INTERNET PARADOX: DEFINING MEDIA GLOBALISATION AND THE DIGITAL DIVIDE

Masrur Alam Khan & Rehana Masrur Khan
International Islamic University Malaysia, Gombak
& Allama Iqbal Open University, Islamabad
masrurk@yahoo.com

Abstract

Although media globalization has created the capability of mass population to connect through barrier space previously not possible, a downside to this revolution exists. A digital divide is in place. The language of digital divide not only place the people into simplistic 'have/ have-nots' categories, making assumptions about the solution to information poverty with little attention to less and less connected, educated and privileged of developing countries. The aim of the present paper is to examine the present scenario of globalization and its most recent outcome as 'the Internet' which is being driven strongly by commercial forces in the most depressed , struggling and victimized section of human society of poor countries of the world. This paper examines the geo-sociology of internet access and its implication, uneven distribution, discrepancies in its access and constraints to Internet growth in developing countries. In the light of findings, the Internet comes close to being a mass medium in the industrialized countries but a 'minority medium' in developing countries. Exclusivity in access to the Internet has led many to brand it as yet another technology that is available only to the few wealthy and powerful elite in developing countries. The true picture is more complex; however, despite lack of access, the Internet is having a real impact.

Abstrak

Globalisasi media telah membolehkan masyarakat merentasi halangan ruang waktu untuk berhubung di dalam keadaan yang sebelum ini tidak memungkinkannya. Namun, masih terdapat kekurangan pada revolusi media ini di dalam bentuk jurang digital. Masalah kemiskinan informasi di dalam jurang digital tidak seharusnya sekadar menempatkan masyarakat di dalam kategori yang 'punya dan tidak punya' tanpa memberi perhatian kepada golongan yang kurang berinteraksi, kurang berpendidikan dan kurang berkemampuan di negara-negara membangun. Tujuan kertas ini ditulis adalah untuk memeriksa senario and hasil terkini globalisasi dan internet yang didukung oleh kuasa komersial di negara-negara miskin dan tertindas. Kertas ini juga memeriksa akses dan kesan geososial internet yang pengagihannya tidak seimbang lantas menyekat perkembangan internet di negara-negara membangun. Dalam

mendapatkan hasil kajian ini, didapati internet merupakan medium utama di negara-negara maju tetapi menjadi medium minoriti di negara-negara membangun. Akses internet yang terbatas menyebabkan ramai menganggapnya sebagai satu teknologi untuk mereka yang berkemampuan dan berkuasa. Gambaran sebenarnya adalah lebih kompleks, walaupun terdapat keterbatasan dalam akses, kesan internet masih nyata.

Keywords: Media globalisation, digitalisation, digital divide, internet, developing countries

Introduction

The global divide by cross-national differences in Internet use is the result of the economic, regulatory and sociopolitical characteristics of countries and their evolution over time. The Internet has developed unevenly throughout the world, creating what has become known as the "global digital divide" (Castells 2001, Kirkman et. al. Rogers 2001) The number of Internet users is one of the most widely used indicators of development of this emerging medium of communication. About 70 percent of middle class homes have Internet access, compared with about 30 percent of lower income class homes. Viewed from global perspective, the divide is much wider. As of 2003, only about 10 percent of the world population was connected to the Internet. In future, those who have access to information will have more power than those who don't (Dominick, 2005).

Scholars have noted that the Internet tends to reinforce existing class and social relations both within and across countries (Mosco 1996, McChesney 1999, Everett 1998). Critical mass communication scholars point out that a "handful of private, giant, communication conglomerates" enabled the governments dominate the media industry, disenfranchising rather than enabling people. These authors argue that the media conglomerates view of the Internet as an "online shopping mall" rather than as a public sphere a la Habermas (1989), and predict that unless the development of the Internet changes course and becomes driven by the needs of citizen, its current path will likely exacerbate social inequalities (McChesney 1999, Mosco 2000). Most researchers agree that the Internet has both empowered and discriminated, enabling some to pursue a better life while leaving the majority of the world's population behind. As Castells (2001:247) concludes "the heralding of the Internet's potential as a means of freedom, productivity and communication comes hand in hand with the denunciation of the 'digital divide' induced inequality on the Internet.

In spite of the growing acceptance of the existence of a global digital divide, there is no agreement as to its causes. Much previous

research has found that differences in Internet use across countries are fundamentally related to economic variables such as per capita income and the cost of an access. In addition to income and cost, competition in telecommunication services also increases Internet use.

Countless studies of media diffusion have also established that use is facilitated by the existence of an enabling infrastructure (e.g. phone lines in the case of telephone use) and sufficiently low cost of access. The case of telephone is perhaps the most thoroughly researched. Numerous are also the empirical studies that find the availability of an enabling infrastructure (availability of electricity, and computer), and affordable cost of access to spur Internet use.

