

21st Century Paradigm Shift and The Role of Media

Mobashshrah Nighat Bajwa
82nd A.C.M.
NIPA,
Lahore.

Preface

With the bewildering increase in man's knowledge, new methods of preserving and passing on this knowledge to others are also being invented with a consequent revolution in printing and communication.

The field of mass media represents one of the most dynamic areas of teaching and learning today. The mass media have indeed entered a new age. All facets of print, broadcast and computer media have changed dramatically in the last two decades or so. Much of this change has been ushered in by rapidly changing technology that in turn has heralded a paradigm shift in the new millennium, from traditional media to cutting edge Information Technologies.

Development in the field of Information technology, including transnational satellite communication through the wide spread use of the Internet, has had a profound effect on global information environment. The speed with which the information and news travels, the graphic nature of coverage, the variety of views with a spontaneous and universal access has transformed the relationship between the special interest groups and the audience they want to influence. Above all, due to the ubiquitous nature of media the creation or manipulation, of public opinion on a broad range of issues and people, is now open to critical analysis at many levels in society.

We certainly are in a new communication age. Exactly where will this new age take us? What will be our personal responses to the information age? How will the world of politics react to these technological developments? How will it affect the social fabric of the nations? What will be its impact on cultural moorings?

Many questions abound in every area where new information technology has made inroads.

Mobashshrah Nighat Bajwa
82nd A.C.M.
NIPA, Lahore.
October 16, 2002

Acknowledgement

While writing this paper I have relied heavily on research material available on the subject and interaction and discussions with specialists in the field today. A number of books, journals, articles and other resource material on the subject published from time to time, have also been consulted in putting together this paper.

I am particularly grateful to Mr. Nawaz-ul-Haq, Director (R & C) at NIPA, for his advice, guidance and valuable comments on this humble endeavour.

I would also like to express my profound thanks to Dr. Naveed Malik, Dean Virtual University for educating me on various aspects of the subject.

Special acknowledgement is also due to Dr. Shafique Jalaundhri, Chairman, Department of Mass Communication, University of the Punjab for putting my thoughts in a sharp focus in a very short span of time.

I would like to express special thanks to the librarian of NIPA, Lahore for his untiring efforts in making available material for writing this paper.

Executive Summary

The primary role of the media as a provider of entertainment, information and education, its role as a catalyst for social change and advancement and its supportive role in economic development, modernization and environmental improvement is universally accepted and recognized. Pakistan is slowly awakening to the situation.

1. The 21st Century paradigm also envisioned a vital role for the media in formulating and shaping opinion by analyzing a situation and creating awareness among the masses. It helps people crystallize their perceptions about the world and various issues. The media may even influence the way we think and act, even if in small ways at times.

2. This power of media has become more profound with the advent and widespread use of today's cutting edge technology i.e. the Internet. It has transformed business and trade practices while at the same provided mechanism for introducing accountability, honesty, participation and transparency in governance.

3. The extraordinary aspect of the Internet is in its power to mobilize support among individuals with mutual interest who otherwise are geographically distant. A recent example of such cohesion among a demographically distant membership was witnessed during the Seattle meeting of the WTO. The speed with which information and news travel, the graphic nature of coverage, the variety of views with spontaneous and universal access has transformed relationship between special interest groups and the audience they want to influence.

4. The Internet is no corporate fad. Like satellite television or FM Radio, it is also a strong social element with broad popular appeal, especially in areas of teaching and learning, commerce and trade and governance. Contrary to one-way flow of

information through conventional media, the Internet has opened up unlimited vistas for two-way communication and flow of information, combining features of interpersonal and mass communication. The citizen of today's world has the option to talk back and not be a passive receiver of selective inputs. This has given him a consciousness and knowledge on a host of issues, freeing him from the bonds of vested interests.

5. With this change in the primary equation, debate is heating up on the perceived power and role of the Internet and how it can affect the social fabric of the society through universal access to unfiltered information by all age groups, especially the children.

6. Gearing up for the race across the new millennium, Pakistan needs to understand all facets of the new power tool – the Internet. Continuing to ignore it will leave Pakistan lagging behind among the comity of nations. Realizing the importance of Information Technologies, high priority is being accorded to this sector and is a corner stone of the country's development strategy.

7. The paper attempts to examine the possible effects of IT on socio-cultural milieu and behaviours besides studying its impact on the economic, political and information environment. Suggestion have been made for the use of medium for the general good as well as for dealing with its possible negative consequences.

8. As the Internet transforms our world at a supersonic speed, there is an emergent need to understand all facets of the net, especially how it may help or hurt individuals or societies. It is also important to learn more about educational and cultural barriers to prevent the net from becoming a tool for the elite, thereby creating more inequality in a society and the world at large.

