CHAPTER-III
NEW MEDIA HISTORY AND GROWTH

3.1 INTRODUCTION

In new media study, it looks well established that there is little '**new**' about '**new media**'. As the name implies, newness is not itself new. Indeed, one of the most central and least controversial themes in the study of media history is the idea that novelty is more ordinary than rare. This idea is both familiar and misleading. The history of new media presents something more significant than merely another opportunity to see familiar distinctions.

3.2 HISTORICAL BACKGROUND OF NEW MEDIA IN INDIAN PERSPECTIVE

Today's essential and technological fact is that the digital computer represents new media's basic technology. The technological development that facilitated the appearance of new media was the networking of computers. As with the computer, to be an open platform is a necessary characteristic of the internet.

Some establish of computing, particularly **J. von Neumann (von Neumann, 1945)** had drawn a clear differentiation line between the machine (hardware) and the programs (software), and, in turn, had come up with the idea of the stored computer program. That separation is not a logical necessity in the design of a computer.

Still, its adoption has two crucial consequences. Firstly, it originates the new universally programmable machine. Secondly, computers became available with a minimum degree of programming created by manufacturers themselves. Programs were increasingly developed by companies and individuals without any direct relationship to the hardware manufacturer **(Campbell-Kelly, 2003)**.

It was only promising due to another unintentional event while the telegraph, telephone and components of a radio device were patented. Neumann decided not to patent the computer and allowed the design of a new machine to remain in the public domain from its beginning, such that its uses could not be fully regulated or controlled by individual or corporate holders of intellectual property rights. **(Campbell-Kelly & Aspray, 2004)**

It is now possible to assess the astonishing past implication of the continuation of a machine with a design in the public domain, universally programmable and can be altered by a large number of individuals. It has become clear that the occurrence has become barely visible; the computer may support various computing formats (text, sound and image). The technology is forty years old and began with the ARPANET network in the late 1960s. In the next twenty years, the crucial idea of federating the various networks emerged as an internetworking architecture became known as the internet. In 1980, Alan Kay with his co-workers at Xerox PARC began to give the computability of a personal computer to the individual rather than have a huge corporate organization be in charge. In the late 1980s and early 1990s, a different kind of equivalent relationship had been witnessed between social changes and computer design. Although it is causally unrelated but conceptually it makes sense that

the Cold War and the design of the World Wide Web took place at exactly the same time.

The practice of internetworking, the TCP/IP (transmission-control protocol/internet provider) protocol emerged for practical reasons of network reliability. It is a protocol structured according to the principle of end to end design. This means that it is neutral, regardless of the content format conveyed from one IP address to another **(Saltzer et al., 1984)**.

The procedure guarantees distribution regardless of the type of obtainable or future digital format. It bears emphasizing that such impartiality such in separation in light of the specific format of content conveyed facilitated the extraordinary development of the internet over the past forty years. When the protocol was created, no one imagined the later appearance of the World Wide Web or any of the audio and image formats that have been created since then. No one would have imagined that the customary and exact content sharing channels could have converged into a single channel based on TCP/IP **(Leiner et al., 1997)**.

Internet's most significant level is the rational level defined by TCP/IP. That level is open in the dual sense of being impartial and within the public domain; therefore, it has no possession and is only indirectly regulated by governments. The result is that any company or individual, in the absence of obstruction created by academic property laws may freely execute programs and distribute content online.

From the point of view of new media, the most important point is most likely the fact that the accessible technology at the end points of the internet is always the same: the open and universal computer. This means

that earlier technological differences of traditional media are blurring. While there is a clear, total distinction between the technology of sending and receiving in classical media, on the internet, the 'sending' and 'receiving' device is the same in both positions, i.e., and again, the universal computer. If technology and guideline in differentiates the positions, the same occurs with economic costs. It is comparatively true to state that the basic technology is economically nearby to nearly everyone, just as the sharing channel like internet is equally available to all. India is far beyond the high preliminary costs essential to create conventional mass media. And variable portion costs, whose values, as asserted by **Girardin**, were decisive in the industrial press, also drop radically on the internet. The emergence of new media represents the passage from enthusiastic, complex and expensive sending devices, and dedicated, simple and cheap receiving devices, to a single, multifunctional, and comparatively cheap device equal on both sending and receiving points, based on an open and also comparatively cheap technology of allocation. It represents the passage from one technology to another that in-differentiates previously differentiated positions.

