INTRODUCTION

*Only connect, and the beast and the monk, robbed of the isolation that is life to either, will die.*

[E.M. Forster, *Howard’s End* (1910), Chapter 22.]

Barring the odd beast and monk, just about everyone is connected these days (Wellman, 2005). The information and communication technologies (ICT) have intertwined computers, data storage systems, support software, and search engines to present the new media which has become a part of communities and households. The new medium of Internet, in particular has revolutionized the communication world. It first challenged and then fundamentally changed the way people learn, play, create, communicate and conduct business. The Internet is not just a technology, but an engine of social change, one that has modified work habits, education, social relations and maybe most important, our hopes and dreams. It is a social space, a milieu, made up of and made possible by communication, the cornerstone of community and society. As a medium, Internet is fundamentally heterogeneous. It is not a medium but a system which is tending to become as complex as the society of which it is claimed to be a virtual copy (Flichy, 2007).

The expression ‘new media’ has been in use since 1960’s encompassing an expanding and diverse set of ICTs such as satellite communication, computers and digitalisation. Its usage became more common with the entry of Internet in public domain in the early 1990s as a communication medium. The multifarious technologies that contribute to Internet’s wherewithal continue to enhance its capabilities for more, faster, diverse, two-way communication between users who have both control and choice. These properties have increased its diversity and have given communications power to citizens instead of to central authority.
(Croteau & Hoynes, 1997). In the new pixelled media environment, McLuhan’s soothsaying finds fresh meaning, as when he talks of a dispersed media structure whose centres are everywhere and margins are nowhere (Kumar, 2005).

Its increasing popularity as a communication medium in both the developed and developing societies has garnered the attention of communication scholars to fathom its promising developments, uncertainties and unsolved challenges in the horizon of the cyber society. The benefit it is capable of providing to the society depends to a large extent on what the users do with it. Such an assertion stems from the fact that audiences are active as well as selective in using a medium and its varied content. Against the backdrop of the notion of active audience, the present study seeks to explore and map the uses and gratifications of Internet in India. To provide a comprehensive background to this study, this chapter seeks to throw light on the evolution and nature of the Internet and its relevance in the uses and gratifications framework.

Internet today is becoming a part of life. The greatest legacy of this medium is the way it has effaced distances and made people gather information with ease and communicate instantaneously using multimedia modes, transact business and get entertained. The Internet is a medium like the town crier, the newspaper, the book, the telegraph, telephone, radio, and television set. Undoubtedly, it is a unique medium and the most sophisticated of all the media developed so far. The Internet has ballooned our orientation, metamorphosed us into global citizens, feeling connected seamlessly (Anand, 2009).

1.0 EVOLUTION OF INTERNET

In 2009, the Internet officially entered middle age and became 40 years old. It was on Sept. 2, 1969, Leonard Kleinrock and a group of about 40 people gathered at his lab at the University of California Los Angeles (UCLA) to observe two computers 15 feet apart send data to each other. This was the beginning of what became known as ARPANET, which later evolved into the Internet.
There are conflicting versions about the origins of the net. The more common story is that the net is a product of the cold war and it was built by the US military to protect national security in the face of nuclear attack (Hafner & Lyon, 1996). In another version, the roots of Internet are traced back to MIT psychologist Joseph C. R. Licklider, a devotee of Marshall McLuhan’s thinking on the power of communication technology. As early as 1956, Licklider is attributed to have envisioned a national system of interconnected home computers. His concept was very much like Internet of today.

However, it is the US military that is credited to have given birth to the Internet during the height of its cold war with the Soviet Union. If one were to suggest one single occurrence which led to the creation of the Internet, it would be the Soviet Union’s launch of the Sputnik satellite in 1957. The Soviet Union’s space exploration caused the then American President Dwight David Eisenhower to create the Advanced Research Projects Agency (ARPA), a new department within the Department of Defense. The ARPA was the answer to the rising American Cold War paranoia about military inferiority, fuelled not least by the Sputnik success. It was also the time of the Cuban missile crisis when nuclear war was a distinct possibility. The US military wanted a product which would endure a nuclear attack (Norberg, 1996).

To expand the use of the computer, ARPA founded the Information Processing Techniques Office (IPTO). At this juncture, the RAND Corporation, a US think tank, made a revolutionary proposal in 1964 for a computer network that would have no central authority and would continue to function even if a large part of it was destroyed. The solution was a network of computer networks, the Internet (Laursen, 1997).

1.1 The Birth of Time-Sharing, Packet Switching

The development of time sharing and packet switching sparked the creation of what would later become the Internet. Time sharing attempted to utilize the
increasing power of the few computers available to the research community by making it possible for several people to use the same computer simultaneously.

