Chapter 2
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This chapter deals with the previous researches which are relevant to the subject matter of the thesis and fundamentally linked with the current thesis. This chapter gives a brief glimpse of the whole thesis in such a way that the future reader will have a notion of research area and work.

2.1 The Purpose of Literature Review

Studying background information and knowledge of the research theme is the sole ambition of the literature review. The other purpose of literature review is to find out the appropriate research methodology, research design, potential variables and relationship between themselves and other concepts associated with the thesis. To identify the various data sources by different researchers. It gives direction to the researcher to meet and accomplish the definite ends. (O.R Krishnaswami, 1998)

2.1.1 Literature Review With Reference to India

Sanjit Kumar Roy (2008) has applied Uses and Gratification theory to derive gratification for Internet users and usages in Indian context. He has selected motivation items which are depicted below and applied exploratory factor analysis to find out specific gratifications for Internet use. The researcher had incorporated survey method and prepared questionnaire consisting of 26 motivational items and was measured on 5-point Likert scale from “strongly disagree” (1) – “strongly agree” (5). Moreover, the statistical analysis factor analysis is used with SPSS version 15 and most
importantly applying principal component method with varimax rotation for the outcome of latent variables. Six motivational items have come out which have Eigenvalues (E.V) more than 1. (E.V>1)

There are many motivational sub-items used which are described below and the variables which are highlighted italics have been dropped from the analysis since all those items are not significant as per their factor loading.

**Motivational items which were used in the questionnaire**

1: Helps share views with people globally.

2: *Helps get answers to queries.* (Low factor loading i.e., <0.35 and thus eliminated)

3: *Do not want to waste time dealing with people.* (<0.35 and hence eliminated)

4: Chat with anyone globally.

5: Introduces me to peer group.

6: Provides access to job opportunities.

7: Prepares me for globally economy/workplace.

8: Can search for a good job.

9: Helps me relax.

10: Provides me leisure.
11: Prefer spending time indoors. (<0.35 and thus eliminated)

12: Relieves stress through entertainment.

13: Provides wider range of exposure.

14: Broadens outlook.

15: Provides greater integration with world.

16: Gives me ideas.

17: Best way to know the world.

18: Easy to download information.

19: Is user-friendly.

20: Helps work faster.

21: Inspires me to excel.

22: Gives freedom to express opinions.

23: Charges me to do something new.

24: Is fillip to creativity.

25: Gives me feeling of being in control of things.

26: Gives me edge over others.
The above items have been reduced to six items after performing data reduction method. Twenty three items have been renamed as per their factor loading which are equal or greater than 0.35. Three items like “helps get answers to queries”, “do not want to waste time dealing with people” and “prefer spending time indoors” are eliminated due to low factor loading score. Renamed factors are labeled

1. Self Development (SD)
2. Wide Exposure (WE)
3. User Friendly (UF)
4. Relaxation (RE)
5. Career Opportunities (CO)
6. Global Exchange (GE)

And therefore, the above six factors are considered dominant motivational items for Internet users and usages.

Arvind Singhal, et al, (1989) have discussed the impact of new technologies on both urban and rural populations in India. He also mentioned about the role of technology and about technological determinism. According to him, technology is the sole cause of societal change in contemporary society. In that book, he told that technological determinants to a certain degree, implying that communication technology (along with other factors like government policies) is one of the important causes of social change in India. These changes are often beneficial, but may not be.
He also mentioned about the pitfalls or limitations of new media. He told new media creates inequalities and information gaps in the society. Little investigation has taken place in the West, or in the Third World, on the issue of equality and inequality in impacts of the ‘new communication technologies’. He introduced Katzman (1974) and his article that the new communication technologies would increase even more the amount of information for the already information rich, than for the information poor, thus widening the information gap between them.

In his book, he argued that in the third world countries, computers have the potential to replace labor in manufacturing plants like textile factories, thus greatly increasing unemployment rates. The impacts of the computers on the social class structure of Indian society are difficult to predict. A relatively small number of elite information workers, especially those with a high level of formal education, may form a bulge at the top of the social structure. Empowered by the computer, some middle class service workers probably move up in socio-economic status, while those who are in skilled occupations will probably be ‘deskilled’ by computer technology. Deskilling the process through which new communication technologies downgrade an occupation to a larger socio-economic status by replacing human skills with information handling equipment.

Srinivas R. Melkote, H Leslie Steeves (2001) have analyzed about ICTs and its impact on rural development. They also discussed whether ICTs are a boon or bane for development.

The author analyzed the aforesaid topics in the following manner.
Information and Communication Technologies (ICTs) for Rural Development

Since the mid-1970s, there has been a steady growth in information and communication technologies and their application in development. The US and several West European countries have become information societies, i.e., countries in which the production, processing, and distribution of information software and hardware are the main activities. The ICTs may be described as "electronic means of capturing, processing, storing, and communicating information".

There has been a significant proliferation of each of these technologies in the Third World since 1975. The Satellite Instructional Television Experiment (SITE) in India, the Palapa Experiment in Indonesia, and the experiments with satellite-based rural telephony in Peru is some of the examples of ICTs in the 1970s and 1980s.