In India, **Internet services was introduced in 1991 by the Department of Electronics (DOE) through the Educational and Research Network (ERNET) for use by public departments, Universities and colleges, private and public research agencies and by non-profit organizations.** United Nations Development Programme takes step to fund ERNET. In the year of August 1995, internet services were offered to private individuals and organizations by Videsh Sanchar Nigam Limited (VSNL). After the liberalization policy in the year 1999, the first dial up e-mail network connection was set up between **National Centre for Software**

Technology (NCST) and **Indian Institute of Technology (IIT)**, later it was connected to US and Europe.

Commercial Use of internet was introduced in India by Videsh Sanchar Nigam Limited (VSNL) on August 15, 1995, through leased line access and dial up. But the access in the initial days was not easy. Normal consumer had to pay unreasonably high amounts for internet connection and additional phone charges for a dial up connection that was unreliable and slow. Defer in broadband access, spectrum allocation controversies and bureaucratic work culture to new technologies like Wi-Max and Wi-Fi, meant that the proliferation of internet gospel did not 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 Internet Service Providers 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).**

Private sector which lowered the prices can accelerate the internet boom in India. After National Telecom Policy of 1999 several private service providers like Dishnet, Asianet and Satyam info way, start to offer internet services shaking up the monopoly of VSNL internet gateway. In order to reduce the digital divide between rural areas, urban areas and enhance internet access, Government of India takes very initial step to opened internet cafes in different parts of the country **(Chaudhary, 2004). The cyber cafes have played a big role in fuelling internet development in India. Moreover, low broadband prices have also helped to increase internet use and internet penetration rate.**

Access to the internet content has been relatively free in India. Indian government did not impose too many restrictions on accessing websites dealing with religion, politics. But that may all change. **Now Department of IT issued new regulations, 'Information Technology Rules, 2011', under which any content which is 'disparaging', 'harassing', 'blasphemous' or 'hateful' can be banned.** The new rules allow officials and citizens to demand that internet sites and private service providers remove that content which is objectionable in public space. Moreover, they require 'internet intermediaries' 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.

Indian parliament passed IT law in 2008 after a three-day siege on Mumbai by terrorist's organization that killed more than 163 people. Later the government of India granted more expansive powers to monitor electronic communications for reasons of border security and national security. Free speech advocates protesting the new law say the limitation could severely curtail debate and discussion on the internet at media space and clamp down on freedom of free speech and expression. 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. In addition to new content regulations, the government also issued rules governing data security, internet cafes and the electronic provision of government services.

3.3 INTERNET CONNECTIVITY AND USAGE PATTERN IN INDIA

Internet has become an integral part of modern existence. Internet has played a crucial in the emergence of the modern knowledge society. Several research studies have reiterated the importance of internet connectivity in the context of economic development of a country. Total internet subscriber base in India was approximately 16.5crore on March 31st, 2013 **(Telecom Regulatory Authority of India, 2013)**.

According to the 16th annual report of the TRAI published in 2013, the total number of fixed line internet subscribers in India (excluding internet access by wireless phone subscribers) as on 31st March, 2013, was 2.161crore with an annual growth rate of approximately 11%, and out of these, approximately 1.5crore subscribers had broadband connectivity **(TRAI, 2013)**. The total number of internet subscribers who accessed internet through wireless phones was nearly 14.3crore during the same period which accounts for about 87% of the total net subscribers in India **(TRAI, 2013)**. These numbers are extremely large when considered in isolation but, when examined in the context of the Indian population, which is approximately '121crore' **(The Registrar General & Census Commissioner of India, 2011)**, these numbers become negligible. This means that only about 13 to 14% of total Indian populace has access to internet. This limits the scope of online advertising industry. This also means that the growth potential for online advertising in India is enormous if the internet connectivity or penetration issues are resolved. Establishing new infrastructure for internet connectivity in a huge country like India is a herculean task and therefore, the best option for India is to utilize existing infrastructure for improving internet connectivity or penetration in

the country. The existing telecommunications infrastructure in India is substantial and may be utilized productively for achieving universal connectivity in the country.