Donald Watts Davies put forth the principle of packet-switching which relied on a peer-to-peer computer network, in which all the computers on a network had equal status and data-forwarding capabilities. If a user wanted a set of data to be transmitted from one computer to another, the transmitting computer would break up the data into small packets measuring only a few bytes. These packets contained information as to their point of origin, their destination on the network, as well as information which would enable the computer on the receiving end to reassemble the data set as soon as all packets had arrived. When the IPTO realized the potential of this invention, a set of specifications for a packet-switching network was approved by the IPTO by 1968 (O’Neill, 1995).

At the same time, work was undertaken to implement a set of communications settings (termed a protocol) which would enable the diverse number of computer hardware and operating systems available over such a network to communicate.

On September, 1969 BBN (Bolt, Beranek and Newman) Technologies delivered IMP (Interface Message Processor), the first network computer to UCLA. Networking pioneer Vinton Cerf, who is often called the father of Internet, recalls that the hardware was an immediate success and a turning point. ARPA thus succeeded in creating the first effective long-distance computer network, that linked together four supercomputers and it was named the ARPANET (Laursen, 1997).

1.2 The Network Falls into Place

During the 1970’s when ARPANET was evolving in size and stability, a number of important developments occurred. Among the most noteworthy were electronic mail, developed by Ray Tomlinson of BBN in 1972 and the introduction of a set of new communications protocols, TCP/IP (Transmission Control Protocol/Internet Protocol) in 1982. The creation of Usenet in 1979 too was a turning point. Tom Truscott and Jim Ellis created a hierarchy of discussion groups on a wide number of
interests, from computer programming to car maintenance, and enabled the participants to read and post information and opinions in what became known as Usenet Newsgroups.

The creation of CSNET and BITNET in the early eighties signaled that the universities had begun to perceive networking as an essential tool for the research community. The US National Science Foundation created a new transcontinental network (NSFNET), and five supercomputing centers whose services were available to the research community at large. A high speed network connection referred to as the backbone was established between the five super-computing centers (Norberg, 1996).

1.3 A Net for All, and a Web Too

In 1989, the ARPANET was decommissioned, and in April 1995 the NSFNET reverted back to a pure research network, leaving a number of private companies to provide Internet backbone connectivity. Network traffic grew at an enormous pace. This could be attributed to the development of World Wide Web by Tim Berners-Lee and Robert Cailliau. The fact that the personal computer became a household item in the same span of time was also a factor (Laursen, 1997).

The World-Wide Web was conceived as a far more user-friendly and navigationally effective user interface than the previous UNIX-based text interfaces. The communications protocol devised for the WWW was termed HTTP (Hyper Text Transfer Protocol). In 1991, the WWW became available and this new tool was immediately picked up by the Internet community.

The World-Wide Web, Internet access for private individuals, as well as the increasing user-friendliness of the software, contributed to the meteoric rise of network use in the 1990s in developed countries. The WWW got another boost in 1993 with the invention of web browsers. E-mail services like Hotmail also
commenced (Laursen, 1997). Google, the miracle baby of Sergey Brin and Larry Page was born in 1998.

Many organizations owned powerful computers and linked them to the Internet. Once low cost, easy to use personal or microcomputers entered the picture, the Internet became accessible to millions of noninstitutional users. Bill Gates is regarded as the leader of the PC revolution and his company, Microsoft, as the world leader in software services and solutions. At times, it has been the target of criticism for monopolistic business practices.

Today, the Internet domain is agog with new and fascinating developments. Convergence, multimedia, Wi-Fi, apps and mobile web have become catchwords. New technologies like wireless communication increase the possibilities of the Internet by offering faster data transmission, richer multimedia, universal access, portability and connectivity across the globe. Bluetooth and Wi-Fi enable people to log on to the Internet on the move. Broadband connectivity has led to high speed Internet, faster data transmission and interactivity in contrast to the earlier dial up access. Social Networks like Twitter, Facebook, Orkut have become very popular in the Internet. This can be understood as a natural outcome of the increasing use of the Internet in our daily life.

2.0 GROWTH OF INTERNET

Several surveys have been conducted to project Internet penetration, user profiles, popular online activities, and behaviour and preferences of those online. There appears to be some variation in the figures of the surveys, yet these would be a valuable tool in getting a perspective of Internet use patterns and trends.

According to Internet World Stats (2009), Internet has penetrated 23.8 percent of the global population. It is most common in the first world countries, such as North America where it has a penetration of 74.4 percent of the population. The net is gaining in popularity in developing countries in Asia and elsewhere. In fact, the
fastest growth rates have come from Asian countries. China leads with 330 million users followed by US with 220 million users. With more than 1.7 billion Internet users around the world it is fast becoming a part of life.

