IMPORTANCE OF INTERNET IN COMMUNICATION TECHNOLOGY

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Internet is "the network formed by the cooperative interconnection of computing networks". The word '*Internet*' was coined from the words '*interconnection*' and '*network*'. It means that hundreds of connecting networks, usually made up of different kinds of computers and different technologies connect networks, use the TCP/IP (Transmission Control Protocol/Internet Protocol) communications. Protocols are the rules that the networks use to understand each other. The various protocols are sets of technical specifications that let computers exchange information, no matter what kind of computers they are, or what kind of technology hooks them together. The Internet is a cooperative effort of many people and organizations, all working to enhance the Net by their participation. Any single person, corporation, university, or the government does not fund it. Every person who makes a connection, every group who's Local Area Network (LAN) becomes connected, owns a slice of Internet.[1]

The Internet is a very powerful and flexible tool that can increase efficiency and productivity. The Internet can provide substantial returns by reducing costs while increasing capabilities. If Internet is the lifeblood of the IT then PC must be the very heart pumping that lifeblood. Internet access and PC penetration are the two basic pre-requisites which compliment each other.[2] The world's largest and most widely used network is the Internet. The Internet connects hundreds of thousands of different networks from nearly 200 countries around the world. More than 60 million people working in science, education, government and business organizations use the Internet to exchange information or perform business transactions with other organizations around the globe.[3] The Internet is coming to represent global communications. Through Web, Internet users are allowed to do everything online, from ordering pizzas to video-conferencing and selling all kinds of goods and services.[4] Similarly, the number of Internet users

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continues to grow, demographics change, and usage habits change.[5] Much has been done to encourage Internet connectivity in Pakistan. There has been a welcome reduction in Internet tariffs. The drastic reduction will benefit the software companies, IT firms and the Internet Service Providers (ISPs). The private sector educational institutions and universities in the public sector would also benefit from the reduction in it tariffs.[6] Companies have made huge profits after creating a web site. The truth is, however, that most sites geared toward point of purchase sales over the Internet have not experienced the volume of sales they expected. But direct sales are just a part of the Internet puzzle. There are huge performance and productivity advantages to be gained from the Internet that don't involve any sales al all. Many companies use the Internet to add to their bottom line without ever making a single direct sale.[7]

The Internet offers easy, inexpensive inter-office communication regardless of platform. For these purposes two types of literacy knowledge are required that are key to use the computer. One kind of knowledge is computer literacy and the other one is information literacy. Computer literacy is the knowledge of the computer that is necessary to function in today's world. This knowledge includes an understanding of computer terminology, recognition of the strengths and weaknesses of the computer, an ability to use the computer. Information literacy consists of understanding how to use information at each step of the problem solving process, where that information can be obtained, and how to share information with others. Information literacy is not dependent on computer literacy. A manager can be information literate but not computer literate. In fact, if one had to choose, information literacy is more important. Ideally, however, a manager should be both information literate and computer literate.[8] Managers can train or just update all of the remote branches and offices. The training can be received via weekly e-mailed sections. They can also be instructed to view the training section of your web site. The training can be done in conjunction with CD-ROM Discs or just from the Internet. Dramatically reduce update times and avoid costly overnight express deliveries. As soon as updates are placed on the Internet, they are available for

multiple users to download at the same time. The end user is happy because he or she can get the update within minutes of it being made available.[9]

There is no doubt that the Internet presents society with some tremendous challenges; most are aware of this by now. It is well known that pornography, bomb-making instructions, and hate belong to illiterate society. Countries are trying to take steps to prevent their society from ill effects of new technology. The Vietnamese government banned access to the Internet by individuals and announced that Internet service providers in the country will be subject to government monitoring of Internet Service Providers (ISPs) in the country will be subject to government monitoring of Internet traffic. The regulations prohibit 'data that can effect national security, social order and safety or information that is not appropriate to the culture, morality, and traditional customs of the Vietnamese people'. The government is particularly concerned that citizens will have access to foreign web sites that criticize the country's government. In China Internet users are required to register with the police and sign an agreement promising not to harm the country or do anything illegal. A part of the regulations Internet subscribers are prohibited from transmitting state secrets, information harmful to state security, and pornography. In United States the state of Connecticut passed a law that makes it illegal to send any message on line 'with intent to harass, annoy or alarm another person. The state of Georgia passed a law making it illegal to place a registered trademark or logo on a web page. Critics argue that the law is confusing and is open to varying interpretations. In Canada after the TWA crash and Olympic bombings in 1996, the minister of external affairs announced that Canada would work with other G-7 countries to try to deal with the perceived problem of terrorists using the Internet to exchange hate literature and share bomb making instruction.[10] It is recommended to consider several issues to deal the changes of Internet:

- Technology not the legislation is the solution. Many programs are emerging that are attempting to deal with offensive content online.