9. A policy framework for the future and the model to be adopted must be based on unique circumstances and pragmatic value system of a particular society that acknowledge realities instead of imposing alien models.

10. Similarly, access to information and II, by themselves cannot perhaps alleviate the human condition. Fundamental changes in other sectors such as governance

and economic systems, must also take place before gaps are truly bridged and social justice and equity become the norm for the vast majority of people in the world.

11. Concerns about the dilemma of freedom of speech versus privacy of information have heightened with popularization of Internet spurred by globalization. There is a general agreement to protect commercial and sensitive information in order to reduce the risk of it getting into the wrong hands. It is argued that the free flow of information that the Internet represents, though precious, requires some level of control on content in order to ensure full and fair competition for all players around the world.

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Chapter I

1.1 INTRODUCTION :

“ Information and Communication Technologies (ICTs) will play an important role in driving economies and unifying countries as did the Railways in the industrial revolution. There was no single development that was likely to be as significant as the diffusion of ICTs. These technologies are clearly becoming the conduit for all human endeavour – from managing the utilization of scarce resources to the development of the persons and generation of economic activity”

Dr. Alfred Sant, Prime Minister of Malta
(Address to ICT Conference, 1997)

The primary role of the media as a provider of entertainment, information and education, its role as a catalyst for social change and advancement and its supportive role in economic development, modernization and environmental improvement is universally accepted and recognized

The 21st Century paradigm also envisioned a vital role for the media in formulating and shaping opinion by analyzing a situation and creating awareness among the masses. They help people crystallize their perceptions about the world and various issues. They may even influence the way we think and act. This power is greatest if we take the media together rather than looking at one individual medium. Some people argue about how much power the media really have. But the continuous public debate and argument suggest that it must be worthwhile studying the media in order to see whether or not they really do have this power and influence.

1.2 SCOPE OF STUDY:

In view of the paucity of time and brevity of space, this research paper focuses on the dynamic, changing quality and role of the new technology as the world wide debate on 'the digital divide' is heating up with Information Technology being the buzzword of the 21st Century paradigm.

This paper attempts to find answers to some of the many questions as well as examines the possible effects of IT, especially the Internet, on the socio-cultural milieu and behaviors. It also attempts to study the impact of this electronic medium on social, political, economic and information environment and puts forth certain recommendations for its possible use by the governments for the general good as well as for dealing with negative repercussions of the medium.

Few new media in the last century, including television have made such a dramatic impact on daily life in so short a period as the Internet. With the use of Internet becoming ever more pervasive, the debate on its merits and demerits may assume vast amplitudes. There may then arise a need for some kind of regulation. This may be in the form of self-regulatory or government policy framework, and parameters to address issues thus arising. This paper undertakes to study this possibility as well.

Chapter II

2.1 MEDIUM'S SIGNIFICANCE:

Information technologies have spread quickly and widely, rapidly becoming common fixtures of modern social and economic life, opening opportunities and new avenues for millions around the world.

The Internet continues to grow at a phenomenal pace. In 1993, most Americans outside of government and academic circles were completely unaware of the Internet as it then existed. Perhaps fewer than 90,000 people worldwide used the net at that time on a regular basis.¹ Some estimates predict that by the year 2005, Internet users worldwide will pass the one billion mark, with more than 700 million users living outside of North America despite it being heavily influenced by American language and culture.

Despite the fact that the Internet industry is at a nascent stage in nearly all the Asia-Pacific countries, except Japan, the number of sites on the World Wide Web (www) jumped from 50 in 1993 to 350 million in 2001.²

The Internet today offers what seems to be an unending reservoir of information and knowledge encompassing every sphere of human activity, may it be education or research, business or industry, agriculture or health, online shopping or trade, e-governance or e-commerce, the Internet has revolutionized the global spectrum.

The potential of the Internet as a major contributor to cultural and social development is so remarkable that having fallen behind in its development, several countries are now pushing hard to join the online club.

The US media has led the global media revolution and has undoubtedly benefited the most. However, over the next several years the US will see this lead

¹ 'State of Internet', Report of the United States Internet Council and ITTA Inc. 2001 (edition).

² Internet, The International Web Magazine, Century Publication (Pvt.) Ltd. Karachi, September 2000 issue.

diminish as Europe, Japan and Asia-Pacific, aggressively expand on the web and affect the way communications is done online.

Inspite of the fact that Pakistan has been slow to join the web, IT has a bright future in this country. Recognizing the importance of IT in the global economic arena, the IT policy of the Government of Pakistan visualizes harnessing its potential as a key component to development of the country. Government is making serious endeavours towards introducing e-government, which will help ensure good governance by ensuring efficiency, participation and transparency in the system.