Feiziya Patel (2005) advanced her thought in three major areas giving a suitable introduction to new media technology and its role in developing societies and how Internet and e-mail diffusion gave fillip to the developing world.

In the introductory part the researcher discussed about how human communication has taken a new meaning with the arrival of new forms of electronic media communication in the last quarter of the twentieth century. Rogers (1986) claims that we are currently experiencing a communication revolution since 'the social changes in society (are) resulting from the impacts of communication technologies, especially the computer'. According to him, 'computer networking is illustrative of the new type of human communication that is the hallmark of the Information Society'.
The new media, according to Rogers, have three fundamental forms of impact on human communication.

This article also reviews the role of technology in developing countries with special reference to the use of the Internet and the e-mail. The Internet is described as a 'network of computer networks that allows sharing of files'. (ibid)

Developing countries are categorized as the Third World. Rogers (1986) outlined the boundaries between the First, Second and Third Worlds from the western perspective. The first World represents the capitalists' societies of North America, Western Europe and Japan; the Second World refers to the Soviet influenced countries in Eastern Europe and the Third world is identified as Africa, Asia and Latin America (ibid). Rogers (1986) claims that the 'low average income in the Third World is identified is related to the fact that half of the people are illiterate, one out of five suffers from hunger and malnutrition, and one out of four dies before the age of five.'

In the second part the researcher introduced Mansell (1999) and his observation of introducing the potential of information and communication ideologies to the Third world countries. He asserts that 'if people in developing countries are unable to acquire the capabilities for using new information and communication technology (ICT) application, they will be increasingly disadvantaged or excluded from participating in the global information society. Mansell (1999) observes that 'new ICT applications may destroy more jobs than they create; the gap between rich and poor widen; and the huge capital investments required to strengthen national capabilities for using ICTs could divert resources from other activities that could have
Thirdly, different scholars and researchers are preoccupied with diverse aspects of the role of the Internet and e-mail in the developing world which suits to the current literature. The observations and recommendations are significant contributions towards modifying the Rogers’ diffusion of innovation theory. Rogers’ theory is primarily applicable to the First World and has been applied to third world situations in an inconsistent manner that was also insensitive to local cultural adaptation or to the political and economic situations in developing countries that are vastly different from First World situations.

Omar Rashid (2013) has put his views on Internet penetration along with mobile Internet usage in both urban and rural India give impetus to the online media and especially social networking sites. He also reported citing Internet and Mobile Association of India (IAMAI) in association with IMRB International that two-thirds of all potential and active users of Internet in urban India access social media. Most importantly, young and college going students remarkably use Internet both 84 and 82 per cent respectively. Moreover, data from IAMAI showed that Facebook ranked first position which accounted for 97 per cent of users in urban India.

2.1.2 Literature Review With Reference to Abroad

Veronika Kalmus et al., (2011) have found out underlying motives after surveying from Estonian population (age range 15-74 years, N=1,507). Findings revealed that two latent motives for Internet use were social media and entertainment (SME) and work and information after performing factor analysis. In the concluding
remarks the researchers showed with the help of General Linear Modeling (GLM) that social media and entertainment was most preferred gratified items chosen by younger age.

The researchers have selected broad range of motivational items which are consistent with current thesis are depicted below

**Motivation Items:**

**Social media- and entertainment-related Internet use:**

1. Searching for and managing information on social media.

2. Self updating on social media.

3. Uploading pictures and photos on net.


5. Making forums to express one’s views on important topics.

6. To participate in various online surveys and weblog.

7. Sharing music, films, programs (Bittorrent, etc.)

8. Uploading videos on YouTube and Toru.

9. Updating own website or blog.

10. Accessing online media online.

11. Relationship maintenance.
12. To search for information which are interesting

13. Putting views in online newspapers and other information portals.

14. To participate online cultural activities.

15. Getting involved online gaming environments.

**Internet use in work areas**

1. To search information on various public bodies.

2. To search information from local Govts. Web portals.

3. Official communication, managing of public business online.

4. Using e-services (e.g., tax board, forms, citizens’ portal, etc.)

5. Internal communication (intranet, lists, etc.)

6. Using online databases and data mining (libraries, data banks, etc.)

7. Online communication with clients and colleagues.

8. To search practical information (e.g., weather, timetables, etc.)

9. Using online banking like RTGS, NEFT and other activities.

10. To search information related to work and studies.

11. To search information for employment, real estate, tourism, etc.
12. Participating in civic initiatives, signing online petitions.

13. Online shopping and gathering relevant information for making purchases.

14. To follow e-newspapers and various information portals.

15. To search information and tips on relationships, family, children, childrearing, health and other aspects of private life.

Finally to explore latent factors for Internet use, the researchers conducted an exploratory principal component analysis of 31 online activities with varimax rotation. Out of 31 items selected for analysis, 1 item has been removed since it has not fulfilled the minimum suggested factor loading (F.L) (0.35 F.L in this case) and 30 online activities have been kept for further analyses.

Many of the motivation items described above are coincided and support the understanding of the current researcher and most importantly the research findings reveal that the variable entertainment and social media were the most preferred gratified items and these variables are showing its relevance in the current thesis also.