In 2000, India had an estimated five and a half million users, but in 2010 the Internet user population is estimated at 100 million. India is one of the fastest growing Internet markets in the world today (Internet World Stats, 2010). Technology and market research firm Forrester Research (2009), in a report titled ‘Global Online Population Forecast, 2008 to 2013’, projects that India will be the third largest Internet user base by 2013 with China and the US taking the first two spots, respectively. The number of people online around the world will grow more than 45 per cent to 2.2 billion users by 2013 and Asia will continue to be the biggest Internet growth engine. The report estimates the number of Internet users in India to be 52 million and expects India to have an average growth rate of 10-20 percent respectively.

The India online landscape report (Juxt, 2010), describes Indian Internet usage statistics. The main highlights are that India has 51 million active Internet users of which 40 million are urban users and 11 million are from rural areas. The Internet is reaching 4.4 percent of Indians. The number of daily users, rural users and online buyers has increased indicating a growth in depth of penetration. Growth is relatively more in South India. Female users are inching upwards and the user-base of housewives is emerging. Email remains the most popular activity online with 94 percent using Internet for this purpose. Downloading music, chatting, job search, social networking also appear to be popular activities.

2.1 Rise of Mobile Web

Internet can be accessed through computers or mobile devices such as mobile phones. Increasingly Internet is reaching the new users through the mobile handsets more than PC’s. Internet access through mobile devices is growing by leaps and bounds. In India, the number of active mobile Internet users (those who
access Internet on mobile devices at least once a week.) is reported to have jumped in one year from 8 million to 25 million (Ohri, 2011). The launch of affordable and Internet-capable mobile handsets has pushed up mobile web access In India. Smart phones and low cost 3G-enabled mobile phones capable of high speed Internet access have contributed to this rise of mobile web. Another reason is the availability of cheap and innovative data packages or Internet surfing plans being offered by major mobile operators like Aircel, Airtel, Vodafone etc.

The increased availability of applications (apps) has also acted as a catalyst. Apps are tiny software packages designed and developed to retrieve and showcase content on particular mobile devices. Low speed is one drawback of mobile web. Accessing sites on the phone could prove annoying at times. To overcome this, apps are designed in such a way that they provide easy user interface and quick retrieval of content even on low priced handsets which usually have smaller screens and low data processing power. Applications are made accessible to users in two ways. They come as preloaded programmes on mobile devices. Many phones have preinstalled apps like Facebook, Twitter and Orkut. Alternatively, apps can be downloaded from application stores. Nokia (Ovi store), Apple (iTunes), Blackberry (Apps store) have their own apps stores. It is estimated that about 40,000 unique applications related to entertainment, social networking and utility were developed last year. An example is NDTV and IBNLive which features news stories and stream videos live from the TV channel studios. It is available on Apple iTunes, Android Market and Blackberry platforms. Naukri.com and Makemytrip.com are also available on Blackberry platform (Ohri, 2011).

Mobile web refers to Internet access on mobile phones and tablet computers. Although the former has become very popular, the latter appears to have few takers. High prices and low penetration are dampeners. Many tablet computers - like Dell streak, Apple iPad were launched last year, but their impact on the growth of mobile Internet has been insignificant.
Morgan Stanley Research (2010) has released data on Internet trends from 1960 with specific reference to the changing dynamics of mobile Internet. They estimate that mobile Internet is going to overtake desktop Internet connections in the future as it will be the preferred choice to connect to the Internet. They forecast that in just ten years time there will more than 10 billion units connected to the Internet.

3.0 HISTORY OF INTERNET IN INDIA

In India, Internet began with universities and research institutes. Internet services were introduced in 1991 by the Dept of Electronics (DOE) through the Educational and Research Network (ERNET) for use by public departments, universities, public and private research bodies and by non-profit organizations. ERNET was funded by United Nations Development Programme. Later in August 1995, Internet was offered to private individuals and organizations by Videsh Sanchar Nigam Limited (VSNL). And in 1999, it was liberalized. The first dial up e-mail network was set up between National Centre for Software Technology (NCST) and the Indian Institute of Technology, Mumbai in 1996 followed by connections to the US and Europe.

VSNL introduced commercial Internet in India on August 15, 1995, through dial up and leased line access. But the access in the initial days was not easy. Customers had to pay exorbitant amounts for Internet time plus additional phone charges for a dial up connection that was unreliable and slow. Delay in broadband access, controversies related to spectrum allocation and bureaucratic resistance to new technologies like Wi-Fi and Wi-Max, meant the Internet gospel did not spread at the pace it should have. However, this was one revolution that could not be stopped. The liberal telecom policy announcements of 1999, setting up of ISPs across the country and eventual availability of Internet through options other than dial up spurred it on. Wireless access, broadband, and net telephony also became a reality (Thomas, 2005).
The opening of the market to the private sector which lowered the prices catalysed the Internet boom in India. Several private service providers like Satyam infoway, Dishnet, Asianet began to offer Internet services in India shaking up the monopoly of VSNL Internet gateway. Internet penetration also increased. In order to reduce the digital divide and enhance access, Govt of India opened Internet cafés in different parts of the country (Chaudhary, 2004). The cyber cafés have played a big role in fuelling Internet development in India. Moreover, low broadband prices have also helped to increase Internet use.