There were 96.98crore wireless phone subscribers in India as on 31st March, 2015, with 55.57crore urban subscribers and 41.41crore rural subscribers **(TRAI, 2015)**. There were approximately 90crore wireless phone subscribers in India as on 31st January, 2014, with nearly 52.9crore urban subscribers and a little more than 36.4crore rural subscribers **(TRAI Press Release No. 13/2014, 2014)**. Nearly, 8.6crore internet users in India use mobile devices for accessing internet **(Avendus, 2013)**. This number is not exceptionally high in the context of the total mobile subscriber base in India but, is still larger than the population of many countries of the world. With rising purchasing capacities, declining prices of mobile devices, plummeting costs of accessing internet via mobile devices and introduction of significantly faster 3G and 4G services at reasonable costs, it may be safely predicted that mobile internet will see a greater adoption rate in near future. The entry of internet enabled mobile phones priced as low as Rs. 2000 and smartphone with a price tag of Rs. 3000 or even less is going to transform the Indian mobile market for better. Indian government's National Telecom Policy (NTP), 2012, proposes to utilize mobile phones for empowering the masses **(Uppal & Ajwani, 2012)**. This would mean more and more people will be included in the internet economy. This would translate into a bigger market and more lucrative opportunities for the online advertisers to reach to their desired target audiences.

The importance of internet connectivity for a developing country like India cannot be overstated. Internet may prove to be great leveler in a

country like India with highly skewed incomes and considerably low functional literacy rates. According to a **McKinsey report** published in December 2012, internet's contribution to Indian GDP is about 1.6% amounting to $3000crore **(Gnanasambandam, Madgavkar, Kaka, Manyika, Chui, & Bughin, 2012)**. **Mason (2010)** conducted a research to determine the economic impact of improving wireless broadband connectivity in India and found out that an increase of 1% in the wireless broadband penetration in India would lead to an addition of INR 16200crore to the Indian Gross Domestic Product (GDP) in 2015 **(Mason as cited in TRAI, 2012)**. The Government of India has recognized the importance of improving internet connectivity and is taking concrete steps to increase the same in the country.

National Telecom Policy (NTP) 2012 seeks to achieve Broadband on Demand and aims to utilize the massive telecommunications infrastructure in the country to make the citizens and the businesses in the urban as well as rural areas of the country a part of the web based knowledge economy and thereby, attempt to ensure equitable and inclusive development **(Planning Commission, Government of India, 2013)**. The Government of India has planned to connect all the villages with a population in excess of 500 with the National Optical Fiber Network in order to ensure universal connectivity in India and to achieve its target of providing broadband connectivity to at least 17.5crore subscribers by 2017 **(Planning Commission, Government of India, 2013)**. The Planning Commission of India has also allocated more than INR 3500crore for execution of the National e-Governance Action Plan in the twelfth five year plan **(Planning Commission, Government of India, 2013)**. All these efforts on the part of the Government of India to improve internet connectivity will not only be beneficial for the common citizens of the

country but, also the commercial establishments. Improved access to internet would mean greater audiences and a bigger market for online advertisers. Even if only half the population of India gets online, it would translate into a consumer base of approximately 60crore for the advertisers which are considerably more than the combined population of some of the biggest economies of the world including the United States of America, Britain, France, Japan and Germany.

3.4 INTERNET USAGE PATTERNS IN INDIA

There are more than 16.5crore internet users in India **(TRAI, 2013)**. 'Internet users in India spend 20 to 25 hours online per month same as their counterparts in Latin America, but only a quarter of the amount spent by those in Asia Pacific countries such as China and Malaysia' **(Gnanasambandam, et al., 2012)**. With the third largest online population in the world, three-quarters of which is aged below 35 years, India constitutes a dream market for any online advertiser **(comScore, 2013)**. India's online population is growing at a rate of 31% per annum making India the fastest growing online population in the Asia Pacific region and the second fastest in the world bettered only by Brazil **(comScore, 2013)**. A Deloitte report published in January 2014, predicts that by the end of June 2014, the number of internet users in India would surpass the number of internet users in the United States of America **(Deloitte, 2014)**. On one hand, they have a young online population which may be presumed to be more receptive to new forms of advertising communication and on the other, even at the current growth rate of the online population; it would take years before the market would be saturated. Women comprise 39% of the online population in India and women in the age group 35-44 years are the heaviest users of internet

amongst all age segments, followed by male audiences aged between 15-34 years **(comScore, 2013)**. The heaviest internet user segment, i.e. the women in the age group 35-44, are also the decision makers in case of most of the household purchases, especially pertaining to goods belonging to the Fast Moving Consumer Goods (FMCG) category. Approximately 60% of the total internet users in India visit online retail stores and spend about 29 minutes per month **(comScore, 2013)**. The abovementioned data, when put alongside the data which reveals that apparel, consumer goods, home furnishing and retail food feature amongst the top five fastest growing sub categories of online retail, point towards the fact that in the coming years online advertising may become the best form of advertising to reach the decision makers in case of purchase of these goods.