Chapter III

3.1 IMPACT OF INTERNET:

Many of the originating impulses behind research on electronic communication, especially the Internet were American. It was not until very recently that I.T and the Internet became the subject of scholarship in rest of the world in a significant way. Up to that time the nature of this particular medium, its relation to society and its consequences were being studied in a synoptic rather than a disciplinary frame. However, with profound changes in the global information environment, the study of the impact of electronic communication is now being undertaken in the context of larger framework of economics, politics, society and culture.

3.2 UNIVERSAL ACCESS:

The Internet and I.T sector is at the heart of the US's unprecedented decade – long communication and economic expansion. The adoption of new technology has practically increased manifold. At present the US accounts for up to 40 percent of the world's Internet users.³ However, other countries of the world especially in Europe, Asia – Pacific, Latin America and Japan have begun to respond to this phenomenal challenge. By 2003, Asia Pacific is expected to surpass the United States as the region with highest number of Internet users. By 2005, more than half of Internet users will speak a language other than English.⁴

Perhaps the spontaneous and universal access to information provides the best glimpse into the future of the Internet. It has given the world an entirely new way of communicating and acquiring information.

³ Internet, The International Web Magazine, Century Publication (Pvt.) Ltd. Karachi, (September 2000 issue).

⁴ State of the Internet', Report of the United States Internet Council, and ITTA Inc. April 2001 (edition).

3.3 A TWO-WAY MEDIUM:

The Internet is a two-way, equal opportunity medium and provides access to a wealth of information on countless topics contributed by people and various interest groups throughout the world. Opinion on this information can be expressed and questions raised of the experts while answers to questions asked by others can simultaneously be read. From an intellectual aspect, the medium opens up enormous opportunities for getting scholarly input on a variety of topics from varied sources. All major newspapers in most parts of the world have not only been made accessible online but, are being continuously updated on hourly basis. Magazines, movies and other such materials are also being placed on the web sites.

3.3. EDUCATIONAL DIMENSIONS:

The Internet is also changing the way we learn and educate ourselves. It has created new opportunities for millions of students through computerization of schools, access to Internet with classroom connectivity. Internet serves as a sort of International library, an enormous, seamless repository of knowledge, which is accessible to all from their own homes, offices or schools. Could anyone sitting in a remote area of the world, imagine having an access to the entire catalogue of the US Library of Congress, with more than twelve million volumes, but for the Internet.

Learning on the web is also offering opportunities to adults to continue learning with greater convenience. An increasing number of universities, libraries and other academic institutions are now accessible. It is not unusual for experts in their particular fields to be among the participants of e-mail discussion groups.

3.4 INFORMAL UNIVERSAL EDUCATION:

The Internet has made it possible for students both young and old to be able to carry out their studies in accordance with the schedule and timings, which suit them the best. Education is no longer a classroom activity only suited to the teacher's requirement; it has now become a requirement tailored to the student's time and needs. Internet has made this reality possible.

3.5 DISTANCE LEARNING OPPORTUNITIES:

A number of Universities around the world are turning to distance learning by offering degree courses in a variety of disciplines through the Internet. In fact distance learning is the fastest growing sector of higher education in the United States and elsewhere. The number of students enrolled in distance learning is growing and is expected to reach 2.2 million (15% of the total number in higher education) by the end of 2002 in the USA alone.⁵ In Pakistan this concept has also been adopted in the form of Virtual University, which is imparting IT and other inter-disciplinary education to the students belonging to all segments and income groups in more than 50 far and near cities and towns of Pakistan.

Notwithstanding the importance and usefulness of learning and teaching paradigm through Internet, there are serious instructional and technical limitations of the medium. Internet based courses can be more time consuming than face-to-face instructions and may even introduce new costs.⁶ It is a challenge for both, the instructors and the students to attempt to resolve, via distance education, all the hardware and software issues that may arise. Some students simply need a lot of personal help just to get started. It is often very difficult for a student to adequately explain a particular problem on the Internet, making it difficult to remove confusion or misunderstanding.

⁵ J. Rosenberg, Marc. E Learning, USA: McGraw Hill, 2001.

⁶ Montgomerie, T.C. & Harapnuik, D. (1997) Observations on Web-Based Courses Development and Delivery. International Journal of Educational Telecommunications, www.quasar.ualberta.

Technologies such as remote access to a student's computer, or laptop, or video and audio conferencing do offer additional communication capabilities, but they also introduce new technological challenges.⁷

Similarly, economic considerations can also interfere with web based learning, particularly depending on the type of course, the cost of hardware and the wide array of software applications, which may be out of reach of many students, especially in the developing countries.