Compared to many other parts of the world, access to the Internet content has been relatively free in India. Indians did not face too many government-imposed restrictions on accessing sites dealing with politics, religion etc. But that might all change. The Department of Information Technology issued new regulations, ‘Information Technology Rules, 2011’, under which any content deemed 'disparaging', 'harassing', 'blasphemous' or 'hateful' can be banned. The rules allow officials and private citizens to demand that Internet sites and service providers remove content they consider objectionable on the basis of a long list of criteria. Moreover, they require Internet 'intermediaries' – a broad term that includes anything from web sites like Google videos and Orkut to companies that host sites or provide Internet connections – to respond to any demand to take down offensive content within 36 hours. Oddly the regulations do not provide a way for companies to defend their work or appeal against such a decision.

The rules are based on a 2008 Information Technology Law that India’s Parliament passed shortly after a three-day siege on Mumbai by Pakistan-based terrorists that killed more than 163 people. That Law, among other things, granted authorities more expansive powers to monitor electronic communications for reasons of national security. It also granted privacy protections to consumers. Free speech advocates protesting the new regulations say the restrictions could severely curtail debate and discussion on the Internet and clamp down on freedom of expression. As the list of objectionable content is sweeping, they opine that India has put a
tight leash on Internet free speech (Bajaj, 2011). However, only future will tell how it will influence freedom of the Internet. Along with the new content regulations, the government also issued rules governing data security, Internet cafes and the electronic provision of government services.

Internet in Kerala brings to mind Akshaya, a landmark scheme implemented in the State in 2002. Though originated as an initiative to address the backwardness of Malappuram district, Akshaya became a landmark ICT project of the Kerala State Information Technology Mission to bring the benefits of this technology to the entire population of the State. The modus for this was establishment of grass roots level ICT centres at the Panchayat/Municipal ward level. Also, the successful implementation of FRIENDS project in Kerala has led to an increased sense of trust and reciprocity between the citizens and the State. Similarly, there have been various initiatives to take IT to the masses in different parts of India - IT@school, Gyandoot, eSeva, Drishtee, Tarahaat, Bhoomi, echoupals are some examples. At best these have been success stories limited is size, scale or scope. The digital divide is far from bridged (Jain et al, 2008).

4.0 RELEVANCE OF INTERNET IN INDIA

New media including the Internet have been perceived as an answer to many of the social, cultural and political problems that plague society today. There are some constraints in the use of new technologies like Internet in developing countries like India but these have to be assessed against the benefits. In fact, no nation wishing to survive the 21st century could neglect coming to grips with making computers and Internet a part of the development package.

Internet offers tantalizing opportunities for developing economies like India to bridge the technological lag of the industrial epoch and move forward abreast of the developed world. A later variant of the same theme and in fashion now, is
‘flatism’: that the entire world is a level playing field with easy entrances and exits (Kumar, 2005).

With the creative use of information and communication technologies, India is bringing the information revolution to India’s 700,000 or so villages, where over two thirds of the country’s more than one billion population live. By providing access to much needed knowledge, technology services and enterprise, these centres are helping to mobilize village communities. By acquiring new knowledge about their trade, farmers, fishermen, artisans and craft, people are improving their living conditions. A good example is the above mentioned Akshaya project of the Kerala Government aimed at bridging the digital divide by familiarizing computers to at least one person in every family. With that objective, quality ICT dissemination and service delivery facilities (Akshaya Centres) were set up within a maximum of 2 kilometres for any household. Today, Akshaya is acting as an instrument in rural empowerment and economic development through creation of functional e-literacy. The project is a catalyst in economic growth and creation of direct and indirect employment in the State by focusing on the various facets of e-learning, e-transaction, e-governance etc (Akshaya Project, 2011)

Barring a few examples like Akshaya, Internet in India is concentrated more in urban areas though its use in rural areas is increasing since its potential for aiding rural development has been recognized. There are compelling reasons to reach out to the rural market. The improvement in the lives of the rural people is foremost. The answers lie in technologies that are cost effective and easy to deploy, applications and services that are appropriate and a regulatory environment that applies itself to serve rural India. Language technologies are crucial to reach out to the masses in India who speak a multitude of languages. The affordability and availability of personal computers is another area of concern. As Jhunjhunwala & Ramachandran (2008) point out initiatives in rural areas cannot get far without solving the problems associated with erratic power supply. In these areas, Government support is indispensable for Internet development so as to include the
vast majority of the rural population. If enabled, it has the potential to transform itself quickly. The ability of the Internet to positively impact the lives of rural people has been amply demonstrated. Thus, Internet and other communication technologies can empower the rural populace such that they can chart their own futures, very different from what anyone could have ever imagined or written about (Jhunjhunwala & Ramachandran, 2008).