3.5 GROWTH OF NEW MEDIA

India is on a threshold of becoming a lead economy of the world as her demographic dividend will be the highest with largest population between the age group 18-59 years. With thrust and strength on information, India is all set to emerge as one of the largest information driven economy and the information dividend yield socio economic profits to the large section of masses. The culmination of information with technology has earned growth to many countries with India no more an exception as the impact of information dissemination leads to democratic policy formulation and decision making to provide better governance.

The information infrastructure is a must as the Government of India planned to establish the National Optic Fiber Network, with an aim to provide broadband connectivity to 2.5lakh Panchayats. With the deployment of 3G, 4G and BWA everybody would be connected and

information will reach to the remotest person. India could have 36crore mobile broadband connections by the year 2016. The Government initiative to make the information accessible to last citizen through the information infrastructure with 27 missions in 17 states, e-courts, Akash Ganga projects and others, which are meant for making the information available to the people is a step to grow the new media and related business like video conferencing for health, vocational education and other activities. The information infrastructure, when established will boost up connectivity of people with government. It will definitely multiply the growth driven by consumption, investment, employment, income, revenue and entrepreneurship. People having information access get connected to the social media networks and the dividend could thus be distributed. Government of India has initiated receiving of public opinion on various policy issues. Positive results of the experiment are displayed as the people are coming up with their own suggestions which are a much democratic way to policy formulation.

Digital India is an initiative taken by the present NDA led Government of India to integrate all the government departments and connect them with people of India directly to address the issues in a better way. The aim is to ensure that the government services are made available with less paper work to citizens electronically in less time. This initiative also includes plan to connect rural India with high speed internet networks. It is scheduled for completion by 2019.

Prime Minister, Narendra Modi launched Digital India programme on July 01, 2015 to transform India into digital empowered society and knowledge economy.

Benefits of Digital India: It is a giant leap forward to transform the country into a digitally empowered knowledge economy.

1. Digital India will help in leveraging India's globally acclaimed IT competence for the benefit of close to 130crore Indians. Common people will get a better access and insight into the administrative system. Some of the facilities which would be available through this initiative are Digital Locker, e-education, e-health, Digital Signature and a national scholarship portal. It will help in controlling corruption, getting things done quickly and will help to reduce paper work also.

2. All Universities on the **National Knowledge Network (NKN)** shall be covered under this scheme. The nodal ministry for implementing this scheme is **Ministry of Human Resource Development (MHRD)**.

3.6 RURAL INDIA AND GROWTH OF NEW MEDIA

Rural India, which generally lags behind urban India in technology adoption, has shown comparative growth rates in terms of adoption of internet.

According to an iCube report by **Internet and Mobile Association of India (IAMAI)** and **Indian Market Research Bureau (IMRB)** released in 2013, the number of active internet users in rural India would rise to 5.6crore by June, 2014. The same report also states that about 42% of the rural internet users prefer to access it in local/ regional languages and if availability of content in these languages is improved then the number of internet users would also improve proportionately **(iCube report as cited in Singh, 2013)**. This is a very lucrative proposition to the advertisers.

They have now been afforded the opportunity to take their brand messages to an enormous Indian rural market via internet.

A Kinectics report titled '**Moving World India**' published in February, 2012, estimates the size of the Indian rural market at $42500crore or approximately INR 25500crores **(Kinectics report as cited in exchange4media.com, 2012)**. The importance of online advertising in this market lies in the fact that this market is highly scattered and heterogeneous and therefore, cannot be targeted as effectively with the conventional media as with the highly personalized, localized and targeted online media.