The aim of the present paper is to examine the present scenario of globalization and its most recent outcome as 'the Internet' which is being driven strongly by commercial forces in the most depressed, struggling and victimized section of human society of poorest countries of the world. The structure of the paper follows: the nature of globalization, globalization of media, and digitalization and will finally address to the following questions:

- Who are the main beneficiaries of Internet usage?
- Does Internet distribution reflect disparity in Asia and in Muslim countries as well?
- Is Internet just for developed countries?
- Does Internet access reflect urban-based and rural-biased scenario?
- What are the constraints to Internet growth in developing counties?

Backdrop of Globalisation

At the end of the 20th century, globalization became an all-purpose catchword in the public and scholarly debate. Government officials could attribute their country's economic woes to the onslaught of globalization, business leaders justified downsizing of their companies as necessary to prepare for globalization, environmentalists lamented the destructive impact of unrestrained globalization, and advocates for indigenous peoples blamed the threatened disappearance of small cultures on relentless globalization. As different parties used the term in highly disparate ways the concept of itself became a global symbol, its meaning became inflated. Globalization risked becoming global cliché (Lenchner, F and John Boli 2000).

Kennedy (1993) describes globalization in primarily economic term, defining it as primarily integrative structure. He further argues that globalization of economic structures means that local and

national governments eventually cede control of policy to the global institutions (primarily multinational corporations, but also including non- governmental, regional, or international organizations, such as the World Bank or the International Monetary Fund)

UNESCO's World Communication Report (1997) provides a succinct definition of globalization.

> "Concept originating in Anglo-Saxon countries which refers to the increasingly world-wide nature of industrial production and trade, caused by the rapid development of new information and communication technology, and the instant, planetary transmission of their content."

Friedman (1999) argues that 'globalization involves the inexorable integration of markets, nation-states and technologies to a degree never witnessed before.

Even though the term globalization typically refers to economic phenomenon, there are ripple effects that make the impact of globalization much broader socially and culturally. Ideas, customs, and cultural movements all follow closely after the exchange of goods across national boundaries. For example, international trade has been the vehicle by which religions have spread, including Buddhism to East and Southeast Asia along the Silk Road, Islam to Southeast Asia, and Christianity to Eastern Europe, Central Asia, and the US (Kluver, 1999).

So interdependence has increased. A related consequence has been an influencing factor in the 'anti-globalization' protests of recent years (in Seattle, Prague and elsewhere). The domination until recently of the debate concerning the globalization process by free-trade proponents such as the WTO and IMF is seen by some to result in a power imbalance.

Naom Chomsky (1994), a prominent opponent of the dominant model, has commented that:

> "Globalizaton could be a fine thing... But a particular form of globalization, that has been instituted by the state and corporate power, with primacy given to the rights of investors... and with people being incidental, has had pretty negative effects".

Kaplan (1994) described these two worlds as follows: We are entering a bifurcated world. Part of the globe is inhabited by Hegel's and Fukuyama's last man, healthy, well fed, and pampered by

technology. The other larger part is inhabited by Hobbe's First Man, condemned to a life that is, "poor, nasty, brutish, and short." Although both parts will be threatened by environmental stress, the Last Man will be able to master it; the first man will not.

Media Globalisation

Globalization is closely related to the concentration of media ownership. It is primarily large, multinational conglomerates that are doing the lion's share of media acquisitions. The potential impact of globalization on the mass communication process speaks to the issue of diversity of expression. Will distant, anonymous, foreign corporations, each with vast holdings in a variety of non-media business, use their power to shape news and entertainment content to suit their own ends? Opinion is divided. Some observers feel that this concern is misplaced, the pursuit of profit will force these corporations to respect the values and customs of the nations and cultures where they operate. Some observers have a less optimistic view. They point to the 1998 controversy surrounding the publication of *East and West* as a prime example of danger of media globalization (Baran, 2004).

However, the relationship of media with economics, political and technological information is very obvious. The economic revolution of globalization means that decisions that affect people's lives, particularly poor people's lives, are taken at an increasing distance from those people and their capacity to shape and influence those decisions is similarly distanced. If people are to respond in effective, intelligent ways to the challenges, or promises and issues that affect them. Decisions taken in Geneva, London or elsewhere, whether taken in the board room, trade negotiations, or stock exchange, have as much impact on the people of Zambia or Nepal as those taken in national capital, in Lusaka or Kathmandu. To make sense of these decisions, to respond to them, people in those countries need to know them in a context that is tailored to them. Have we over the last 15 years moved closer to a media industry that provides people with that information or further away?

The political revolution defined by the end of the Cold War, provided so much fuel for the fire of the New World Information and Communication Order (NWICO) debate, but the Cold War is finished, ended, gone. There are different wars, different threats, different challenges, not least to media freedom, but a bipolar world has been replaced by a unipolar one. We will not provide a political analysis of the beginning of the 21st Century, but if ever there was a time for increasing communication and understanding between people, it is now.