Besides providing information, education, and aiding e-governance and e-commerce, Internet can play a vital role in strengthening democracy through informed political participation and online campaigns. The recent past saw a spate of online crusades which have proved effective tools of mass protest and debate, quickly mobilizing people from all corners of the world. The burst of online activism was witnessed in the wake of the recent anti corruption agitation by Anna Hazare and after the Mumbai terror attack in November 2008. So also the Aarushi Talwar murder case in 2008 at Noida generated a lot of interest online.

The vast opportunities enabled by the information revolution must be harnessed for the benefit of mankind, and in furthering sustainable development (Parthasarathy, 2005). Governments in many developing countries have invested heavily in Internet related infrastructures to attain their development goals (Mansell 2004).

5.0 NATURE OF INTERNET

The most significant attributes of the new media are interactivity, demassification and asynchronization. This means that the new media technologies allow for more individualized communication where interaction can be on a one-to-one level and the interaction is asynchronous because both sender and receiver do not have to be in touch at exactly the same time in order to communicate. The current trend is from massification to individualization. Industrial society was a mass society with mass production, mass media and mass culture and so on. The information society
is becoming more individualized as new media are demassified. Some label it as narrowcasting in contrast to broadcasting (Rogers, 1986).

Barry Wellman (2004) opines that the evolving personalization, portability, ubiquitous connectivity, and wireless mobility of the Internet are facilitating a move away from interactions in groups and households and towards individualized networks. The Internet is helping each person to become a communication and information switchboard, between persons, networks and institutions. Groups have clearly become individualized networks; on the Internet and off it. The person has become the portal (Wellman, 2001, 2002).

The Internet technology is also asynchronous, meaning they have the capability for sending or receiving a message at a time convenient for a consumer (Papacharissi & Rubin, 2000). Basically, here we see a shift of control from source to receiver in a communication system. Also audience has more choice and accessibility. No one individual or organization has proprietary control over it. Although several Governments like China, Iran and U.S try surveillance and control its contents to a limited extent.

The Internet is a distinctive medium. In the past, each communication technology was a separate entity. Today, the distinctions are disappearing. “Convergence’ is the buzzword. Mobile phones, visual recorders, televisions, printers, and computers can now reside together in one item of equipment” (Clarke, 2004, p.79).

The nature of the Internet can well be understood from the wide range of activities pursued on it by people from different age groups. In a study titled ‘Generations online, 2010’ by Pew Research Centre, it was found that a high percentage of users (80-100 percent) across all age groups used Internet primarily for three purposes: E-mail, search, and health information. Social networking was popular among youngsters and its popularity progressively declined with age. The net was also widely used to get news, buy products, make travel reservations, and access Government websites. The popularity of online banking increased with age till 64
years after which it showed a decline. Only a small percentage of people used Internet to create and maintain Blogs, podcasting, online auction, donating to charity. Sixty to sixty nine percent of the youngsters used Internet for instant messaging, in contrast to less than nine percent of those above seventy four years (Pew Internet & American life project, 2010).

5.1 Internet: Possibilities and Concerns

The net is so vast and growing at lightning speed that each person’s experience with it can only be a tiny sample of the whole. Each user partakes of different Internet niches and the experience leaves one with markedly different views. “I am not sure that I know what the Internet is; I am not sure that anyone does” James Costigan (1999, p. XVII). The chameleon like nature of Internet makes it difficult to define it in specific terms. Its mutability makes it like a bowl of jelly, keeps on changing, meaning different things to different people at different times.

Let us take a look at the conflicting views of two popular communication scholars of all time, William Gibson and Marshall Mcluhan. Gibson is the ‘godfather of cyberspace’ and Mcluhan gave us some of our favourite expressions such as ‘medium is the message’ and ‘global village.’ The new technology has given renewed life to McLuhan’s ideas: “The human tribe can become truly one family and man’s consciousness can be freed from the shackles of mechanized and enabled to roam the cosmos” (1964, p.158). Mcluhan’s global village is an exciting place, a good place for people enjoying increased contact and increased involvement with one another aided by electronic technology. But on the other hand, Gibson points out how electronic technology turns us into indistinguishable non-individuals, rallying around products. We are united by buyable things, identifying not with others who share our common culture but with those who share some common goods. There is an ongoing debate on commercialisation of net. He adds that the net is a waste of time and yet believes that, this is exactly what is right about it. He opines that in its clumsy, larval, curiously innocent way,
internet offers us the opportunity to waste time, to wander aimlessly, to daydream about the countless other lives, the other people, in far away lands. In his opinion surfing the Web is a procrastinator’s dream. Yet people who see you doing it might even imagine you’re working (Gibson, 1996). In perspective, the possibilities appear to outweigh the concerns.