Owoyemi Toyin Eunice et al, (2006) have attempted to find out latent construct that influence Internet usage and underlying association between them according to students' gender. Survey method was incorporated with 31 motivational items were used through questionnaire with a sample of 336 students. The instrumentation was
done using 5-point Likert scale questionnaire depending on students' degree of agreement and disagreement. Collected data were analyzed through factor analysis with principal component method and orthogonal rotation with varimax criterion (Kaiser Normalization). Both KMO for sampling adequacy and Bartlett's test of Sphericity were used to confirm multicolinearity between variables. The researchers have assumed 0.30 as minimum factor loading for final interpretation. Findings revealed that after extraction procedure 20 factors in male and 15 factors in female usage profiles emerged as new constructs but some other departed. The dominating latent factors or constructs are given below which the researchers have been able to found out by applying factor analysis.

1. Latest Fashion Factor,

2. Admission Factor,

3. Health/Religion Information Factor,

4. Web Design/ File Transfer Factor,

5. Hacking Factor,

6. Tourism Factor,

7. E-Examination factor,

8. E-mail Factor,
9. Hotel Booking Factor,
10. Current Affairs Factor,
11. Scholarships Factor,
12. Online Purchase Factor,
13. Knowledge Acquisition Factor,
14. Entertainment Factor,
15. Pornography Factor.

It has been found that there is a noteworthy and visible gender differences in Internet usage pattern and out of all those factors, 14 factors are common to both the sexes. Moreover the researchers have suggested in implementing Internet facility effectively in secondary education in Nigeria for the use of this new technology to optimum level.

Dr. Robert Zheng et al, (2008) have articulated deficiencies from past research in the fields of ‘personality traits’, ‘aloneness’ and ‘age identity gratifications’ along with motives for Internet use. The researchers have explored the role of Internet in mediated social support and equally examined the role of psychological variables affect online social communication and behavior. The method of research is survey and the researchers have identified 17 motivational items using 5-point Likert scale for the preparation of questionnaire. For the measurement of items the researchers
have applied factor analysis and principal component method with Varimax rotation. Also they have grouped those 17 items into 4 items after conducting data reduction method with Eigenvalues more than one. And the four-factor solutions were renamed as follows:

1. Entertainment.

2. Relationship maintenance.

3. Recognition gaining.

4. Information-seeking.

Thus findings revealed that personality traits significantly influence the motives for Internet use for social compensation and mood management. Hence, the above three variables ‘entertainment’, ‘relationship maintenance’ and ‘information-seeking’ appeared to have been reflected in the findings of the current thesis.

Nicholas Michael Cummings (2008) introduced the term ‘second life’ and defined it an online environment or climate where millions of online users across the globe work together, teemed up, work in partnership, socialize and interact in varied manner through the use of avatars. The researcher has used the term ‘avatar’ which means ‘the character a player controls in a game or the personification of a player in a game’s world’. According to the researcher any player-controlled character can be referred to as ‘avatar’. Video-games and virtual world applications are occupied by player-controlled avatars. There is a general agreement that the young people are
more inclined to online video gaming environment and other online activities like participating in social media. Therefore the current concept of ‘second life’ and ‘avatar’ as featured in this article is appeared to have been supportive of current thesis as the young college students who are the subjects and more accustomed to keep busy with the social networking sites and Internet gaming.

Junho H. Choi et al, (2009) have identified six motivational items like convenience, save time, save money, less pressure, stay informed and enjoyment. Out of six motivational items two items like ‘stay informed’ and ‘enjoyment’ appeared to have been coincided with the current literature and supports researchers understanding.

They have explored online consumer behavior in three countries viz., the United States, the Netherlands and the South Korea. They have also tried to find out factors affecting e-commerce activities in finance, product and entertainment. Findings reveal that cross-national users in said countries did not have any notable differences in predicting e-commerce behavior. Rather they found that age, web experiences and motivation of having a less pressure were factors or predictors that affect e-commerce activities. Also they found that there are both global and local determinants of online consumer behavior and most importantly they said for further researchers and practitioners that it should be culture-general and culture-specific components in online commerce services and marketing.

For the measurement of different selected items the researchers have used
Likert scale to measure e-commerce activities. Also statistical analysis like ANOVA and t-test were also used to find out the cross-national online consumer behavior.

Junho Choi et al., (2004) have tried to establish the fact that motives for Internet use and its relations with users' attitudes, social values and relational involvement. Not only that the study developed cross-cultural comparison in the blueprint of motives and their relationship among said countries. The uses and gratification approach was undertaken to establish the motives of Internet users and perhaps supporting a strong theoretical background to the article. The researchers have applied factor analysis, a statistical application through which latent variables can be measured and consequently confounding or extraneous variables can be eliminated easily. Findings revealed that after performing factor analysis, the factors like 'information seeking' and 'self-improvement' were principal or dominant and most common reasons for Internet use among three countries- the U.S, the Netherlands and South Korea.

The first research question ‘what are the motives for using the Internet in each country?’ addressed by the researchers was being tested empirically to find out the motives beneath the Internet use across countries.