⁷ Vito Tanzi, (Co-Author) 'Public spending in the 20th Century: A global perspective,' Cambridge University Press, 2000

Chapter IV

4.1 E-COMMERCE:

Just as at the social level, development of the Internet has catapulted transformation in business and trade practices. A new kind of economy called e-business or e-commerce has emerged whereby timely and instant information is a critical source and the basis for competition. Old ways of conducting business are being replaced by paperless online transactions that extend beyond the boundaries of a single enterprise or state and can be applied to almost any type of business relationship.

E-business /commerce is perhaps the fastest growing sector of the Internet economy. It has revolutionized business and trade practices by creating greater efficiency and monetary savings. Transactions in products and services as diverse as banking, ticket sales, online retailing, payment for parking, utilities, income tax, media downloading etc. through the Internet have mushroomed over the last several years.

So great is the impact of online business that areas such as Asia-Pacific and Latin America have surpassed expectations as their e-commerce initiative has blossomed. According to the International Data Corporation (IDC) by 2003, the US will account for only 44% of the total global e-commerce market, down from 61.7% in 1999.⁸ E-commerce transactions worldwide generated \$ 615.3 billion in revenues in 2001. Online retail sales grew 21% to \$ 5.3 billion last year and are expected to jump 41% to \$ 72.1 billion in 2002. About 11% of book sales were transacted on the Internet in 2001.⁹

The Japanese site of online retailer www.amazon.com attracted one million shoppers in record time of only 18 months after its launch. Similarly businesses in

⁸ Internet, The International Web Magazine, Century Publication (Pvt.) Ltd. Karachi, (August, 2000 issue).

⁹ Ibid (September 2000 , Issue).

many European countries are gearing up to take advantage of the expected boom in online business. European e-commerce is likely to grow annually by 100% and should reach \$ 1.6 trillion by 2004.¹⁰

As far as Pakistan and other countries that have lagged behind are concerned, there is no more time to lose. In order to compete internationally, they will have to adjust their selves where currently the benchmark of “best practices” exists.

However serious concerns are being raised as more and more money is being lost to online frauds. More than \$ 700 million in online sales were lost to frauds in 2001, representing 1.14% of the total online sales of \$ 61.8 billion.¹¹

As a result the consumers are demanding development and application of sophisticated security systems to protect them against this type of fraud. Similarly, many researchers view online business with skepticism. Goldberg states “as the glow of the Internet economy turns to woe, stock options are going out of fashion and a new phrase is echoing through the troubled corridors of dot com land: Cash is King.”¹²

4.2 E-GOVERNMENT:

Where good governance is a synonym for transparency and honesty in government affairs, it also includes efficiency, facilitation and simplification in the systems related to citizen’s affairs and concerns. The technological developments in electronics and the emergence of the Internet have opened new dimensions to good governance. Governments are challenged to keep pace with these rapid technological innovations as citizens, public and private sectors all, demand more in terms of good governance.

¹⁰ Spector, Robert, Amazon. Com—Get Big Fast, N.Y: Harper Collins, 2000.

¹¹ GartenerG2, a Program of Business & Techonology Research Co, Gartner.

¹² Goldberg, Andy, “ The Dotcom Depression,” Contemporary Affairs, (Book 26), Caravan Enterprises, Lahore.

The e-government regime fundamentally envisages, changing how the government operates. It aims at creating a collaborative and participatory environment to introduce cost effective delivery of quality services, efficient and responsive government and transparency in its functioning. E-governance will also reduce hierarchal delays by removing redundancy, duplication and unnecessary regulations. Improvement in specialized areas such as criminal justice, transport, health, public utility facilities etc. will also be ensured.

Access to information through the Internet has therefore, enhanced people's participation in all spheres of public affairs by providing a channel for two-way as well as multiple interaction. The citizen-government interface will thus ensure good governance through collective wisdom, transparency, efficiency and public accountability. By the same token, a thriving e-commerce also needs healthy e-governance built on a strong informational foundation.¹³

However, despite the obvious benefits of bringing government services and activities online, the endeavour will face several challenges. The key issues arising out of e-government relate to system security and information authenticity and invasion of privacy because of the sensitive nature of information stored in government databases.

Most importantly, if not universally accessible, e-government may create another digital divide within a society whereby, the efficient services of the state are reserved only for the high-income groups or well educated individuals with access to the Internet.

To prevent the net from becoming a tool limited to the elite, governments must ensure that its services are universally accessible and especially comprehensible to the lower income groups. Net clubs do offer any opportunity to reduce the incidences of haves and have-nots, but substantial cultural changes are required before e-government becomes a widely accepted reality.

¹³ Saeed, Amara, "E-Commerce Needs E-Governance," Daily Business Recorder, October 7, 2000.

4.3 OTHER FACETS:

The Internet has wiped out the boundaries of time and space. Man made divisions of caste and creed, colour and culture, have been bridged and the focus is shifted from local problems and issues to important national and international ones that affect all of humanity. It has transformed the world into the very “Global Village” envisaged by Marshall McLoughan.

