc., which can be disseminated more widely through social network. Clark (2013) explained that "Reduced barriers to identifying and co-ordinating like-minded individuals in forums, blogs and via Twitter hashtags not only enable even the most niche groups of individuals to build thriving on-line communities, but also, for these communities to host inconspicuous "every day politics".

The internet now lies at the heart of democratic society. It has enabled citizens to group to mobilize and hold government and politicians accountable unlike before. It has also expanded public participation in democratic processes. Social media in particular can reconnect citizens with their democratic institutions in new and dynamic ways.

2.2 Importance of the Internet in Economic Development

Recently, the World Development Report examined the role of knowledge in promoting socio-economic development. It began with the realization that economies are not only built through the accumulation of physical capital and human skills, but on a foundation of information, learning and adaption. It is therefore necessary for societies to understand how they acquire and use knowledge in various dimensions of development. This assertion was evident in a study by Press (1997), which showed a positive correlation between the number of internet hosts in a country and the UNDP Human Development Index. The internet now appears to have opened up new options for socio-economic development. Press further posited that internet connections for economic purposes is the fastest-growing sector of the internet as more and more companies are establishing links with customers. Almost every business now has a web-site and business partners. Vendors establish contacts through the internet.

Internet increases marketing opportunities i.e. manufacturers take advantage of the internet because they use it to post information and market their businesses. For example, in product design, companies can share information and improve their successes according to Lexis-Nexis (2000). The Internet allows business men and women to import and export in partnership with foreign countries. In some instances meetings are held between corporation on-line in the form of "virtual meetings", in so doing relevant information is being passed to society. It allows manufacturers to discuss business without travel which is another dimension of economic value of the internet.

Businesses that take advantage of the internet's numerous features, find it highly beneficial to the success of their company. In another development, internet increases advertising opportunities. There are new types of software that automatically arrange data to be published on the web. Through the internet companies advertise their goods or services much quicker than they could, when using tangible documents. According to Internet Indicators (2000) files from the internet serve a variety of purposes such as, "hosting on-line meetings, accessing design information from the world wide design community, and dragging content from manufacturer's websites and dropping into drawings.

On the other hand, the Internet takes the place of unnecessary labour and reduces costs. Previously, companies spend thousands of dollars hiring receptionists, secretaries etc. companies can now save money and spend more time planning marketing strategies thereby reducing costs. That not with understanding, labour still needs

to be employed to supply the demands of consumers. The Internet provides worldwide economic opportunities as a result of having access to the worldwide web. Many companies specifically those with high rates of poverty now have the opportunity to use the net and possibly create business negotiations with wealthier countries. Once there is interaction, countries may offer economic assistance.

2.3 Importance of Internet in Social Development

There has been an increasing recognition that suitable and more equitable forms of human development does not only depend on the existence of Internet connections alone, but on the acquisition and usage of information and knowledge gained through the internet as put by Rogerson and Itoh (1998) and Mansel (1998). Harnessing the Internet to deliver benefits especially in developing countries means ensuring that those facilities are responsive to the poorest and most disadvantaged communities. Internet communication brings people from two or more different parts of the world together to interact and use knowledge in various aspect of social development. assists in management of crises, poverty alleviation and wealth benefit e.tc. example of such is the Greater Horn of Africa Electronic Communication Network project founded by the United States Agency for International Development (USAID) which helped to link member states of the region in order to exchange crises related information.

Another area of potential/social benefit of the internet is in the application of electronic network to problem of food insecurity in Africa, which led to competition for local resources between groups which could have led to civil war. However, with electronic network, such problems were ameliorated. In farming, Internet delivers critical information to farmers, extension

workers and researchers without which there could have been problem for farmers fighting crises as asserted by Adam (1996) and Panos (1998). In terms of poverty alleviation, Grameen Communications (1998) posit that village internet programme in Bangledash was aimed at reducing migration from villages, creating IT-related job opportunities for the rural poor and creating familiarity with computers among the rural population of the country.

In the same vein, another remarkable social importance of the internet is the role it plays in establishing relationships between individuals who had not known each other. In some instances, such relationships which started on twitters and other social media even resulted to successful marriages. The Internet is also a tool for empowerment of marginalized groups. It offers opportunity for direct communication between developing countries and many activist and nongovernmental organizations (NGOs) that share political goals through the web. There are many examples of activists who have used the net to help empower marginalized groups throughout the world. The internet is also used for posting debates and policies on bulletin boards in order to solicit responses and organize protests. Citing another example, NGO women group charities used e-mail to keep in touch with women in Bosnia. It was difficult to make phone calls to find out what they needed, but e-mails kept on trying until according to Annis (1994) and Frederick (1994) it found its route to deliver the message. The Internet has become more accessible to all people, regardless of age, income or level of computer literacy.