An online survey was taken into account in three countries and the questionnaire was translated into Dutch and Korean. Moreover, only Internet users of above 18 years of age can participate in the survey. Researchers have used 36 survey questions for the measurement of motives for Internet use. Among all the items, the factors like information seeking, companionship, amusement, and peer
pressure are consistent with the current thesis.

Further, they have measured attitudes, social values and social involvement for that they have made seven items consisting of both positive and negative items like speed of network, spam mail, service cost are synonymous with current thesis. Also, the researchers have asked some questions to respondents regarding the satisfaction towards conventional media and new media use which is at par with current thesis. Moreover, the researchers have factored all 36 items by principal component method with varimax rotation which is consistent with the current thesis.

Zhongdang Pan et al., (2011) have attempted to unveil ‘communicative potentials’ for the better understanding of uneven Internet use behavior. According to them, three sets of communicative potentials were identified viz., resources, utility values and literacy which were responsible for individuals’ access to Internet. The three sets describing above are allocating disproportionately in a particular society and shaping unequal network access into a pattern of behavior. They have analyzed data from Shanghai survey demonstrating structured inequalities in their society which are intertwined or entrenched in the distributional characteristics of Internet use.

Moreover, the researchers have successfully figured out structural constraints on the growth, development of new media and its all round utilization for the sake of knowing the contexts in which individuals welcome the Internet and its, systematic and systemic use. Further, the researchers have defined communicative potentials in three categories:
(i) Access, i.e., one's access to a new medium.

(ii) Utility expectancy, i.e., one's needs and expectation from the new medium.

(iii) Utilization capacity, e.g., persons Internet know-how for goal attaining.

Therefore aforesaid description of communicative potentials may influence adoption and usage behavior separately. Therefore, this article is synonymous with the current thesis in terms of use, usage pattern, gratification on the part of individual's access to Internet.

Moreover, the researchers have applied statistical application like factor analysis and pinpointed 21 factors and out of these detected items they eliminated three extremely rare factors like online shopping, conducting online retailing business and managing personal finance via e-banking from the final analysis. They have adopted exploratory factor analysis of the remaining factors. After performing the analysis, 4 factors were revealed accounting for 60.2 per cent of variance.

Moreover, the variables selected by the Zhongdang were all identical with the current thesis especially in selecting socio-demographic variables like age, sex, education, occupational status, monthly family income, home or family size. There are other similarities which are coincided with the present thesis in finding relationship between traditional media with new media.
Birol Gulner et al., (2010) have explored the motives of the Internet users. The data gathered through survey method on a randomly selected sample of 728 respondents from The Selchuk University. After performing factor analysis in the data set, 7 motives have come out which have effects on the use of websites like Youtube, facebook etc. The seven motives enumerated as per their importance like narcissism and self-expression, media drenching and performance, passing time, information-seeking, personal status, relationship maintenance and entertainment. And most importantly motives like 'information-seeking', 'relationship maintenance' and 'entertainment' are all at par with the present thesis. This simply implies that virtually all the researchers especially those who are working in the same area or dealing with the same kind of topic thinking alike and selection of variable in their work are all associated.

Moreover, the researchers have also performed regression analysis, descriptive statistics and factor analysis to measure different research questions. The most interesting outcome of their research after performing factor analysis were 1) narcissism and self expression 2) media drenching and performance, are the two factors responsible for motives of Internet use in contrast to generally held belief that finding old friends in these websites. Rather they found that the factor 'finding old friends' related to the six factor called relationship maintenance.

Another interesting result after doing factor analysis were male respondents give special attention or associated with 'narcissism and self expression' at the same time female subjects were more attached with the factor 'information seeking' and
'relationship maintenance'. The researchers have used Principal Component method and rotated the factors with Varimax Rotation of 33 gratification items where N=500. The first factor ‘narcissism and self expression’ accounted for 8.86 of Eigen value and maximum variance of 11.2 per cent after rotation and the related Cronbach’s alpha is 0.89, similarly the second factor ‘media drenching and performance’ accounted for 2.87 of Eigen value and 10.8 per cent is the variance after rotation and the Cronbach’s alpha is 0.80, and third factor ‘passing time’ has factor loading of 0.670 and Eigen value of 2.03 and variance after rotation 9.5 per cent and Cronbach’s alpha 0.76. The fourth factor ‘information seeking’ accounted for 0.637 of factor loading and it explained 8.7 percent of variance after rotation with Cronbach’s alpha 0.73. Similarly the factors like ‘personal Status’, ‘relationship maintenance’ and ‘entertainment’ were labeled fifth, sixth and seventh factors respectively.