It has provided extensive exposure and opportunities to nations and communities that hitherto were ignorant of unfolding events, breaking news and to discoveries, important information and a host of other such data.

Communities formed in cyberspace among individuals with mutual interests, who otherwise may geographically be distant, are reshaping social and political debate on issues as diverse as banning the use landmines to the success story of women empowerment through the Grameen Bank of Bangla Desh. Super empowered net communities have the ability to reach further and faster than ever before to mobilize members with swiftness through efficiency of the web. The Seattle meeting of the World Trade Organization (WTO) is witness to the Internet’s this power to mobilize support.¹⁴

E-mail is quickly outpacing traditional mail service as a medium for interaction between families, friends and contact groups as it provides instantaneous correspondence and is economical as well.

¹⁴ Abidi, S. A., “ IT and the Global Consciousness, Science dotcom., June 22, 2002.

Chapter V

5.1 DIGITAL DIVIDE:

The term “digital divide” has become a common phrase to depict the distinction between those with access to Internet and those without. While the globe is becoming more and more wired, UN Secretary General, Kofi Annan warned, “ the digital divide still yawns as widely as ever, with billions of people still unconnected to a global society.”¹⁵ The rich at all international, national, societal and class levels are already far ahead of the poor on the IT Highway.

The digital divide is primarily income or resource based. Lower income households without access to web and a number of countries in the world having no or very poor communication infrastructure, may feel more disconnected and disadvantaged than ever before, thus widening the divide further. Closing the digital divide, however, has become a major global cause of the recent years, as the globalization focuses on the development of high technology.

Governments across the globe have responded to the call to bridge this divide. They are playing a key role to promote IT and Internet development through numerous programmes and initiatives. International bodies are also playing a critical role in ensuring a standard approach to technology adoption and usage across borders, while also trying to overcome the growing gap between the wired and unwired countries. However, according to Javed Jabbar, there is no conclusive evidence that “access to information and IT can, by themselves, alleviate the human condition. Fundamental changes in other sectors must also take place before gaps are truly bridged and social justice and equity become the norm for the vast majority of the worlds people.”¹⁶ The UN Economic and Social Council (ECOSOC) is closely looking as to how to address this international

¹⁵ Kofi Annan, Address to the UN General Assembly planning meeting on ICTs for development, 17 June 2002. (Associated Press).

¹⁶ Jabbar, Javed, “ IT: The Gap is Growing,” Dawn, August 20, 2001.

divide in ICT usage and penetration. The G-8 is also deeply concerned about the necessity to make these new technologies available to all. At its Okinawa Summit the G-8 agreed to appoint the “Digital Opportunity Task Force” to review the global digital divide and put forth recommendations.¹⁷

UN General Assembly has also taken a major step in this regard by adopting a resolution welcoming the organization of the World Summit on the Information Society. The Summit will be held in two phases; the first in Geneva in 2003 and the second in Tunisia in 2005. It is expected to promote access by all countries to information, knowledge and communication technologies for development.¹⁸

It is obvious therefore, that although expensive, potentially disruptive and extraordinarily beneficial, ICTs are here to stay. In the words of Richard Heeks “Information and Communication technology is a runaway horse and the choice for the worlds poorer nations is stark: stand by and watch it carry the worlds richer nations forward, or jump on and hope to steer it as best as they can.”¹⁹

Each country of course, will have to create its own adoption model or perhaps multiple models, which suit its own culture, business practices and regulations and expand according to their own roadmaps.

5.2 FOCUS ON PAKISTAN:

“The wealth of a nation is not judged by its physical assets. It is determined by the technological gaps between the ‘haves’ and the ‘have-nots’.”²⁰

Realizing the unprecedented importance of Information technology in the wide spectrum of social and economic spheres, the government is according high priority to this sector, as it is one of the corner stones of the government’s development strategy.

¹⁷ BBC News online March 17, 2001.

¹⁸ Information Superhighways News letter, (January, 2002). www.internet.com

¹⁹ Heeks, Richard, “Reinventing Government in the Information Age,” Routledge, London, 1999.

²⁰ IT Policy and Action Plan, IT and Telecommunication Division, Ministry of Science and Technology, Government of Pakistan, Page 7.

The mission of the IT policy is to rapidly develop the infrastructure in synchrony with the creation of trained individuals and teams. Direct these at transforming our society into a prosperous and dynamic one — one that values and benefits from the creation and free flow of information and knowledge. Encourage and assist the entrepreneurial spirit, and make the fruits of this technology available to every citizen.²¹

Government's role as a facilitator and enabler for private sector to undertake this venture is the guiding theme of the IT policy. In fact, this single factor has proved to be a watershed as it has galvanized the private sector to vigorously pursue and exploit the potential offered by the policy framework and technological developments.