We have had the technological information revolution, of internet, satellite and telephony, and its consequences ... the creation of a global information based economy; the creation of increasing inability now of governments to control information; the creation of increasingly networked societies characterized by personal interaction and horizontal communication flows; the capacity of geographically disparate communities with common interest to organize together globally and to exert unprecedented pressure for change; the capacity of anyone with access to the internet to access infinite knowledge. And with this information technology revolution, the concomitant challenges of the digital divide.

New International Information Order

Media globalization refers to the process primarily by which information technologies, such as the world-wide web and other communication technologies, have transformed economic and social relations to such an extent that cultural and economic barriers are minimized. Masuda (1982) argues that the technological innovations will provoke radical cultural and social changes that will be fundamentally different from the status quo. In the post-industrial, information-based society, knowledge, or the production of information values, will be the driving force of society, rather than industrial technologies. Moreover, the convergence of technologies will precipitate further changes that promise to fundamentally alter the human landscape.

Wang (1994) describes the same phenomenon which she calls "informatization" as "a process of change that features (a) the use of informatization and information technologies to such an extent that they become the dominant forces in commanding economic, political, social and cultural development; and (b) unprecedented growth in the speed, quantity, and popularity of information production and distribution". This "New International Information Order" no longer allows national or regional considerations to stand in the way of the integration of values, attitudes, and shopping brands.

Thus, informatization is the process whereby information and communication technologies shape cultural and civic discourse. This would not just include computers and the internet, but other related technologies that have for their primary characteristic the transfer of information, including more traditional technologies, such as film, satellite television, and telecommunications. As society and economies and re-orient themselves around technologies, there are inevitable consequences.

These two concepts, globalization and informatization, thus explain different phenomena, but there is a marked overlap between

their social, and political, economic and cultural functions. Although globalization ultimately refers to the integration of economic institutions, much of this integration occurs through the channels of technology. Although international trade is not a new phenomenon, the advent of communications technologies has accelerated the pace and the scope of trade. Previously, ideas and technologies took centuries to diffuse across the globe, not seconds (Sprague, 2000). With electronic communication media, however, within an instant the most novel ideas can reach around the globe, or news of events in one continent can drastically affect financial markets around the world. On a daily basis, over one trillion dollars flow around the world on these electronic networks (Kennedy, 1993). Conversely, globalization allows the proliferation of information technologies, and creates a world wide market and clear strategic incentives for the adoption information technologies.

Observers of the twin forces of globalization and informatization have argued that these forces will likely have consequences far beyond the immediate economic context. Rather, they are likely to have profound cultural and social consequences. Certainly, globalization has contributed to a greater global consciousness that makes political and economic issues extend far beyond their immediate borders. Human rights, the environment, and workers' rights are just a few examples of issues that have gained international or global constituencies (Friedman, 1999).

Innovations in communication technology, in addition to driving economic globalization, have also transformed the media world and the spread of information, with important consequences for national as well as global governance. This began with radio broadcasting in the 1940s and has since been extended through television and satellite transmission to give even those in remote places immediate access to sound and images from the wider world. In some countries, new communication systems have even brought people news of the domestic events that is not available locally. Direct-dial international telephone and fax services have swelled the transborder flow of news and other messages. Another important development has been the sharing of information through links between computers around the world.

Exposure through the media to foreign cultures and life style can be both stimulating and destabilizing; it can inspire both appreciation and envy. Concern that the dominance of transnational media could result in cultural homogenization and could damage indigenous cultures is not limited to non-Western countries. Many people are worried that media images will strengthen the consumerist ethos in societies in the early stages of development. There are questions about distortion and imbalance as the world's news is filtered predominantly through Western prisms and

dissatisfaction that information flows from and within the developing world are inadequate. Apprehension about concentration in media ownership is linked to worries that this sector's power to shape the agenda of political action may not be matched by a sense of responsibility. These varied concerns have given rise to the suggestions that civil society itself should try to provide a measure of global public service broadcasting not linked to commercial interests.

Although there has been a spectacular expansion in the reach of some communications media, serious imbalances remain in access to information and in the distribution of even the most basic technology. Two billion people — more than one in three individuals in the world — still lack electricity. In 1990, Bangladesh, China, Egypt, India, Indonesia and Nigeria together had fewer telephone connections than Canada, which has only 27 million people. These disparities are repeated in the ownership of communications satellites, the key to media globalization. (World Bank, 2000)

Digitalisation

Digitalization is another problematic term, though perhaps more easily defined than 'globalization', with its politically dominated nuances. On its surface, 'digitalization; refers to the move from analogue modes of representation, such as Amplitude Modulation (AM) radio or 35 mm film, to digitalized formats, where information is stored in a series of 'bits' (binary digits) and recreated according to pre-defined algorithms.