Michelle Selinger (2009) has elaborated the concept of ICT and its role in education. According to her, if it is used appropriately then the both quality and quantity of education can be delivered effectively. She also said that there were many ‘duplication of effort’ in enhancing education through ICT and do require an immediate halt of those duplication so that one can escape from ‘expensive mistakes’ and consequently no longer be repeated or replicated the same mistakes. Also the students can be benefitted from the use of high-quality multimedia inputs and it will change the students learning experience and teachers can be playing a significant role in the design of ICT resources and its initiatives in education and should be responsible for the proper delivery of the ICT initiatives.
Dawn Poole (2007) analyzed the responses from 453 participants were analyzed by age, gender, ethnicity and amount of weekly access to computers at home. Findings reveal that the participants were more accepting of the technology-based survey items and were more likely to engage in those behaviors than non-technology items. Further paired-t tests indicated that technology based items are more acceptable to the participants than the non-technology items and significant difference is that male students are accepting more of both technology and non-technology items than females. Hence final findings reveal that age is a major factor in accepting the both technology and non-technology items. The college-students have more conservative beliefs and can take firm decision between what is right and wrong than high school students as they are still inclined to shape their moral behavior.(ibid)

Last Moyo (2009) tried to describe debates around digital media, especially the role played by the Internet and mobile phones in their formation of a democratic ‘public sphere’. He reviewed (Hacker and van Dijk, 2002:2) where they opined ‘digital democracy refers to a collection of attempts to practice democracy without the limits of time, space and other physical conditions, using [new] ICT...as an addition, not replacement, for traditional analogue practices.’ Therefore, he further told that major features of an ideal public sphere are interactivity or deliberative democracy, transparency or openness and accessibility to all. He said that participation on the Internet is curtailed by factors like access, costs, censorship, lack of technological literacy and technophobia. He cited the example from China where Internet access is severely controlled and under surveillance and is not as transparent as in other Western nations. Also the researcher talked about how Internet can be considered
as an autonomous and independent public sphere through the usage of e-mail, e-chats and webcasting to form democratic discussions. Moreover, he said that mass media is exploited by state and market forces to promote the status quo and allow participation and criticism only to a limited degree where elite's interests are being served. Further, the researcher told that the concept of senders and receivers of information in the traditional transmission process is blurred, very difficult to differentiate as in Internet communication, senders can be receivers and vice-versa and, therefore, shifts in conventional relationship between the senders and receivers by making it dynamic, fluid and dialogic-elements which are linchpins of egalitarian political public spheres where discussions must materialize into solutions to certain political questions. The researcher said about convergence and how it is the integration and fusion of media of diverse textual backgrounds such as newspapers, radio and television to form one strong versatile or multitalented medium and cited (Berger, 2001:27) where he opined that it can be seen as the ‘co-operation’, ‘alliance’ or ‘merger’ between print, broadcasting and online media. Two level of convergence were talked about like merger or fusion of text, sound and video into one text in a single medium and television and the Internet provide good example of this fusion and the second level of convergence is that of co-operation between media (telecommunication, broadcasting, print) that in reality remain separate entities but have merged online thus forming new challenges in terms of content and institutional regulation for policy makers.

W. Edward Steinmueller (2002) said that virtual communities are one of the foundations of the new economy in which interpersonal interactions achieved through
computer-mediated communication can meet needs and accomplish goals that would be difficult or impossible without the benefit of the networked information technologies that are creating an ever more populous cyberspace. The prevalence of information goods and services in cyberspace raises new opportunities for the realization of new forms of social interaction and exchange that are of substantial value to the users of these technologies. To exploit these opportunities, voluntary associations of individuals using the new computer-mediated communication—that is, virtual communities—are emerging. Further, he said that economic, social and technological factors are influencing the competition between virtual communities for the recruitment and retention of members as well as for their engagement and involvement.

Ithiel De Sola Pool (1977) has analysed regarding the four aspects of communication technology which are considered to be change agents for advanced societies like (i) the emergence of information society (ii) convergence of modes (iii) distance insensitivity of costs (iii) both scarcity and abundance of bandwidth. This literature is more concerned about the aspects of information society thereby the researcher said that there were considerable growth in information sector especially in United States and majority engaged professionally in intellective activities. Also the researcher said about information explosion which is fostering a social inequality or elitism and cited Katzman that everybody will receive information as the information flow in society grows, the greatest proportion of increase will go to those who already have the most of information, i.e., those who have resources of money, education and skill to absorb more of the new flow and hence the gap between information rich and information poor further widens.
Also the researcher is unsure about the effects of information society and fosters that society will certainly need as good, efficient a job of education in childhood and reeducation in adulthood so that many people have the tools and interests to operate in that society. Mass media, the schools will play a critical role in setting the quality of life in an information society.

Jasmine Harvey and Paul Sturges (2010) have described the impact of ICT on culture and societies especially in those countries who are yet to attain the information society. The researchers attempt to discuss with empirical support the importance of cell phone in developing countries for being an appropriate technology and have a positive effect. Apart from discourse analysis, they conducted survey and responses from filled up questionnaire were analyzed by SPSS and moreover, respondents were randomly selected using accidental sampling procedure in five locations. Those five locations are—in the office, the cybercafé, the households, educational environments, the market. The findings are very interesting as depicted in the study. Some people are accessing to show their 'affluent' socio-economic status to be very popular among their friends and community, while others enjoying the technological features of the cell phone. In educational environments, some are more passionate to show off their branded mobile such as Vodafone, Panasonic etc. symbolized as higher socio-economic status. Therefore, the researcher has projected that ICT have a positive impact on Gambian culture and can be a appropriate for right people in the right place.