The IT policy focuses on the following aspects to meet the local and export needs: ²²

- Human Resource Developments: (meet local and export needs)
- Infrastructure Development: (set up world class enabling infrastructure)
- Hardware / Software Industry development: (encourage and fund research)
- Internet growth: (encourage competition and remove unnecessary regulations).
- IT promotion and Awareness: (through a major campaign)
- IT usage: (at all levels of government under the concept of 'government online').
- Legislation: (provide protection to users and providers of services).
- Regulation: (create fair, equitable and competitive environment).

The key policy measures and incentives for facilitating environment have already begun to show results, as Pakistan is rapidly becoming a major player in IT sector. Interest has been generated among the potential entrepreneurs to invest in Pakistan's IT industry. A \$ 50 million Venture Capital Fund has also been

²¹ IT Policy and Action Plan, IT and Telecommunication Division, Ministry of Science and Technology, Government of Pakistan, Page 9.

²² Ibid. Page 4-6.

created in the USA by a group of Pakistani IT professionals and investors. According to PTCL, at present Pakistan has almost 350,000 Internet subscribers. Though lower compared to other countries of the region, Pakistan is fast becoming the hottest place in any third world country to invest in the field of Information Technology.²³

Through investment in, and development of IT industry and human resources, Pakistan's aim should be to build an e-society, where all citizens have equal access to technology for an improved quality of life. The focus however, must not be confined to the development of commercial aspects alone. Wide range of societal benefits offered by IT as an agent for change must also be tapped. At the same time due care must be taken to alleviate genuine public concerns as well as control possible negative fall out of the technology.

The final choice regarding the model to be adopted should certainly rest with the polity, keeping in view the unique circumstances and their interplay with technological developments. A policy framework for the future must be based on a pragmatic value system that acknowledges realities instead of creating its own version of reality or imposing an alien model.

²³ Rehman, Atta- ur, "IT the Great Opportunity," Contemporary Affairs, (Book 26), Caravan Enterprises, Lahore.

Chapter-VI

6.1 ETHICS AND THE NEW MEDIUM:

Most traditional media have standards of fact checking that help establish their validity. The Internet on the other hand is a self-publishing medium. Anyone with a small amount of technical skill and access to a host computer can place material on the Internet, ranging in its accuracy, reliability, and value. Unlike most traditional information media such as books, magazines, newspapers, organizational documents, radio, television etc. no one has to approve the content before it is made public. This large variety of unfiltered information is created for many purposes i.e. to inform, sell, to present a viewpoint, and to create or change an attitude or belief. For each of the various kinds and purposes, information exists on many levels of quality or authenticity and reliability. It ranges from very good to very bad and includes every shade in between but onus of evaluating the data falls on the user on whether or not to believe the information.

The key to credibility is the question of trust. The debate is heating up across the world on whether or not some limits be placed on free speech on the Internet. Should this information be available to everybody, even minors in public schools and libraries? Is filtering software the answer? The latest software is more precise than it used to be, but it is far from perfect, especially when it comes to sites promoting violence, pornography, cyber terrorism and similar other cyber crimes.

The US Congress and courts as well as other governments seem to agree that something must be done, but specific solutions remain elusive.²⁴

Several parameters are being currently examined that can be applied to a source to establish its credibility. They include, evidence of author's credentials and contact information, evidence of quality control, accuracy and timeliness, corroboration or confirmability through World Wide Web yellow pages or directory, which describes each, selected site and provides evaluation of its contents etc.²⁵

²⁴ Anjum, Jamal Ahmed, "Violence on the Net," Dawn October 24, 2000.

²⁵ Evaluating Internet Research sources, Robert Harris, Rharris@virtualSalt.com

Chapter VII

7.1 OVERRIDING PUBLIC CONCERNS:

The Internet by its very nature is a global medium that cuts through cultural, religious, social, economic, regional and even national boundaries and as such is creating upheavals in established mores, modes and beliefs. Gary Burnett, a professor of Information Studies at Florida State University said, “if we do not take measures to understand the subtleties of the world we live in, there is a possibility for significant negative consequences”.²⁶

As the Internet has become an increasingly important tool for business and individuals, concern over security and privacy on the Web have grown. Guaranteeing privacy and information protection online is an increasingly critical element in the future success of the Internet. The Carnegie Report ²⁷ quoted a relatively steady increase in Cyberthreats such as viruses, hacking, breach of privacy, pornography, unfiltered information, etc. Governments around the globe are caught in a no win situation. On the one hand the challenge is to keep pace with the lightning-fast electronic communications of the Internet, while on the other is an even bigger challenge of shaping Internet policy to deal with the Cybercrime.