No other technology has seen such an extraordinary growth that new media has seen. A question also arises here, why the India is experiencing the tremendous growth in this sector? Researcher found the reasons lies in the following factors:

- **Booming economy:** The economy of India is the tenth-largest in the world by nominal GDP and the third-largest by purchasing power parity (PPP) **(Wikipedia, 2013)**. The country is one of the G-20 major economies and a member of BRICS. On a per-capita-income basis, India ranked 141st by nominal GDP and 130th by GDP (PPP) in 2012, according to the IMF **(Wikipedia, 2013)**. India is the 19th largest exporter and the 10th-largest importer in the world. The economy slowed to around 5.0% for the 2012-13 fiscal year compared with 6.2% in the previous fiscal **(Wikipedia, 2013)**. These facts support the fact that Indian middle and lower class is capable of spending on consumer goods more and more at present.

- **Rapid expansion in country's middle class**: With one of the fastest growing economies in the world, clocked at a growth rate of 8.3% in 2010, India is fast on its way to becoming a large and globally important consumer economy. The Indian middle class was estimated to be 25crore people in 2007, by **McKinsey & Company (Wikipedia, 2013)**. It will reach 60crore by 2030. According to **Deutsche Research** the estimates are nearly 30crore people for all Middle Class **(Wikipedia, 2013)**. If current trends continue, Indian per capita purchasing power parity will significantly increase from 4.7 to 6.1% of the world share by 2015 **(Wikipedia, 2013)**.

- **Inexpensive technology**: According to **AC Nielson's 'The Social Media Report 2014'** assesses that, 'More people are using smartphone and tablets to access social media .....With more connectivity, consumers have more freedom to use social media wherever and whenever they want.'

- **Telecom expansion**: Telephony has traveled a long way in India since year of 1882. Total telephone numbers in the country stands at 96.09crore, while the overall tele-density has increased to 79.28% as of May 31, 2012 and the total numbers of mobile phone subscribers have reached 92.937crore as of May 2012 **(Wikipedia, 2013)**. The mobile tele-density has increased to 76.68% in May 2012. In the wireless segment, 83.5lakh subscribers were added in May 2012 **(Wikipedia, 2013)**. The wire line segment subscriber base stood at 3.153crore **(Wikipedia, 2013)**. Indian telecom operators added a staggering 22.727crore wireless subscriber in the 12 months between March 2010 and March 2011 **(Wikipedia, 2013)**. According to **Internet and Mobile Association of India** (IAMAI) report, the

number of active social media user base in India is 3.25crore (82% of active mobile internet base) **(IAMAI, 2012)**. According to a report titled **'Mobile Internet in India 2015'** jointly released by the Internet and Mobile Association of India and IMRB, Indian hit 3060lakh mobile internet users in December 2015, growing at an overall 77% from 2014.The report projects 3710lakh mobile internet users by 2016. **(The Times of India, New Delhi Feb 4, 2015)**.

- **Internet expansion**: The report, **'Internet in Rural India'**, prepared by IAMAI and the Indian Market Research Bureau, states rural India has 3.8crore claimed internet users and 3.1crore active internet users **(Business Standard, 2013)**. Active users are those who access internet at least once a month, while claimed users are those who have used internet at least once in their lifetime. According to a report titled **'Mobile Internet in India 2015'** jointly released by the Internet and Mobile Association of India and IMRB, Rural mobile internet users grew by a staggering 93% between Dec 2014- Dec 2015, yet only 9% of the hinterland has access to the technology **(The Times of India, New Delhi Feb 4, 2015)**.

3.7 GROWTH OF SOCIAL NETWORKING SITES: A SIMPLE STARTING WITH CLASSMATES.COM

Previous social networking websites Classmates.com (1995) was focused on ties with former school mates, and SixDegrees.com (1997), focused on indirect ties. Profile of the user could be created, messages sent to friends listed and other members could be sought out who have similar interests which could be found out from their profiles created. Despite these new developments, the websites were not profitable and sooner or later

discontinued. It was even described by the websites owner as simply ahead of its time. Two different models of social networking that came in 1999 were trust based, developed by **Epinions.com**, and friendship based, developed by **Jonathan Bishop** and used on some regional UK sites between 1999 and 2001. 2005, Social networking service My Space was reportedly getting more page views than Google till 2005, competitor Facebook rapidly growing in size. Orkut was launched on January 22, 2004 (now discontinued) by Google, popular in India. In 2007, Face book began allowing externally developed add on applications, and some applications enabled the graphing of a user's own social network - thus linking social networks and social networking. Various social networking sites have sprung up, catering to different languages and countries, Over 200 social networking sites using these existing and emerging social networking models. According to the survey by asset management firm **Piper Jaffray**, Instagram, a social media photo sharing platform is most popular among youth in USA. The survey that involved 9,400 youth with an average income of $68000, just 15% of youth called Facebook the social network of choice. Instagram was followed by Twitter and Snapchat. Facebook, which brought Instagram in 2012 was fourth in the popularity scale. **(Hindustan Times, 2015)**