Last Mayo (2009) mentioned about digital divide and other concomitant divides like geographical divide, social divide and democratic divide. According to the
researchers, inequality in access to ownership of new media can significantly affect the access to information from the new media or Internet by the disadvantaged communities and at the same time creating or reinforcing the socio-economic disparities based on the digital marginalization of the of the poorer classes, races and regions of the world. The researcher cited the words of Lisa Servon who argues that ownership and access do not necessarily amount to use in all cases where they have the skill. They may not find relevant content online for becoming active and consistent users. According to the investigator, physical access to computer and Internet is definitely a major variable for the better understanding and defining the digital divide. Also there is a urgent need by looking at other variables like literacy, technological literacy content, language, network and the most important one is cost which is correlated with new media access.

Moreover, the researcher defined technological literacy as the skills and ability of the individuals and communities to use the digital technologies and Internet for their socio-economic and political needs. Nevertheless he introduced the concept from Andy Carvin where they discussed about basic literacy, informational literacy and adaptive literacy are all vital ingredients in understanding the complex nature of digital divide. He also explained the geographic divide as lack of access to new media and the Internet due to geographic location. It is multidimensional and can refer to national, regional and global inequalities in access to Internet. Further he told that availability of digital opportunities is based on where an individual lives in terms of their proximity and access to the digital information networks. He said that global divide is about disparities in access between people living in the highly
developed economies of the north and those living in the less developed south. And regarding social divide the investigator opined that differences in access between various social groups due to socio-demographic barriers such as class, income, education, gender, age and race. The general trend in both the developed and developing countries is that the richer classes are the first to own and use these media technologies while the poorer people only get them as a result of the 'trickle down' effect when prices of computers and Internet connection become affordable. Also Internet is a capital-intensive; therefore, poor people are away from computers, modems, and software and Internet service providers monthly subscriptions may not be affordable them.

And 'democratic divide' as mentioned by Last Mayo that there are people who can use the digital media and the Internet as tools and resources for participation in political activism and those who cannot participate.

Ellen Johanna Helpster (2010) assumes and tests that generation is the determining factor for level of Internet use and life stage, establishes gender variations in Internet use. The researcher has taken a representative sample of 1578 Internet users by applying random selection method. There are four types of variables that the researcher has incorporated in his article, viz. gender, generation, life stage and Internet use. And also research questions were formulated and tested by statistical methods like factor analysis. The researcher considered three types for detailed analysis like sexual material question i.e., 'how often people looked for “sites with adult stuff” (M=1.25; SD=1.05), health related questions asked how often people
looked for information on medical care on the Internet (M=203; SD=1.05) and shopping like how often people said they 'get information about goods and services' and likewise. Not only that scores achieved were averaged (M=2.54; SD=.78. α =.78). The researcher also chooses to implement Likert Scale (5pt. scale) from (0to 4) which calculated regarding posting of messages on discussion boards, creating a slog or website, whether they had any social networking profile last year (M=.65; SD=1.06, α =.78). Also, online personal communication calculated how often Internet users took part in the activities like Instant messaging, e-mailing, chatting; (M=2.69; SD=.98, α =.62). The detailed finding summarized as that gendered nature of health (female) and sexual material (male) actions and also showed that men were more frequent users of Internet for shopping than women in Britain.

M.G Jere et al, (2011) have applied factor analysis with SPSS software package, principal component with varimax rotation was performed in selected gratified items whose Eigen values are greater than one with a factor loading of 0.40. The researchers have designed measure items to capture Internet and magazine gratifications. The items are –diversion, social escapism, exploration, career opportunities, surveillance, economy, information-seeking, interpersonal utility, status, self-development. Notably seven factors were extracted (eigenvalues>1) and accounted for 66 per cent of the total variance. Three gratification factors like social escape, economy and status were less effective factors and had been kept aside.
The seven factors are

Factor 1: Interpersonal utility with eigenvalue =10.5 and 34.98 per cent of variance.

Factor 2: Information Seeking with eigenvalue= 2.81 and 9.35 per cent of variance.

Factor 3: Surveillance with eigenvalue =1.89 and 6.29 per cent of variance.

Factor 4: Self-development with eigenvalue =1.36 and 4.53 per cent of variance.

Factor 5; Exploration with eigenvalue = 1.15 and 3.84 per cent of variance.

Factor 6: Diversion with eigenvalue= 1.12 and 3.72 per cent of variance.

Factor 7: Career Opportunities with eigenvalue= 1.01 and 3.35 per of variance.

Finally findings reveal that magazine usage provided superior on one dimension of gratifications factors than Internet usage.

Robert Larose et al, (2001) have identified new set of variables from social-cognitive theory which were very much likely to explain Internet usage. The researchers have developed self-efficacy and self-disparagement for the field of Internet behavior. They also defined that Internet addiction was the result of crisis or deficient self-regulation within domain of social-cognitive theory. Moreover, they analyzed negative consequences of online behavior and its impact on Internet usage pattern. Survey method was incorporated distributing Likert-type questionnaire to 171 subjects. And for the measurement of hypothesis the researchers have applied statistical method Pearson product moment correlation and multiple regression. The researcher hypotheses are a) expected activity, pleasing sensory, novel sensory and
social outcome expectations are positively associated with Internet usage and after performing correlation matrix there is a significant relationship between variables expected outcomes ($r=.48, p<.001$), pleasing sensory outcomes ($r=.37, p<.001$), novel sensory outcomes ($r=.32, p<.001$) and social outcomes ($r=.37, p<.001$) are all positively related to Internet usage.