However, when used in reference to the mass media, the term has a more specific, and one could say complex meaning. The development of new form of digital communication technology, leveraging even more powerful computing resources, is leading to what is termed the "information age". Fukuyama (1995), while disagreeing with the assertion, has noted that many 'gurus' of the information age have claimed that modern communications technologies will result in " a devolution of power downwards to the people and a liberation of everyone from the constraints of the centralized, tyrannical organizations in which they once worked".

Whatever the truth of the claim, digital technologies have undoubtedly changed, and will continue to affect the nature of mass media, and the relationship of the public with it. The first and most obvious change in mass media is the development of new format of media such as the internet (web, email, mailing list etc.).

The potential social and cultural implications of the digital age are considerable, but there are primarily considerations. First, many of the creative arts have embraced digital technology. Sculptors,

graphic artists, musicians and painters now produce digital creations.

Second, the notion of community may have to be rethought in terms of virtual communities through internet without physical proximity.

Third, consider the digital age might mean politics. A huge amount of political information is available in digital form on the Web. Ideally, this should result in a better-informed electorate. But there is the problem of the "digital divide". Most people will not have access to the Internet, because of the underdevelopment of the telecommunication infrastructure necessary for getting online.

Who are the beneficiaries of Internet Usage?

Disparity between developed and developing countries is evident in figure 1 while comparing distribution of internet usage in Asia with the rest of the world i.e., 31.7% and 68.3% respectively. Though at the face of it, there is not much striking difference in Internet usage but if we take away the internet usage of China, Japan and South Korea from Asia region it reflects a true picture of disparity of Internet penetration among Asia, Asia without China, Japan and South Korea and rest of the world i.e., 21.98%, 9.72 and 68.3%, respectively (Neilsen/NetRating, 2004).

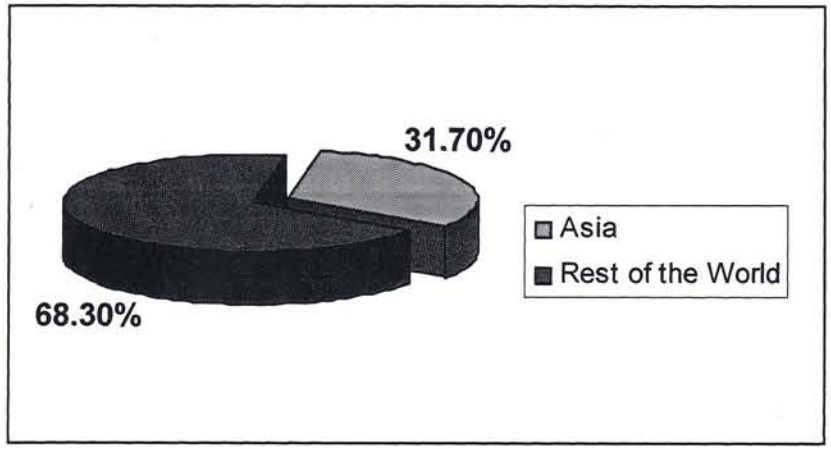

FIGURE 1. Comparison of Internet Usage in the World
Source: Neilsen/NetRating, 2004

One thing is amazing that the pace of growth of Internet is become faster i.e., 129.86% when we exclude leading Asian countries in data computation as compared to the rest of the world, i.e., 125.0%. However it is confirmed that estimation of internet use

needs to be treated with caution and sometimes with skepticism. Estimates of rapid Internet growth in Asia mask the fact that most Internet growth occurred in just a few countries.

Does the Internet distribution reflect disparity in Asia?

In Asian context, several countries enjoy faster growth (table 2) as compare to the leading countries of the world. Figures from Uzbekistan, Bhutan, Myanmar, and Azerbaijan suggest that new Internet connections grew to 6,400% to 2,400% in these countries of Asian region during last two years whereas the highest range of Internet growth was 68.8% to 10.8%. Though Internet penetration and percentage share in Asia do not support the growth rate due to huge population of these countries. In Asia, China, Japan, and South Korea maintained highest percentage as Internet users i.e., 33.7%, 25.9%, and 11.9%, respectively. Whereas, the Internet penetration was influenced by population in Hong Kong, South Korea and Singapore 72.5%, 62.4% and 61.0%, respectively.