5.1.1 Possibilities

On the positive side, Internet has the power to empower. It gives a voice to the voiceless millions. It can be a powerful democratising force, offering greater social, economic and political participation to communities that have traditionally been overlooked (Bhatia, 2005). The potentials of the net was widely used by the activists of the Arab uprising in 2011 demanding democracy in Tunisia, Egypt, Libya, Syria, Yemen. Tunisia and Egypt witnessed an overthrow of previous regimes.

Online campaigns and cyber activism have immense possibilities in contemporary societies. In India, the trigger for many were the Mumbai attacks 2008, which had a massive impact on urban India, creating online forums to urge people to vote and become politically conscious. Cyber space was quite active during the 2009 Lok Sabha elections and the recent 2011 Kerala Assembly elections. Politicians tried to reach voters through their websites and blogs. The election watch sites lampooned corrupt leaders who have bled the nation. Online activity was witnessed not only amongst the contesting political parties, but also from voters and corporate groups. A plethora of websites particularly during election times offer a wide variety content ranging from pop songs, magic shows, to online games, opportunities to form your own cabinet to political cartoons, e-books and candidates' blogs, to surveys and opinion polls. A website indiavoting.com had games, songs and magic shows. The election websites also seem to have grabbed the attention of many non-resident Indians (NRIs) who are getting involved, participating and even funding these websites. Corporate groups also put out
"edutainment" websites mostly targeting the youth vote. One of the campaigns during 2009 elections was the *Jaago re* advertising campaign for Tata Tea, which had started in 2007. It was a campaign to promote four brands of tea, as tea cuts across all boundaries and acts as a wake-up call and rejuvenates. The *Jaago re* slogan ‘don’t just wake up, awaken’ was perceived widely as a social awareness campaign that tried to stir the multiplex-going, well-earning youth out of their complacency and spur them to vote (Pinglay, 2009).

But skeptics point out that with low penetration the net campaigns in India reach only a miniscule fraction of the voters. However, activists say it is commendable for an otherwise indifferent youth population to be involved and it is a good beginning.

Internet creates new vistas for education and learning. This huge storehouse of information is available to anybody, irrespective of class and national boundaries at any time of the day. E-learning technologies, digital libraries, smart classrooms offer unprecedented storage capacities beyond time and distance boundaries.

Internet has possibilities in rural development, telemedicine and e-governance. It has bridged the gap between those in power and the masses. Governments are making use of Internet for development, publicity, tourism, disaster management and so on.

E-commerce is coming of age in India. Websites such as startupduniya.com, Makemytrip.com, Rediff.com, naukri.com, indiatimes.com, eBay India, are some of the names that immediately come to mind from the Indian context when one talks of e-commerce. Changing lifestyles, shopping habits, multiple Internet access points and rising Internet literacy will propel e-commerce transactions in the coming years. Entrepreneurs with innovative ideas have proved that there is money to be made online. Sanjeev Bikhchandani’s naukri.com and Anupam mittal’s shaadi.com are two instances. Another ‘chug away’ success is the Indian Railways website. Banks, airlines also conduct online transactions (Bhatia, 2005).
Entertainment remains one of the most important functions of the net in modern times. Interactive multimedia, online games, social networking, downloading music, video, movies, photos remain very popular activities of Internet.

5.1.2 Concerns

Some early net pioneers like Clifford Stoll find little worthwhile in the Internet’s virtual life. He describes it as “an unreal universe, a soluble tissue of nothingness. While the Internet beckons brightly, seductively flashing an icon of knowledge as power, this nonplace lures us to surrender our time on earth. A poor substitute – it is this virtual reality where frustration is legion and where in the holy names of education and progress - important aspects of human interactions are relentlessly devalued.” (Stoll, 1995, p.4).

The moral danger inherent in the Internet has been defined as the easy availability of offensive material like pornography, hate speech, rumours and violence. Around the world, this fear has inevitably led to calls for regulations, particularly to protect children from the red light districts of cyber space. Pornography has been the cash cow of the net to date (Lee & Tamborini, 2005). The net has added a new dimension to the existing disparities of the world: the digital divide, one that divides people and countries into ‘information haves and have nots’. Uneven diffusion of technologies can deepen disadvantages and deprivation of equal opportunities. Cyber crime also needs to be tackled. Hacking, computer viruses, software piracy and credit card frauds are on the rise. The challenge of cyber security is multi dimensional owing to the very nature of cyber space, which provided anonymity as well as an ever increasing sophistication of attack tools.