According to comScore report, about a quarter of the total minutes spent online by the Indian internet users is on social networking. Google, Facebook, Yahoo! and Microsoft are the top four web properties in India, in terms of number of monthly unique visitors and total time spent by them. Social networking sites may prove to be quite valuable from the point of view of online advertisers. 'Social Media platforms have extensive databases containing information on consumer demographics, social connections, interests, habits and behaviours, thus providing a

wealth of information, which can be leveraged for targeted and relevant advertising' **(Deloitte, 2014)** The users usually go to these websites for recreational purposes and therefore, may be more receptive to creatively crafted relevant online advertisements.

'Social Media provides brands with unique opportunity to embed themselves into the lives of the consumers, deeply understanding their buying behaviour and preferences and thereby, influencing their buying decisions' **(IAMAI, 2013)**. Facebook had nearly 7.1crore active monthly users in India at the end of December 2012 with a year on year increase of 54 % **(Deloitte, 2014)**. Advertisers have also started to appreciate the power of this platform for promoting their brands. They intend to increase their Social media advertising budget by 70 % in the year 2013 **(Nielsen, 2013)** in order to leverage the unique opportunities provided by different Social Media websites.

Blogging is another internet activity that is rapidly ascending the charts. More than 1.1crore new bloggers have joined the blogging community in India between March, 2012 and March 2013 registering a Year on Year growth of 48% **(India Digital Future in Focus 2013, 2013)**. Blogging is another form of social networking which is mostly used for recreational purposes. Usually, content of blogs is highly specific in nature and gives a reasonable idea of the propensities of the audiences. This makes targeting audiences easier. One of the key features of blogs is that they are user controlled. The bloggers are given almost complete control over the type of advertising they are willing to carry on their blogs and the placements of various ads on the blogs.

Entertainment is one of the major online activities of Indian internet audiences. Indian consumers spend about 3 hours monthly on entertainment related activities **(Gnanasambandam, et al., 2012)**. About 74% internet users in India visited an entertainment between March, 2012 and March, 2013 with music and online videos being the most popular entertainment activities. More than 3.1crore people watched online videos on YouTube and total online videos watched across different sections was in excess of 5.4crore **(comScore, 2013)**. News or information based sections also attract considerable traffic in India with approximately 59% users visiting and spending about 34 minutes on them **(comScore, 2013)**. Travel is one category where India performs better than the world average. The reach of travel websites in India is about 38% with users spending approximately 27 minutes on travel websites as opposed to the world average of about 36% and 26 minutes, respectively **(comScore, 2013)**.

3.8 CONVERGENCE OF INFORMATION TECHNOLOGY AND NEW MEDIA FOR GROWTH

With the advent of web based technology married with technological innovations and IT revolution, people have come closer. Fast and efficient communication networks including rapid new media sites which provide blogging, micro blogging, video blogging chatting, photo sharing, information sharing services are gaining importance day by day. The combined impact of convergence of information technology, new media leads to easy life. The dependence of working class on the information easily spread by the new media has changed the lives of the people as they are now more connected than ever before with cost saving social media.

The Union budget 2013-14, that concerns on the burgeoning current account deficit (CAD) which is due to trade deficit arising as a result of dwindling export of Indian products and services world-wide. Therefore, the competitiveness of Indian exports becomes an issue to deal with as to how India can reap the rich dividend distributed by information facilitated by internet enabled social media. In view of the New Manufacturing Policy (NMP) which targets to make share of manufacturing in GDP to 25% by the year 2022, how the information infrastructure project can help in developing social media in India?