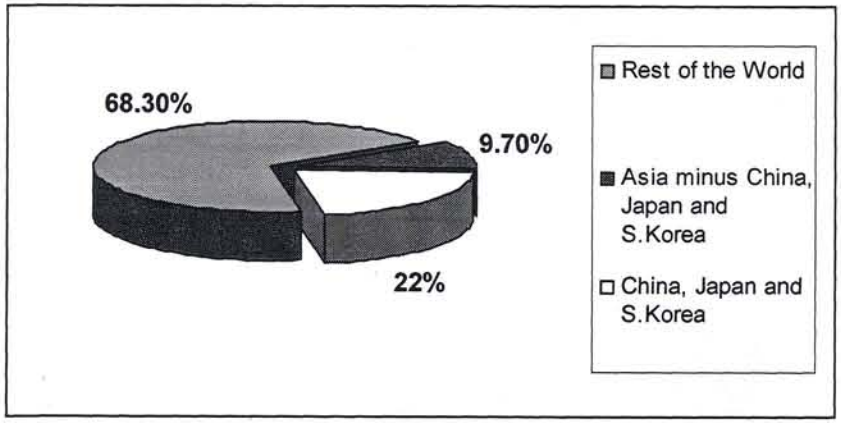

FIGURE 2. Comparison of Internet Usage in Asia (minus China, Japan and South Korea) and Rest of the World
Source: Neisen/NetRating, 2004

Figure 3 indicates that the percentage of internet usage in Muslim countries is very low. Malaysia enjoys the highest percentage of usage with 3.4% followed by Indonesia with 3.1%. Whereas Afghanistan, Brunei Darusslam and Maldives with 0% respectively, having the lowest percentage of internet usage. Malaysia also enjoys highest percentage of Internet penetration (34%) followed by Pakistan 9.4% and Maldives 5.2%.

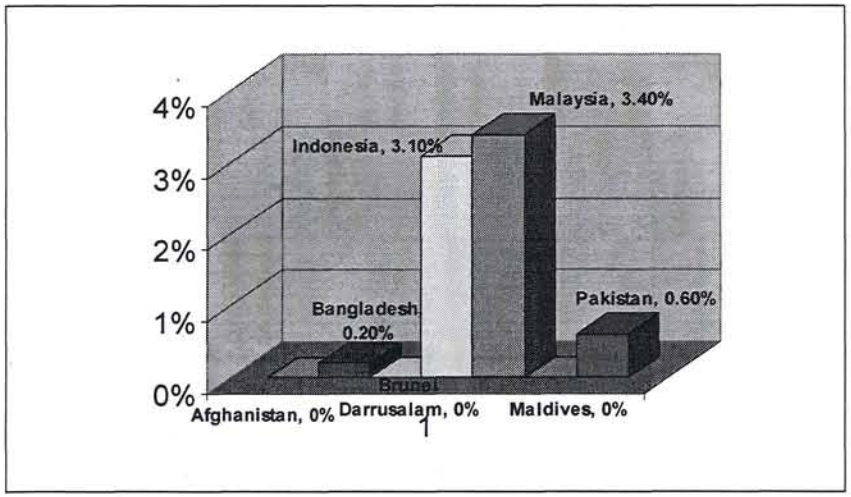

FIGURE 3. Internet Usage in selected Muslim Countries
Source: Neilsen/NetRating, ITN and other local sources updated on October 2004

Is Internet just for developed countries?

One consistent criticism centers on the domination of Internet use by developed countries. Access to information means access to power and most societies continue to ignore less privileged class of the society.

According to the Neilsen statistics (2004), at present 69% of the Internet users are confined to the top ten countries and rest 31% is shared by the rest of the world. America enjoys highest percentage of Internet penetration 69.0% (24.8% of World Users) followed by China 6.8% (10.7% of World Users), Japan 52.1% (8.2% of World Users), Germany 57.1% (5.8% of World Users), United Kingdom 58.5% (4.3% of World Users) South Korea 62.4%, (3.8% of World Users) Italy 49.3% (3.5% of World Users), and Canada 64.2% (2.5% of World Users) Figure 4.

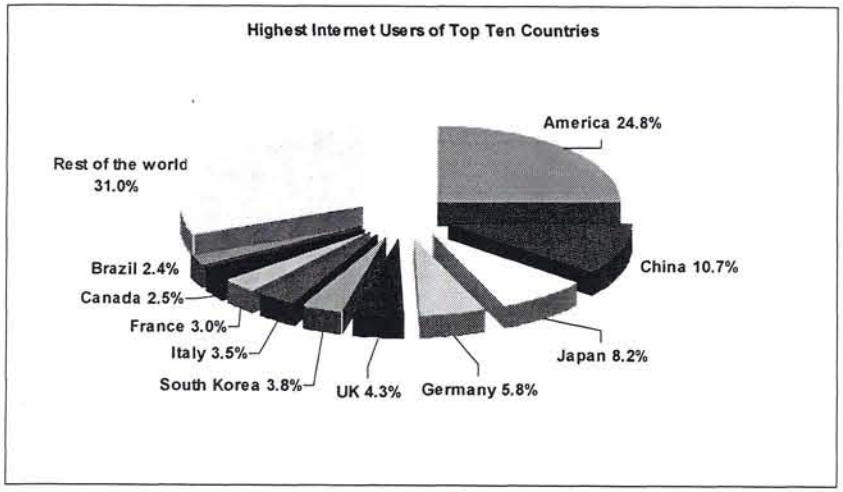

FIGURE 4. Top Ten Countries with Highest Number of Internet Users
Source: Neilsen/NetRating, ITN and other local sources updated on October 2004

Does Internet access reflect urban-based and rural-based scenario?