Internet increases marketing opportunities i.e. manufacturers take advantage of the internet because they use it to post information and market their business. The Internet provides worldwide economic opportunities as a result of having access to the worldwide web. Many companies

Use of Internet for Knowledge Communication in Political, Social and Economic Development of a Society: Challenges and the Role of Librarians and Information Managers

specifically those with high rates of poverty now have the opportunity to use the net and possibly create business negotiations with wealthier countries. Once there is interaction, countries are ready to offer economic assistance.

3.1 Challenges Associated with the use of Internet in Knowledge Communication

The following challenges emanating from the use of Internet have been identified as having adverse effect on the political, social and economic development of a society:

(i). Insecurity of Business

The advent of the use of internet in business transactions has increased the chances of bringing companies the risk of being defraud. Unfortunately, many small companies or home business owners do not realize that they are also likely to be targeted as any large company. As consequences of existing in the digital age, almost everyone is vulnerable to breaches of security. Jenkins (2000) has it that, "if your business relies on computer or Internet technology, you need to be prepared to deal with security issues". This shows that all businesses that solely depend on internet are prone to attacks ranging from that of theft, loss or unauthorized access. With the constantly evolving nature of the internet, it is vital that users continuously protect themselves and their information.

(ii) Reduction in the Chances for Developing Relationship

Doing business on the Internet can open markets for entrepreneurs all over the world. That notwithstanding, it can be more difficult to develop on-going business relationships. If a business entrepreneur is in Nigeria for example, chances are he would not have the opportunity to meet face-face with a customer in Japan or United State, while Technologies such as video conferencing, Skype etc., allow

an individual to see his or her business partner via computer screen, it lacks the personal contact or relationship that could have been established on meeting someone in person.

(iii) Copyrights Issues

Due to the ubiquitous nature of the internet, copyrights issues infringements are difficult to control. With the internet covering the entire universe developing a set of uniform copyright law is virtually impossible. If a business is successfully developed over the internet, it will be difficult preventing someone from copying the business model and using it for his or her own benefit.

(iv) Development of Incompatible Relationships

Many instances are heard of relationships developed via the internet social media, some even led to marriages but on coming together physically, the two parties realize that they cannot stand one another either due to natural hate or incompatibility etc.

(v) Adoption of Foreign Culture

Cultures differ from one country to another and even within the same country; cultures differ between one social or ethic group and another. The advent of internet has globalized the whole world making it very easy for people from any part of the globe to adopt cultures that are alien to them. This factor has greater influence on children, especially adolescents. They easily get carried away by things they see on the internet, they watch porno films, see and read thing they ordinarily should not be seeing and reading at their ages. This syndrome has negative effect on the moral upbringing of children. Even though certain things and behaviours may not look offensive in some societies, to some they are highly offensive.

(vi) Inciting Public Riot

Due to availability of easy means of communication among people through internet, it is now easy to incite public riots by any aggrieved group in the society. example, a political group can easily disseminate provoking or inciting information which may or may not be true, through internet social media to heat up a polity thereby bringing instability in a country. Before the advent of the internet technology, it was difficult or almost impossible for a person or group of persons to disseminate information to people in a big town talk-less of state or country as a whole. Today this can be done throughout the world in a matter of seconds!

4.1 Solutions to the Identified Problems of Internet Use

Electronic business systems have higher risks of insecurity than do traditional business systems. Hackers are one of the greatest threats to security of e-business affecting customers and businesses. Confidentiality, authenticity and the integrity of the data needs security measure to check the menace of hackers, data storage, data transmission and the use of anti-virus software is necessary. Other measures include the use of firewalls and encryption i.e. transforming texts or messages to code restricted access to private networks, as well as public networks that a company may use. The firewall can also log attempts into the network and provide warning when unauthorized attempts are taking place. For businesses that use Wi-fi, they need to consider different forms of protection because it is easier to access. Such businesses should look for protected access, virtual private networks or internet protocol security. Another option is the use of an intrusion detection system that alerts when there are possible intrusions.

(i) Encryption

Encryption transforms texts or messages into a code which is unreadable. The messages have to be decrypted. This usually has two keys used, one for public and the other for private. The public key is used for encryption while the private key is used for decryption. The level of the encryption can be adjusted and should be based on information which could be just a slide of letters or random mixup of letter.

(ii) Use of Digital Certificates

Digital Certificate is used to identifying the owner of a document. By so doing, the receiver will know that a document coming to him is an authentic one. This can be used in different ways by a company. It can be used as a replacement for user name and passwords. This helps to assure authenticity of documents as well as the confidentiality of such documents and data integrity.

(iii) Use of Digital Signatures

If a document has a digital signature on it, another person cannot edit the information without being detected. For an individual to use digital signature, he must use a combination of cryptography and a message digest. The message digest will be used to give the document a unique value encrypted with the sender's private key.