In the information driven economy, new media has emerged as a powerful influential means to ensure growth as reflected and empirically tested in various studies. Since new media emanates from internet and IT, the information sharing which are led by spiraling aspirations of middle class, increasing income level, changing habits of consumers and cost effective methods that impact on business, entrepreneurs, investment, consumption and employment is inevitable. The multiplier effect of social media on the growth of web based technology, peripheral services, innovative mobile telephony devices, tablets and PCs can be instrumental for the change. The increasing needs for information in financial service, public services like police, health, education and judiciary is need of the hour to integrate and adopt proper information infrastructure as it not only contributes to the economy but also enhances their performance. According to the **Internet and Mobile Association of India (IAMAI)** and **Indian Market Research Bureau (IMRB)** report **'growth in number of new media users can be attributed to the rising internet penetration in India, through increasing inroads of affordability of smartphone and consequent mobile internet use'**. More than three quarters of internet users in India engaged in social networking. That accounts for nearly

6.5crore social media users in urban India. India is the third largest internet user country in the world having 14crore internet users. India has 5.7% users of internet users worldwide and has 11.4% population penetration of internet users as on 30th June, 2012. And there are more than 20crore computer literates in India and 95crore mobile owners in India.

3.9 NEW MEDIA AND BUSINESS GROWTH IN INDIA

New media has a tendency to improve the business scenario of a country. The power of new media in terms of disseminating speedy and accurate information about the product, convincing the customers, minimize operating costs, instant feedbacks and response, brand building and customer relationship is well established as founded by various researchers. So, use of new media leads to value addition to their products, promotion revenue generation and helping the customers. Social networks provide a cost effective marketing channel, enable business houses, retailers and wholesalers to capture a rich source of customer information. New media has accelerated the growth of e-commerce as India has vast population of the aspiring youth. For instance, Dell had sold laptops and accessories over Rs.29.2crore purely via its Twitter account at dell outlets **(Dell, 2009)**. According to study titled '**Going Social: How businesses are making the most of social media**' done by a management consultancy firm '**Klynveld Peat Marwick Goerdeler**' widely known as **KPMG (2011)** that over 70% organizations operating around the world are active on social media. Adoption of social media is widespread for businesses in the emerging markets of China, India and Brazil who on average are 20 to 30% points more likely to use than counterparts in the UK, Australia, Germany or Canada.

3.10 INTERNET, NEW MEDIA AND GDP GROWTH OF INDIA

The role of new media and its impact on economic growth is well envisaged and as the largest democracy of world with huge customer base, India acquires significant position as there is much to be done to yield the potential of information technology.

It has been proven by **McKinsey Global Institute Report (2011)** that **internet plays a role in contribution to the Gross Domestic Production of a country. Internet contributes 3.2% of the Gross Domestic Production (GDP)** in India whereas developed nations like Sweden, United Kingdom, South Korea and Japan have equal to or more than 4% of GDP contribution. The study also reveals that India still has a potential for expansion of its internet penetration and new media can smooth the progress. In India, the percentage of total internet contribution comes from private investment 28%, private consumption 20%, public expenditure 5% and trade balance 47%. All nations have recognized the contribution of broadband to speed up development as according to a World Bank Report (2010), a 10% raise in broadband penetration leads to 1.38% boost in per capita GDP in developing countries. As per report by **Gartner**-a leading IT research firm, the revenue of social media stood at $1180crore in 2011 and expected to reach $1690crore in 2012 and $3400crore in 2016 worldwide. In India, total revenue of mobile service is projected 12.5% **Compound Annualized Growth Rate (CAGR)** during 2009-13 period.

3.11 ROLE OF SMARTPHONE AND APPS IN GROWTH

Affordable and internet enabled mobile handsets have pushed up new media access In India. Smartphones and low cost 3G-enabled mobile

phones capable of high speed internet access have contributed to this rise of new media. Another reason is the availability of cheap data packages or internet surfing plans being offered by major mobile operators. The increased availability of tiny software packages applications known as '**Apps**' has also acted as a catalyst. Apps are designed and developed to retrieve and showcase content on particular mobile devices in such a way that they provide easy user interface even on low priced handsets which usually have smaller screens and low data processing power. It is estimated that about 80,000 unique applications related to entertainment, social networking and utility were developed in 2015.

3.12 SUMMARY

The chapter starts with an insight into the history of new media and its growth. It talks about the essential aspects of new media like computer, internet and its origin at length. The content of the chapter is supported by previous studies and observation of the theorists and think tanks of the subject. With abundance of quotation and literature, the chapter is rich with contents in order to bring the idea home regarding new media and its expansion and the ensuing challenges.

In this chapter, the study has been focused on the domestic perspective of the subject; it talks about the historical background of new media in India in detail. Touching upon the commercial use and its perspectives, the chapter takes the study further to its futuristic implication. The growth of new media in India has been discussed at length with ample references and relevant studies.