- Legislators, law enforcement officials and politicians must understand the technology of the web.
- We must use existing laws to deal with Internet challenges. There should not be one law for the Internet and another for the real world.
- There is a need to educate people.[11]

The ultimate impact of the Internet is seeing the emergence of millions of tiny electronic nation state, each with its own unique culture, rules and attitudes. Global communities that are based not on their physical location or language or culture but on personal interests these tiny nation states are establishing and will continue to establish their own laws, own rules, and their own regulations.[12] For the first time in history, we have a technology capable of adjusting to human needs, rather than the human beings have to adjust to the machine.[13]

Internet has been described as the backbone of the information age. The information can be sole, shared and traded for purposes ranging from opening new markets for products and services to plotting and predicting global weather conditions and food supplies. Because of this technology we are considered as 'Brain Society's the information age process.[14] An increasing important way that both public and private organizations working internally and with other organizations is through the Internet. The Internet is perhaps the most well known and the largest implementation of internetworking, linking hundreds of thousands of individual networks all over the world. The Internet has a range of capabilities that organizations are using to exchange information internally or to communicate externally with other organizations. This giant network of networks has become a major catalyst for electronic commerce. The value of Internet lies precisely in its ability to casily and inexpensively connect so many diverse people from so many places all over the globe. Anyone who has an Internet address can log onto a computer and reach virtually every other computer on the network, regardless of location, computer type, or operating system. Following table describe capabilities and functions they support:

TABLE
MAJOR INTERNET CAPABILITIES

Capability	Functions Supported
E mail	Person to person meeting, document sharing
Usenet newsgroup	Discussion groups on electronic bullet in boards
LISTSERVs	discussion groups using e-mail list servers
Chatting	Interactive conversations
Talent	Log on to one computer system and do work on another
FTP	Transfer files from computer to computer
Gophers	Locate information using a diarchy of menus
Archie	Search database of document, software, and data files available for down loading
Veronica	Speed searching of gopher sites by using keywords
WAIS	Locate files in databases using keywords
World Wide Web	Retrieve, format, and display information (including text, audio, graphics, and video) using hypertext links.[15]

The concept of Internet, where private proprietary networks are converted or created with the TCP/ICP protocol, is among the fastest growing segments of the networking industry. Many companies use proprietary networks for electronic data interchange (EDI), and this information is sensitive, ranging from product orders to financial transactions. The Internet, or an Internet, can be tailored to fit EDI needs with the appropriate authentication, encryption, and society measures. Another fast growing application is virtual private network where internet services provided by other companies are segmented for users. For example more and more companies are contracting with Internet Service Providers (ISPs) for network access, customized web browsers, order fulfillment and help desk support that can be used only by

their customers.[16] The use of the Internet will always swell to fill its capacity. We have not begun to experience all the kinds of data the Internet can provide. Currently, the Net is used mostly as a link between a person and some information stored on a computer somewhere. Despite pleasant comedies about e-mail, the fact is that most of us aren't on mail. When the Internet connection is given, we'll have no need for much of the postal mail we receive. Currently a few of us use the Internet for voice and video communications because the quality is low and the ability to connect to a specific person is a chancy.[17] We will have entered the age of Tele-immersion. A Tele-immersion system lets individuals at different locations share a single virtual environment and has the same access to the wonders of the Internet anywhere they go. Using CAVE (computer automatic virtual environment) technology, Tele-immersion combines advanced, and high-speed telecommunications system to support collaborative applications. CAVE will recognize the presence and movement of individuals within a particular space, track the movements and update the screens of others working in the same virtual environment.[18] Speed and intelligence are going to transform not only the Internet but also the way we work, live, think, learn, and have fun.

REFERENCES

1. Glee, Harrah, Cady and Pat McGregor, *Mastering the Internet*, Sybex Computer Books Inc., USA, 1995, pp.5-6.
2. Syed, M. Aslam, *Reduction in the Internet Terrif*, PAGE, November 27-December 3, 2000, p.39.
3. Kenneth, C. Laudon & Jane P. Laudon, *MIS: New Approach to Organization and Technology*, Prentice Hall, New Jersey, 1998, p.17.
4. Martin, M. Schulman and Rick Smith, *The Internet Strategic Plan*, John Wiley and Sons, Inc., USA, 1997, pp.1-11.
5. Ibid., p.287.
6. *Pakistan Export and Investment Guide*, Pakistan International Publications, Karachi, October, 2000, p.273.
7. Ibid., pp.273-275.
8. Raymond, McLeod, Jr., *Management Information System*, Prentice Hall Inc., USA, 1995, p.12.
9. *Pakistan Export and Investment Guide*, op. cit., pp.274-275.
10. Carroll, Jim Rich Broadhead, Dean Cassel, *Internet Handbook*, Prentice Hall Inc., Canada, 1997, pp.303-304.
11. Ibid., p.308

12. Robert, A. Szymanski, Donald P. Szymanski, Nirma A. Morris & Donna M. Pulsche, *Introduction to Computer and Information System,* Memillan Pub Comp, New York, 1991, p.601.

13. Ibid., p.163.

14. Robert, A. Szymanski, Donald P. Szymanski, Nirma A. Morris and Donna M. Pulsche, *op. cit.,* pp.653-660.

15. Kenneth, C. Laudon & Jane P. Laudon: *op. cit.,* pp.341-346.

16. Martin M. Schulman and Rick Smith, *op. cit.,* pp.269-300.

17. Kenneth C. Laudon and Jane P. Laudon: *op. cit.,* pp.347-355.

18. Ron White, *How Company Works,* McMillan Technical Pub. USA, 2000, pp.369-371.

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