The following figure 5 reveals that the Internet dominates urban based countries in Asia and also positively related to its high literacy rate. Top three Asian countries Hong Kong, Macau, and South Korea having 100%, 98.9% and 80.3% urban concentration, respectively, and enjoy high literacy percentage, 94.0%, 94.5%, and 98.1%, respectively and enjoy high literacy percentage 94.0%, 94.5% and 98.1% respectively. Whereas Bhutan, Nepal, and Afghanistan (figure 6) with high rural concentration, i.e., 91.5%. 85.0%, and 76.7%, respectively, have also very low percentage of literacy, i.e., 42.2%, 45.2%, and 36%, respectively. Moreover, if we look at internet access penetration of these countries it confirms that the distribution of internet world wide is urban-based and rural biased. Moreover it also supports the idea that the literacy is one of the positive indicators of Internet access.

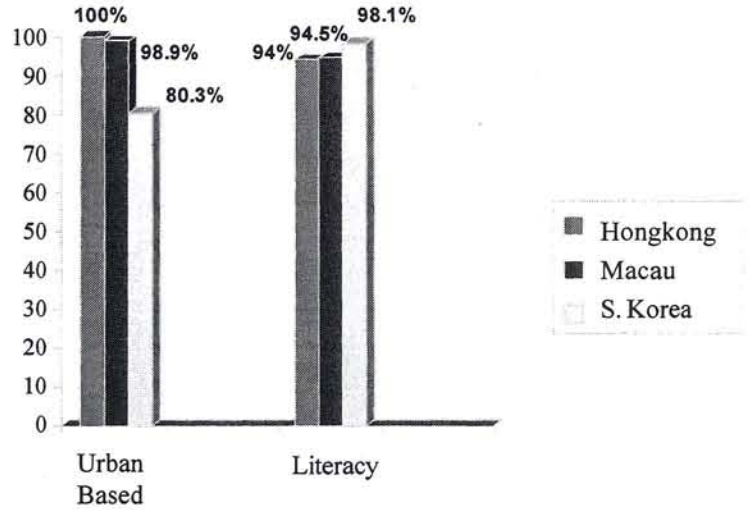

FIGURE 5. Relationship of Internet Usage of Urban Based Counties in Asia and Literacy Rate of Literacy
Source: CIA World Factbook, December 2003
Definition: Per capita figures expressed per 1000 population.

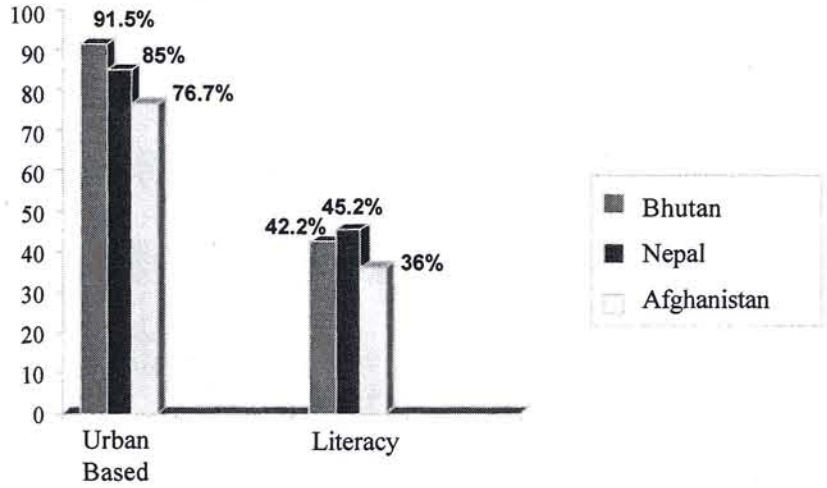

FIGURE 6. Relationship of Internet Usage of Rural Based Counties in Asia and Literacy Rate of Literacy
Definition: Per capita figures expressed per 1000 population.
Source: CIA World Factbook, December 2003

Constraints to Internet growth

Developing countries face three main constraints in improving Internet services rapidly: poor telecommunications, an inability to afford computers, and lower levels of education (literacy).