It is misused by terrorist and extremist groups for propaganda and hate campaigns. Recently terrorists used unsecured Wi-Fi links to send e-mails. In the wake of terror threats Indian Government is planning to set up a centralised system to monitor communications on mobile phones, landlines and the Internet. The Government has introduced changes to the IT Act in 2011 which gives it the power to monitor,
intercept or block any content on the net. The need for net censorship stems from the 26/11 terrorist attacks in Mumbai in 2008 where in Internet and mobile technology was used to plan and execute the operation. India’s action is not isolated and follows a pattern among countries like US and China, who are targeting terror aided by Internet. Although, many view this as an invasion of privacy, Governments justify their action as it is aimed to protect national security and online strategic assets from the enemies of the State.

On the net, the confidentiality of information and privacy is not guaranteed. While the rules of privacy are still being worked out, websites are routinely hacked, databases sold and personal data tossed about as the cyber age ushers in new challenges of privacy. In the insecure edge of technology, passwords, bank account details, biometric data and medical records are vulnerable even as attempts are made to protect them. Net plagiarism particularly among the student community is another problem area.

6.0 INTERNET RESEARCH: THREE AGES OF INTERNET STUDIES

During the two past decades, Internet research has slowly assumed salience and communication scholars are seeking to fathom the multidimensional parameters of Internet as a medium and its uses by an increasing number of people everywhere. The focus of Internet research has changed over the years. Wellman (2004) describes the three ages of Internet studies ten, five and zero years ago. The first age of Internet studies has been termed as punditry rides rampant, when the Internet was seen as a bright light shining above everyday concerns. It was a technological marvel, thought to be bringing a new enlightenment to transform the world. In their euphoria, many analysts lost their perspective and succumbed to presentism and parochialism. They thought that the world had started anew with the Internet. They insisted on looking at online phenomena in isolation. They assumed that only things that happened on the Internet were relevant to understanding the Internet. The analyses were often utopian: extolling the Internet
as egalitarian and globe-spanning, and ignoring how differences in power and status might affect interactions on and offline. Socio demographic variables were not analysed. The dystopian had their say too, worrying that while all this razzle-dazzle connects us electronically, it disconnects us from each other.

Next came the age of systematic documentation of uses and users. Wellman opines that the second age began around 1998 when the realization dawned about the need for systematic accounts of the Internet as it would be good to describe it rather than just to praise it and coast on it. The documentation of the proliferation of Internet users and uses was based heavily on large-scale surveys, initially done by marketing firms (and with some bias towards hyping use), and later by governments, academics, and long-term enterprises such as the Pew Internet and American Life Study. These studies have counted the number of Internet users, compared demographic differences, and learned what basic things people have been doing on the Internet (Chen and Wellman, 2003).

The dawn of the third age reflected the transition from documentation to analysis. Research in the first two ages was comparatively easy. At first, no data was needed, just eloquent euphoria. The second age was low-hanging fruit with analysts using standard social scientific methods and some concepts to document the nature of the Internet. In the third stage the real analysis began with more focused, theoretically-driven projects (Wellman, 2004).

In India, Internet research is in its infancy. There is a pressing need to throw more light on the social aspects of this powerful medium, which is rapidly becoming popular among all sections of people.

**7.0 USES AND GRATIFICATIONS APPROACH**

Much of Internet research has been carried out by the followers of the uses and gratifications tradition, who anticipated the medium as an exemplar of active media selection that could further validate the core tenets of that paradigm. The
active audience paradigm examines media behaviours from the audience member’s view, acknowledging that media users control their own decisions (Stone et al, 2003). As Swanson (1992) explains, the most important contribution of the uses and gratifications approach is that audience is not impotent in the face of the media but is active and endeavours to use media content to serve their own purposes and interests.

In the abstract, the uses and gratifications theory seeks to explain (i) the psychological needs that help shape (ii) why people use the media and what motivates people to (iii) engage in media use behaviours to (iv) derive gratifications to (v) fulfil those intrinsic needs, within the confines of a particular socio cultural environment (Arnett et al, 1995; Rubin, 1983). This perspective also recognizes that (i) individuals differ along several psychological dimensions which in turn prompt them to make different choices of media and (ii) even individuals exposed to the same media content will respond to it in different ways, depending on their characteristics (Stone et al, 2003).