Further findings supported their second hypotheses that 'expectations of negative Internet outcomes will be negatively related to Internet usage' i.e, negative Internet outcomes were contrary to Internet usage ($r= -.16, p<.05$) and hence supporting the second hypothesis. Similarly, other results revealed that self-efficacy ($r=.65, p<.001$), self-disparagement ($r= -.48, p<.001$), self-slighting ($r= -.46, p< .001$) and self-perceptions of Internet addiction ($r=.65, p<.001$) were all related to Internet usage the way researcher hypothesized.

Ting Yang et al (2011) have tried to find out Internet usage pattern and gratification of college students in two countries China and Korea and made comparative study between these two countries.

Findings revealed that Korean students have higher Internet gratification level than Chinese students. The researchers have applied Uses and Gratification approach as a strong theoretical framework and found that there is a positive correlation between Internet gratification level and addiction level. Moreover, research results indicated that Gratification Obtained (GO) is higher than Gratification Sought (GS).

For the above findings the researchers formulated research questions like

a) Is there any Internet usage motivation differences between two groups?
b) Is there any Internet gratifications differences between two groups?

c) What is the relationship between gratification level and Internet addiction level?

To establish associations between variables the researchers have applied survey method composed of demographic variables, Internet usage situation, gratification level measurement, Internet addiction level measurement. Likert-type scale was formulated with 1 being strongly disagree and 5 being strongly agree. Moreover, they measured difference between two groups through Chi-square test and found that there were no significant difference between two groups Internet usage motivation but information seeking (p<.01) and online shopping (p<.01) were significantly different. In another segment like to test the gratification level in two countries the researchers have applied t-test and findings revealed that Internet usage gratification difference between these two countries is significant i.e., (p<.01) and Chinese group is less satisfied (M=2.76, SD=.60) than Korean group (M=3.16, SD=.54).

When measuring the relationship between gratification and addiction Pearson's correlation was utilized and found that in Korean groups, there is a positive correlation between Internet addiction and Internet gratification (Pearson's r=.61, p<.01) and when it was examined in Chinese students, likewise both Internet addiction and Internet gratification is positively associated (Pearson's r=.26, p<.01).

Anabel Queen-Haase et al (2010) tried to explore comparison between these two media and how these two social media satisfy needs of the users. The researchers have employed both survey and interview method for the data collection. They have
applied Likert scale starting from 1 = never to 8 = several times a day and also identified 25 items or gratifications for measurements but after performing factor analysis with principal component method and also with varimax rotation only 24 items had been included since one item did not satisfy the suggested factor loading. Equally t-tests were employed to examine gender differences in the factors. Finally they applied OLS (Ordinary Least Squares) regression to examine the association between gratification obtained and use of Facebook. Factor analysis revealed six gratification items like pastime, sociability and social information. Also research findings conclude that Facebook is mainly used for fun and know about various social activities in user’s own network while instant messaging is predominantly for maintaining social relationship and social development.

2.1.3 Literature Review on Internet Security and Cyber Censorship

Shalini Singh (2012) has reported in a national daily that the ongoing debate on Internet regulation based on IT Rules, 2011 likely to be analyzed in the Geneva over India's approach to UN General Assembly, for the government regulation of Internet. India has offered to form a forum called 'Committee for Internet Related Policies' (CIRP) to look into varied Internet policies and to monitor Internet related disputes when arises. There are other points in the list of proposal that CIRP to be funded by the United Nation and also to run by its staff which is simply indicative of the fact that the Internet governance will chiefly be controlled by its member states. Moreover, she reported that yet Internet is filtered and monitored by a voluntary group ICANN or Internet Corporation for Assigned Names and Numbers and it has
its headquarter in California because the very concept of Internet took place in the U.S. As she opined that India’s move to place such kind of proposal may create controversy both within and across the global information scenario. Nevertheless India’s proposal seems to have shift to government control rather than a participative model (ibid). Apart from this it is important to mention that many countries have already started to implement the complete doctoring of Internet especially the China, Russia along with Uzbekistan and Kazakhstan. These countries have passed a resolution ‘code of conduct’ in the UN for Internet regulation. Replicating the same feelings percolate to Director of ITU echoed “the whole world is looking to a better solution to Internet governance, unwilling to maintain the current situation.”(ibid)

Parminder Jeet Singh (2012) reacted in a national daily where argued for the formation of CIRP as he questioned that it is under government control or under OECD (Organisation for Economic Co-operation and Development. Moreover he questions of ICANN’s claims to be a independent body of regulating Internet rather it is working under the aegis and delightful working of U.S government. He also raises many contemporary issues relating to global Internet governance viz., role and responsibilities of various Internet giants like search engines and social networking sites, transnational data flow, IPR and access to knowledge, cultural multiplicity, intrusion to privacy, data security and protection, issues of human rights etc. Currently the U.S law is monopolizing global Internet companies as those are U.S based. U.S hegemony not only to check or curb Internet but they have their interests in dominating the global economic, cultural, political and security scenario. Hence, the U.S hegemony is not only restricted to conventional media but to control this new medium
Internet under the guise of free flow of information. This free flow of information is imbalanced from North Pole to South Pole. The former is claiming and over emphasizing it a ‘net neutrality’- typically an egalitarian principle of the Internet but in practice it is the one-way flow and monopolization of Internet business which is the sole cause of the erosion of decentralized, bottom-up approach as enshrined by the author. Hence it is futile to think that India’s proposal to take over decentralized structure of Internet governance and also formation of CIRP is more multi-stakeholder as claimed by the author.