Poor telecommunications

Poorly developed telecommunications represent both an obstacle and a stimulus to Internet development. Many poor countries have limited telecommunications networks and the Internet is totally dependent on a minimum level of telecommunications infrastructure for its existence. The number of telephone lines per 100 people, a measurement known as "teledensity", is perhaps the largest constraint. The average teledensity among developing countries is just 1.5. (World Factbook, 2003)

Figure 7 reveals that per capita income is another indicator to determine the access to telephone facility in Asia. Afghanistan, Cambodia, Bhutan and Bangladesh have 1.0, 1.66, 2.80, and 3.61 out of 1000 have lowest teledensity as well as lowest income level in the world. In contrast to Hong Kong, Japan and Singapore have highest teledensity i.e., 519.19, 474.63 and 423.12 as per 1000 population respectively. These figures also support their high income level in Asia

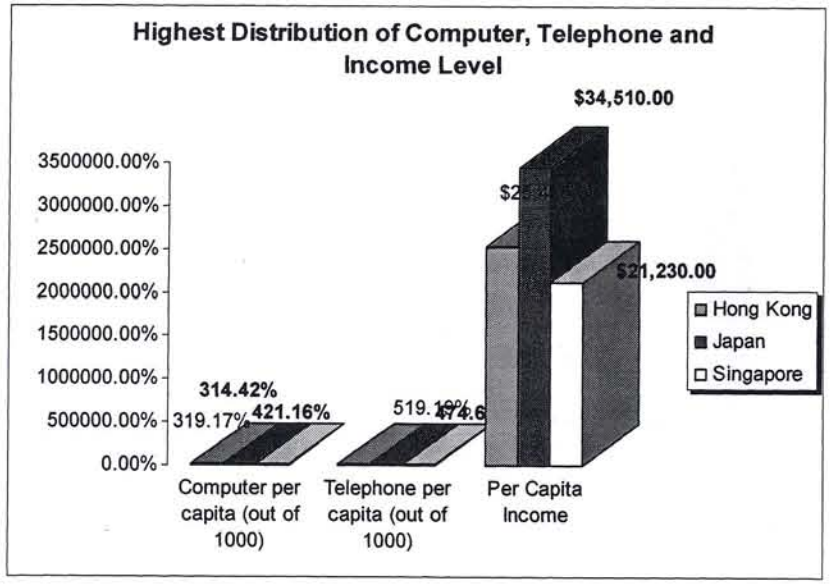

FIGURE 7. Lowest Distribution of Computer, Telephone and Income Level in Asia

Access to computers

Problems of access to telecommunications pale into significance besides of those gaining access to a working computer capable of connecting to the Internet.

According to the data, "An inhabitant of a high-income country is four times more likely to have access to a television set than inhabitant of a low-income country; 25% more likely to have access to a telephone; but almost, 8000 times more likely to have access to an Internet host computer" (World Factbook, 2003).

Figure 8 illustrates a very sharp digital division in Asian countries. While looking at the relationship of computer users and income per capita, it gives almost identical findings as already shown in above table with very slightest variation. Cambodia, Myanmar and Bangladesh have very little access to computer i.e., 1.14, 1.22 and 1.44 as per 1000 population, respectively. Singapore, South Korea and Japan come out with the highest number of computer users and also being richest countries in Asia.

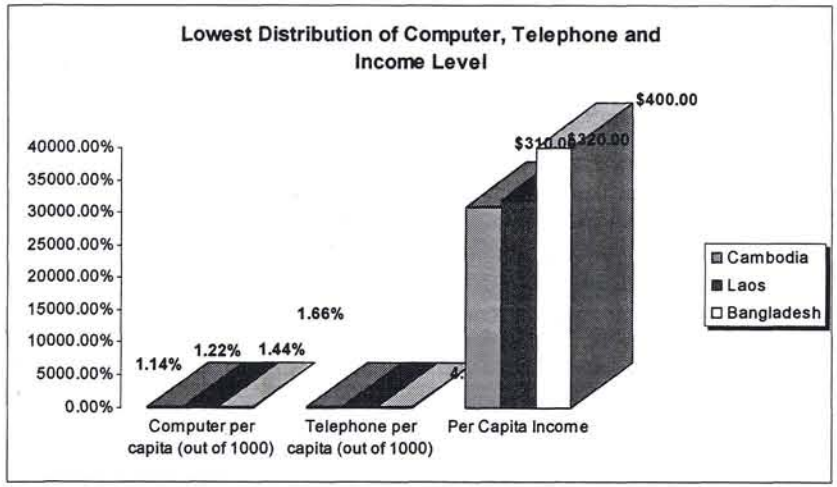

FIGURE 8. Definition: Per capita figures expressed per 1000 population.
Source: CIA World Factbook, December, 2003

Conclusion

Today, competitiveness in trade and in attracting capital is more knowledge intensive than ever before. Through information superhighways, new technology is eliminating some problems of access to knowledge. But the poor are left with little access to these superhighways, lacking both the vehicles, personal computers, telephones, televisions and education (literacy) and skills to drive

them. Many countries need assistance in managing the information revolution to avoid marginalization and exploitation. (1997 Human Development Report)

In the light of the findings, the Internet comes close to being a mass medium in the industrialized countries but a 'minority medium' in developing countries. Exclusivity in access to the Internet has led many to brand it as yet another technology that is available only to the few wealthy and powerful elite in developing countries. The true picture is more complex however, and despite lack of access the Internet is having a real impact.