The uses and gratifications approach is a theoretical tradition that spans over seventy years. It places emphasis on audience decision making and fits into the category of limited effects theories. So it is viewed by its proponents as a welcome antidote to the earlier direct effects models by examining what people do with the media rather than what the media do to people (Katz 1959). Specifically, the uses and gratifications approach assumes that

- Media and content choice is rational and directed towards certain specific goals and satisfactions (audience is active and audience formation can be logically explained).

- Audience members are conscious of the media related needs that arise in personal and social circumstances and can voice these in terms of motivations.
• Personal utility is a more significant determinant of audience formation than aesthetic or cultural factors.

• All relevant factors for audience formation (motives, satisfaction, media choice, background variables) can in principle be measured (Mc Quail, 2005)

The uses and gratifications paradigm given below illustrates the fundamental components, structure and functions of this theory (Stone et al, 2003).

**Figure 1: Uses and Gratifications Paradigm**

<table>
<thead>
<tr>
<th>Needs</th>
<th>Motivations</th>
<th>Activity</th>
<th>Uses</th>
<th>Gratifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needs</td>
<td>Gratification Expectations</td>
<td>Pre Exposure Activity</td>
<td>Media / Channel Choice</td>
<td></td>
</tr>
<tr>
<td>Motives Activity</td>
<td></td>
<td>During Exposure</td>
<td>Media Exposure</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Post Exposure Activity</td>
<td>Gratifications Obtained</td>
<td></td>
</tr>
</tbody>
</table>

Needs have been classified into deficiency needs and self actualization needs. Media needs are a type of the latter. Motives reflect the desires created by the types of needs that require further fulfilment. Examples could be entertainment, information, companionship etc. Studies have identified motives associated with media use choices. For example, Livingstone found that escapism was the primary motive for watching soap operas (1988).
Gratifications refer to the cognitive and affective aspects of gratifications obtained from exposure that fulfil needs in the media use process. The degree of satisfaction with the gratifications obtained from media use can affect gratification expectations (gratification sought) (Stone et al, 2003).

7.1 Ritualistic and Instrumental Orientation

To explain why audience motives for using the desired media do not always appear goal oriented, Rubin (1984) distinguished between ritualistic use and instrumental use. The ritualistic use or gratification refers to consumption of media content out of habit and thus do not have well defined gratification goals. The instrumental use or gratification involves intentional seeking out of media content to satisfy certain needs. Papacharissi and Rubin (2000) suggest that there are two distinctly different types of uses, information seeking and interpersonal utility. These are linked to two opposing user profiles. Those who felt valued in their interpersonal environment considered the Internet to be primarily an information tool, whereas those who felt less valued in their interpersonal interaction turned to the net as an alternative to interpersonal communication, or to fill time.

7.2 Uses and Gratification Meets Internet Research

As the information revolution brings unprecedented choice among media options for entertainment and news or information, uses and gratifications theory has been applied to examine new media adoption intentions and decisions. The uses and gratifications research which holds the basic premise that the audience in any communication exchange is active and goal directed is perfectly suited to study the new medium, Internet, which has interactivity as its hallmark. Rice, Ronald and Williams (1984) aver that the new media provide fertile test beds for many of our theories and models. Scholars have suggested that the uses and gratification theory may be especially useful because of the mutability of the web or what Newhagen and Rafaeli (1996) call its ‘chameleon’ like character (P.11).
When examining the uses of new media, researchers have sometimes combined interpersonal and mediated motives. When comparing CMC and interpersonal communication motives, Flaherty, Pearce, and Rubin (1998) found that people used computers and Internet to gratify (a) interpersonal needs (i.e: inclusion, affection, control, relaxation, escape, and, pleasure) (b) needs traditionally fulfilled by media (i.e: social interaction, pastime, habit, information, and entertainment) and (c) other needs (i.e.: time shifting and meeting people) which are fulfilled by new media.

Studies on media use and gratification help us to better understand media diffusion and use patterns in different social contexts. Because computer mediated content does emulate, supplement and extend traditional mediated content, a degree of parallelism in the uses and gratifications between the two could be expected. Early studies do indicated that audience motives for computer mediated media use appear similar to those associated with traditional media use. However, developments in technology pose fresh challenges for understanding new uses and gratifications of the media. Also, the new media give an opportunity to further the application and scientific values of the uses and gratifications theoretical perspective (Stone, et al., 2003).

As pointed out earlier, Internet research is in its infancy in India. Therefore, there is a pressing need to gauge the uses and gratifications associated with the new medium of Internet in Indian context, especially among students who happen to be the most avid users of Internet. How has internet fitted in the media usage pattern? What gratifications are being sought by students from the Internet? Which socio demographic variables define their gratification seeking behaviour? Answer to these and related questions forms the essence of this study. The next chapter of the thesis presents a review of Internet studies from the uses and gratifications perspective.
REFERENCES


Chapter I