Shivshankar Menon (2012) has raised concern over cyber security and many problems associated with it, the first being the problem of cyber war and cyber attacks, an unforeseen fear, for example, ‘Stuxnet’ and ‘Ghostnet’ which may cause unwarranted malicious attacks in the system and consequently growing concerns over Internet security related issues. Growing concerns over cyber crime have increased exponentially in today’s scenario especially the evolution and revolution of ICT brought power to the anti-social groups or miscreants or terrorists. It has offered them the means and ways to terrorize, threaten against the powerful larger groups. Here the author has unveiled many inescapable and uncomfortable contours of ICT which cannot be denigrated. As he opined ‘technology provides lethal powers to the small group terrorists and is ranging from the benign to the dangerous, since it is value-neutral.’ There are other popular movements in the West Asia today which have many positive impacts on the society for instance the mobilizing people and influence opinion against the powerful regimes across the Arab world, popularly known
as Arab Spring. To quote him ‘autocratic regimes across the globe now take the power of ICT very seriously’.

As he argued that for defense, all the major powers are preparing offensive cyber capabilities as well as cyber espionage or spying. Equally the terrorists are also developing the same in the name of equalization. Be it individual or larger or smaller groups everybody is utilizing cyberspace for the interest of their own needs. It is India who is little lazy in giving attention to all those issues. Therefore, the government is preparing itself to counter attack these malicious cyber attacks and cyber threats in unsafe cyberspace. Hence the government is in a new mood to start different bodies which can protect cyberspace slowly. The bodies like NTRO and CERT-IN have already showed their efficiency in India’s Commonwealth games by protecting open civil systems. And the author has placed some suggestions for securing cyberspace from unwanted cyber threats. India should prepare indigenously the technical know-how, vibrant technology and the instrument required for the safety of cyberspace.

Sangeeta Barooah Pisharoty (2012) has analyzed the malefic virus attacks on virtual space spanning across the globe. He cited McAfee an antivirus who cautioned that by July 9, 2012 three lakh DNS changer virus would delink Internet access and likely to attack 20,000 in India. But fortunately with the timely interference of various security agencies the damage did not occur. He also cited Jiten Jain, a security analyst who pointed out that 112 websites including India’s Planning Commission, the Finance Ministry were hacked and attacked by malicious viruses.
Analyst also stated that ‘hacking in current times has grown beyond email hacks, phishing or online scams. India today is facing biggest ever national security challenge from cyber attacks and snooping from hostile countries.’

A group of security analyst organized a conference on International hackers in India. The author also raised some like 'blackhat' hackers—a hacker by profession with enormous technical know-how in computer and whose sole aim is to break security of a system or Internet. Moreover, the ‘whitehat’ hackers who diagnose the weaknesses of Internet security and other malefic cyber attack by informing the owner so that they can provide safety to their system. It is worth mentioning that many hackers are starting their career as a 'blackhat' hacker but shifting themselves as a 'whitehacker' and ultimately becoming a consultant of cyber security and protecting websites and networking.

Arindam Mukherjee (2012) asserted that hate mail and objectionable and inflammatory contents, morphed visuals stirred the communal tension in Northeast especially through social media. It was after the communal massacre government took stringent steps by blocking 310 objectionable websites, 20 twitter accounts and also limiting the number of SMS. The lists of blocked sites are 100 Facebook pages, 80 You Tube videos and most of them are relating to communal in nature. Amusingly the government blocked some articles which were critical in analyzing Govts. policies. Further the author cited Sunil Abraham an Executive Director from a research organization argued ‘for the last three years, since the amendments to the IT Act, the government never had legitimate reasons to put a check on free speech. The current
events have provided it with a ground to do that.' The government’s intention was very clear in the name of national security they blocked 11 websites and requested to Google for blocking 1400 content and all these actions are under the purview of Article 19(2) of the constitution as ‘reasonable restrictions’.

Sagarika Ghose (2012) has discussed regarding information war and how politicians can use this new media for their political campaign especially Barak Obama’s extremely successful Twitter campaign. As she rightly opined that social media is not the adversary for the society rather it is simply an ‘amoral technology, a busy highway waiting to be used by all. Rather she echoed ‘hatespeak on social media, not social media itself, is the real enemy of a liberal democracy.’ Hence, she argued by defining Art 19 of the constitution that free speech is guaranteed for criticism of the government for political cause; free speech is not the right to say whatever you want to say in social media. She also opined that a torrent of blasphemous language defamed religious idols and many instances on minorities are the hallmarks of Facebook and twitter in India.