Left on their own, children can be easy preys for sexual predators, credit card frauds, pornography and violence. The Cyber cafés that have emerged as a necessary byproduct of the IT revolution are contributing to truancy, obscenity and pornography. Parry Aftab, author of “The Parents Guide to Protecting Your Children in Cyberspace,” says, leaving children alone with the internet is different from leaving them with the TV onit is the people children can meet online which is the danger.....”.²⁸

²⁶ www.usatoday.com/life/cyber

²⁷ Carter Henderson, ‘How the Internet is changing our lives,’ The Futurist, (July – August, 2001).

²⁸ Aftab, Parry, “Internet and Kids, Contemporary Affairs, Caravan Enterprises, Lahore.

Information and ideas crossing international borders might be at variance with the ethos existing in the recipient country, which could cause erosion in its socio-cultural and moral values. Though Internet provides two-way flow of information, yet the developing and under developed countries with low literacy and limited access are bombarded with information and messages from the developed world and hardly the other way around, it does partially lead to cultural invasion.

Online users may even develop a large-scale view incompatible with their settings thus leading to possible maladjustment. Youngsters are developing inferiority complexes and becoming less satisfied with their personal lives when they compare it to the lives being depicted by their more affluent colleagues on the Internet. Consequently, they are drifting away from the established values of their society and family. A two-year research study carried out by the Carnegie Melton University in the US has shown that incidences of depression and feelings of loneliness are greater among those using the Internet than those not using it so frequently.²⁹

It has created a paradigm division between the computer literate youth and the relatively computer illiterate elder generation, thereby leading to social destabilization and alienation between the two.

The Internet is replacing book reading as a hobby and as a necessity to education. It is moving children away from proven traditions...ones that encourage kids to develop their imagination, sensitivities, perceptions and their ability to communicate with others as well as socialize. Studies consistently show that greater use of the Internet was associated with a statistically significant decline in TV watching, newspaper and magazine reading, visiting friends and relatives, listening to music and exercise and workout. A CNN study shows that

²⁹ Carter Henderson, 'How the Internet is changing our lives,' The Futurist, (July – August, 2001).

the Internet users spend 4.5 fewer hours a week watching television than non-users.³⁰

The Internet is an impersonal medium. Spontaneity, expressions, feelings and actions are not part of the interaction process, therefore, cold and calculated responses are the norm, rather than the exception online. Personal experiences, which mean so much towards the formation of individuality and character formation, are being replaced by group experiences. Individuality is being replaced by a "herd mentality". Physical social interaction is declining in direct proportion to the increase in Internet users, who are engaged in de-humanized, faceless interaction with their consoles.

IT is being viewed as a job eater whereas the growth of computer industry and human resource development will help increase hi-tech better-paid jobs. Internet has had a profound impact on the US economy and is being credited for the tremendous growth and prosperity of the country through out the 1990s. Since 1993, the US hi-tech industry has generated over one million new jobs while directly supporting 2.5 million jobs.³¹

There is a glut of information online making navigation so cumbersome, time consuming and complex that the learner / user has no way of knowing if he has covered everything or is simply lost.

It is causing health problems for the younger generation. The Internet is so addictive, the user's eyesight, posture and diet are affected. Healthy outdoor exercise is a common loser in Internet culture.

The challenges posed by Cyberthreats cannot be faced without the active cooperation of the governments, industry and the international community. Efforts are underway to present a united front against this potential threat. Already there are increasing calls for governments at one level or another to "harmonize" Internet protocols and "manage" or "encourage" developments to address this

³⁰ CNN. Com

³¹ State of the Internet', Report of the United States Internet Council, and ITTA Inc. April 2001 (edition).

issue. Governments are making efforts to develop new policies and technologies to combat Cyberthreats as at present encryption continue to serve as the backbone of Internet Security. The law enforcement methodology also needs to be changed in order to carefully detect and target the cybercrime. It is important because the government's laws and legal enforcement mechanisms are rooted in physical geography. But the Internet is a global medium and allows free flow of information across regional and national borders.

In a similar vein, industry is also collaborating with governments to fight this menace. The international forum of the G-8 and the 41-nation Council of Europe are making concerted efforts to standardize Cybercrime Laws through a treaty.

Chapter VIII

REGULATING THE INTERNET... RECOMMENDATIONS:

As the Internet is transforming our world at a supersonic speed, there is an emergent need to understand all facets of the net, especially how it may help or hurt individuals. It is also important to learn more about educational and cultural barriers to prevent the net from becoming a tool for the elite, thereby creating more inequality in a society and the world at large.