(iv) Social and Business Relationships

For the development at incompatible relationships, individuals concerned should ensure that before a relationship goes to the extent of contracting marriages, the concerned individuals should ensure that a physical contact is initiated to avoid regrets in the long run. Also in terms of business relationships, efforts should always be made to meet each other physically to ensure compatibility. Osagie (2015) posit that relationship on-line by chatting and exchanging telephone numbers before

Use of Internet for Knowledge Communication in Political, Social and Economic Development of a Society: Challenges and the Role of Librarians and Information Managers

physically meeting is a probability which is good to someone and bad to another. He suggested that parents should come close to their children to know their problems and know what they are into, to protect them from having on-line relationships at an early age.

4.2 The role of the Librarians and Information Scientists

Librarians and Information scientists have a role to play in curbing the menace of Internet abuse. They could do this by purchasing books, pamphlets, magazines and other resources that discuss disadvantages of the Internet. They should displace such materials in the library where they will catch the attention of the users. This strategy will particularly apply in the teenagers and children libraries. Also printing beautifully designed and attractive inscriptions and placed in strategic places of both adult and children libraries on the Dangers of Pornography and giving ones' account number or ATM pin number to some people met in the Internet.

Librarians and Information Scientists including ICT experts, they all have significant role to play in order to minimize the use of the Internet facilities installed in the electronic libraries of their institutions. They can as well boldly print the inscriptions that using certain Web sites are prohibited; and mention the punishable consequences. Also they can restrict users from accessing other Websites other than the databases already subscribed by the organization or institution mainly for research activities.

Conclusion and Recommendations

Knowledge communication has become so easy in contemporary times as a result of the advent of the internet technology and its application in execution of duties, responsibilities and business transactions. As a result, one could say that, the use of internet has brought about enormous developments in

politic-social-economic development of all nations. However, the development and the positive impacts have to be taken with caution, because the disadvantages could be destructive in one way or the other. It is therefore left to the beneficiaries of the development to be able to separate the grains from the chaff.

To address the challenge of adoption of foreign culture especially in the youths, parents should try as much as possible to monitor what their children are watching on the Internet. Librarians and information scientists should play their roles in campaigning against unethical use of the Internet. They should device means of restricting access to only online databases mainly for teaching, learning and research activities.

References

- Adam, L. (1996). "Electronic Communication Technology and Development of Internet in Africa". Information Technology for Development. 7. 133-144.
- Annis, S. (1991). "Accumulation on the World Scale: A Critique of the theory of Underemployment." New York: Basic Brooks.
- Clark, Amanda (2013). "Exploiting the web as a tool of Democracy: New ways forward in the study and practice of Democracy" pg. 13 at:www.coe.int /t/dg4/cultureheritage/news/wfd/study en.pdf
- Daniel, S.O. (1999). "Electronic Networking in the Emerging Nigerian Information Society". *The Internet at a glance in Nigeria Libaries*. Vol. 33 no.1 pp.11 16.

- Fair Observer (2015) Will Internet Remake Politics? Accessed 14/7/2015 from:
 www.fairobserver.com/region/north_america/will_internet-remake-politics/
- Frederick, H. (1994). "Computer Networks and the Emergence of Global Civil Society". In "Global Networks; Computers and International Communicating" edited by IN. Harasim, U.S. MIT Press.
- Grameen Communications (1998). Grameen Village Internet programme. Bangladesh: Green Bank.
- Jenkins, Joe (2000). "Internet security and your business: knowing the Risks" at www.Joe@nowalls.com
- Internet Indicator (2000) Available at: http://www.internetindicators.com
 Lexis-Nexis (2000) Available at: http://www.lexis-nexis/niverse
- Madhusodhan, M. M. (2007). "Internet use by research scholars in University of Delhi: India. Library *Hi Tech News*" Vol.8 pp. 36–42.
- Madu, E.C. and Ezeani, C. (2010). "Modern Libraries and Information Science for Information Professionals in Africa". Ibadan: Textile Publishers. Pp. 16–20.
- Mansell, R. (1998). "Net gains or Net Dream?" Development Research Insights. Issue No. 25, Institute of Development Studies: University of Sussex.
- Margetts, Helen (2013) "Draft Resolution 2 Committee Meeting held in May 2013 in London" (not published).

- Online Cambridge Dictionary. Accessed at: http://dictionary.combridge.org/British
- Osagie, C.O. (2015) "The Impact of the use of Internet by children and Adolescents." NTA Weekend Deal, Saturday, 1st August, 2015.
- Panos, (1998). "The Internet and Poverty: Panos Media Briefing no. 28" London: The Panos Institute.
- Press, L. (1997). "A framework to Characterize the World Diffusion of the Internet" Notes for presentation at INFO 1997, Havana. Accessed at: http://som.esudh.ed/fac/1
- Rogerson, A. and Itoh, K (1998). "Knowledge and Development: Two sides of Tomorrow's coin. *Development Research Insights.*" No.2. Issues No. 25. Institute of Development Studies: University of Sucssex.
- World Bank (1999). *Knowledge for Development*. The World Bank Report 1998/99. London, Oxford University Press.