Internet growth is accelerating faster in developing countries than anywhere else, but it will continue to be available only to a tiny proportion of people in the poorest countries for many years to come. The Internet is still very much in its early stages of growth everywhere and is in its infancy in developing countries.

Internet growth is booming because providing Internet services makes money. Generally, it makes money only where there are lucrative business and middle class markets and where telephone connections are good. None of these conditions applies to most rural areas in developing countries. In 1994, 63% of the population of developing countries lived in rural areas and this group represented 49% of the world population.

As a matter of fact, there isn't much demand for the Internet in rural areas. Installing a simple, affordable telephone service comes much further up most rural farmers' priority lists than a connection to a global, computerized network; installing a safe water supply is often more urgent still. The plunging price and rapid spread of mobile telephony suggests that telephony could be increasingly available but widespread access to the Internet remains a distant dream. The Internet is not a priority of developing countries in the communications sectors.

Analysts agree that the cost of putting computer in every home, of establishing the necessary telecommunications infrastructure, or, merely, of providing electricity to every house, is prohibitive. Computers cost proportionately far more in developing countries. The cost of an average personal computer is 15 times the per capita GDP of the poorest country.

Poverty is not the only problem facing those wanting access to the Internet. Political restrictions are common in many countries and several countries have a politically motivated policy of making access to the Internet unaffordable to all but commercial users. Access to the Internet in China, which is subject to tight regulation, costs around US$70 a month, for example. Tariff on imported computers can also make Internet access far more expensive. In India, for example, tariffs on computers reach 120 percent.

References

Baran, (2004). *Introduction to mass communication media literacy and culture.* (3rd ed.). New York: Mc Graw Hill.

Castells, M. (2001). *The internet galaxy*. Oxford University Press.

CIA World Factbook, December 2003. Retrieved from http://www.cia.gov/cia/publications/factbook/index.html

Chomsky, N. (1994). *World orders old and new*. London: Pluto Press.

Dominick, J. R. (2005). The *dynamic of mass communication: Media in the digital age* (8th ed.). New York: Mcgraw Hill.

Everett, M. (1998). Latin America online: The Internet, development, and democratization. *Human Organization, 57*(4), 385-393.

Friedman, T. (1999). *The lexus and the olive tree: understanding globalization.* New York: Farrar, Straus, Girous.

Fukuyama, F. (1995). *Trust: The social virtues and the creation of prosperity*. Hamish: Hamilton Limited.

Habermas, J. (1989). *The structural transformation of the public sphere*. The MIT Press.

Kaplan (1994). In Farhang Rajaee (Ed.). *Globalization on trial: The human condition and the information civilization*. Canada: Kumarian Press.

Kennedy, P. (1993). *Preparing for the twenty-first century*. New York: Randon House.

Kirkman, G., Peter, K. C., Jeffrey, D. S. & Klaus Schwab. (2002). (Eds.) Global Information Technology Report 2001-2002. Oxford University Press.

Kluver, R. (1999). In Thomas Friedman (Ed.). *The lexus and the olive tree: Understanding globalization*. New York: Farrar, Straus, Girous.

Lechuer, F. J. & John, B. (2000). *The globalization reader*. Massachusettes: Blackwell Publishers.

Masuda, Y. (1982). *Information society as post-industrial society*. Bethesda, M, D: World Future.

McChesney, R. W. (1999). *Rich media, poor democracy*. University of Illinois Press.

Mosco, V. (1996). *The political economy of communication*. London: Sage.

_____ (2000). Public policy and the information highway-access, equality and universality-report to the national library of Canada. Retrieved from http://qsilver.queensu.ca/sociology/vmpubpol.htm

Rogers, E. M. (2001). Digital Divide. *Convergence, 7*(4), 96-111.

Sprague, J. (2000, February 8). Asia's worldly past: Everything old is new again. *Asiaweek*.

UNESCO (2000). World Communication Report. Retrieved from http://www.unesco.org/webworld/wcir/en/report.html

UNESCO (1999). Human Development Report Globalization and Religion. Retrieved from http://unesdoc.unesco.org/ulis/cgi-bin/ulis.pl?database=ged&req=2&by=2 &sc1=1&look=new&sc2=1&lin= 1&mode=e&text=Huma n+development+report+1999 & submit=%A0% A0Go%A0%A0

United Nation Development Programme (1999). Human Development Report 1999, New York. Retrieved from http://hdr.undp.org/reports/global/1999/en/

Wang, G. (1994). Trading different paths: Informatization in Asian nations. Norwood: N.J: Ablex.