The debate on freedom of speech versus privacy of information has heightened with popularization of the Internet and the trends towards globalization. There is a general agreement to protect commercial and sensitive information in order to reduce the risk of it getting into the wrong hands. It is argued that free flow of information that the Internet represents, though is precious; some level of control on the content is necessary to ensure full and fair competition for all players around the world.

- In order to guarantee the privacy of online communication, governments should put in place enforceable legal protections against un-authorized scrutiny and use by private or public entities of personal information on the Internet.
- To bridge the digital divide, the governments must ensure that the information, education and training is disseminated at the grass roots level for a greater majority of people living in poorer countries. The Internet has to be harnessed to serve the needs and address the issues of societies in their own socio-cultural, political and economic context and environment.
- Both, as a nation and individual consumers, we must balance the usefulness of the Internet for information, communication, commerce and governance with its costs. Use of Internet can be both highly entertaining and valuable but if it causes too much disengagement from real life, it can be harmful.

- In euphoria to adopt Internet for imparting education, it should not be forgotten that a balance must be maintained between ‘hi-tech’ and ‘hi-touch’.³² Human teachers are essential for learning. Technologies, though can be used as powerful tool, cannot replace the teachers. Compassion and the ability to analyse a student’s learning needs, remains the teacher’s sole domain.
- The energetic prosecution of legal and technical safeguards will also be increasingly necessary -- whether over trademarks and domain names or other aspects of Internet use.
- In the absence of a worldwide agreement on both definitions of crime and enforcement mechanisms, the most effective role of governments may be to encourage the tools by which people can protect themselves and their families from content on the Internet that they deem inappropriate, especially since no body disputes the right of parents or employers to install filters on the computers they own.
- Governments should rely on the technology itself to meet as many of its goals as possible. Clearly the Internet itself will change as a medium — commercially, technically and philosophically. The governments and industry may consider adopting and implementing new techniques of encoding such as: watermarks, encryption, digital certification systems, less user friendly public key infrastructure (PKI) and other user identification techniques to ensure trust worthiness and authenticity of transactions and the information received.
- There are areas where governments must act concertedly for example, in the prosecution of predators who stalk children, against cyber-terrorists and other malicious Internet mischief, from viruses to threat to theft identity. In United States, the Telecommunication Reform Legislation banned the

³² Barron, A.E., and Orwig, G.W. (1995). *New Technologies for Education: A beginner’s guide.* (2nd ed.) Englewood, CA: Libraries Unlimited.

distribution via computer of indecent or obscene material to minors. China has recently made it mandatory for Internet users to register with the government besides banning the transmission of pornography. A German Parliamentary Commission has called for international Internet controls against materials harmful to children.³³ Other governments should also follow suit.

- There should be an international agreement in terms of code of practice, on the liability of Internet Service Providers and telecommunication carriers on the following aspects:

Self-regulation: There should be an agreement between the governments and the access and host service providers regarding a code of conduct as have been done in England.

Removal of illegal files from servers: Once a country's regulatory institutions have located illegal files and harmful contents, legislatures could enforce quick removal of the offending materials.

Blocking Access: If offensive material is transmitted from abroad and cannot be removed, the governments may choose to block the content at the point of access.

Rating System: Independent bodies should be set up to provide a rating system available to the public.

Over the next few years as governments grapple with the problem of regulating Internet, politicians will continue to pass un-enforceable laws. Filtering software is an imperfect solution, but it is much more likely to play a role in the future of the net than any sort of legislation.

³³ Taqui, Jassim, "Economic Piracy Through the Internet," Dawn, March 30, 1997.

Conclusion.

The Internet is no corporate fad. Like satellite television or FM Radio, it is also a strong social element. Contrary to one-way flow of information through conventional media, the Internet has opened up unlimited vistas for two-way communication and flow of information, combining features of interpersonal and mass communication. Citizen of today's world has the option to talk back and not be a passive receiver of selective inputs. This has given him a consciousness and knowledge on a host of issues, freeing him from the bonds of vested interests.

The paradigm shift in media indeed has given birth to a new activism, which is global in its scope, humane in its character and civil in its operation. Demonstrations at Seattle, Davos and other places jolted the conscience of the world by pleading the case of the poor and the deprived in Asia, Africa and Latin America and exposed to the world the darker side of the World Bank, IMF and WTO. Similarly, the largest public rally in England during the last one hundred years as well as demonstrations in Washington D.C. and elsewhere in Europe against US plans to attack Iraq, all bear testimony to this powerful but humane aspect of the new medium and its ability to mobilize universal support.

Hopefully, cyber citizen will soon be strong enough to make a difference in the quality of their elected representatives, making them more sensitive to humanity and global survival rather than parochial issues. Maybe Internet will prove to be an institution, rather than a mere technology, that changed the world. Yet, the world must realize that unless governance and economic systems are reformed and restructured the adoption of these technologies alone cannot reduce disparities.

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