CHAPTER 2
CHAPTER 2 - REVIEW OF LITERATURE

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2.1.0. Growth of online journalism

The growth of Internet from its inception to the present form of the World Wide Web has been phenomenal. Internet has been running a race with time. Changes have been made to it very frequently. Something new is added to it every other day making it better, easier and cheaper and of course faster. World Wide Web (www) has come to the scene very recently, that is, in 1993. From its very inception, internet has been providing news and views to its users but it got new impetus and came to be known as 'online journalism' only after the emergence of www.

Media researchers have been observing its growth. Studies conducted in this field holds testimony to their enthusiasm about this new medium. It has been observed that the fast changing pace of Internet technology has curtailed research
activities to some extent. However, the researchers have been able to keep track of new developments to a great extent.

_Hazel and Dicken (1998)_ were right when they said that Internet conceptualized most often, in terms of what humankind gains by virtue of its emergence, it is equated with progress and advancement of civilization.

This optimism seemed omnipresent when Chang (1999) and Engel (2000) who opined that, with the introduction of the WWW and the appearance of graphical browsers in 1993, the cryptic, text-driven limitations of Internet were overcome and the www is now experiencing an exponential growth in online population every year.

The Internet community grew by leaps and bounds within a short period of time, and so was the growth of online journalism. Most of the newspapers went online whether they realized or not the importance and the business aspect of the online edition. To some extent it was over estimated and in some cases it was totally neglected, which led to the piling up of loses worth millions.

Though there was no doubt about the potentialities of the internet, the business viability of Internet was always given a serious thought that it deserves.
Abrahamson (1998) offered five speculations about the future of the Internet. First, the advertising would support a major portion of the form and cost. The medium itself will have to mediate between, the attention getting needs of advertisers for more glaring commercial entities, and the possible reader dissatisfaction with intrusion. Internet will continue to be transformed into a vehicle for the provision of specific high value information to very specific high consumption audience. There will be a likely change in the nature and form of domain names to give detailed direction to audiences, regarding the bind of information that is available at a particular site. The role of the government in the evolution of Internet will quite deliberately be diminished. The fourth speculation focuses on the centripetal dynamics of media evolution, significantly highlighting the levels of economic concentration in the entities that provide information on the Net. The fifth point about Internet future is that we know nothing. It is already likely that the emergence of the Internet will prove to be what historians term a world historical event.

Aubrey (1997) noted that the future of the Internet will have nothing to do with how credit card numbers are given out - not given out, encrypted or decrypted for security purposes. It will have nothing to do with speeds of modems, issuer related to bandwidth, whether or not cable television companies will be able to deliver instantaneously what now takes thirty seconds to come up on your home computer screen.
Deuze, (1999d) observed the growth of online journalism and said, "It is growing into a new medium of mass appeal". Wired Magazine was the first to start online magazine in January 1993. By the end of 1994 a total of 78 newspapers were online, in 1995 the figure rose to 855, in 1996 to 1,920, and by the end of 1997, a total of 3,622 newspapers were available on www.

Gupta and Jasra (2002b) noted that the number of newspapers publishing electronically in the US soared from 78 in 1994 to 511 in mid-1995. Of those, 471 were publishing on the web and other 40 were publishing on or were committed to publishing on commercial online services connected to it. As the calendar changed from 1995 to 1996, the number of online newspapers exceeded 1000.

Thakur, (2001b) who studied the growth of online journalism in India, noted that the online phenomenon showed its face in 1994 when India's first electronic newspaper, India Newsnet, was launched in October 1994. It was launched via Business India's Online Service aXcess that provided Business India, Computer Mart (yellow pages) and Airline timetables (domestic airlines) free of charge to its e-mail subscribers. The Hindu was the first Indian newspaper to go on the Net in 1995; soon the Net had The Times of India, The New Indian Express and the Deccan Herald by early 1996. Kannada eveninger, Sanjevani has the credit of going on Net much before other newspapers, the Nai Duniya was the first in Hindi
and Kesari was the first Marathi newspaper on Net. Initially some language publications (weeklies such as Kumudam and Vikatan) hoisted their contents as images rather than in the text form since the browsers did not then support non-English fonts. Now, non-English publications make the fonts available as free downloads at their sites to view the pages in respective languages. There are about 150 newspapers, magazines and online-only publications from India that have entered the cyber world. Besides, many television channels and All India Radio have launched their sites, and are offering text and audio-visual contents on the Net. Press Trust of India (PTI) was the first news agency in India to launch a web site.

While websites of leading English dailies provide an entry point for any news or information on India, newspapers that have a strong hold in their respective states have also entered cyberspace. The Deccan Chronicle (Andhra Pradesh), Deccan Herald (Karnataka), The Telegraph (West Bengal), The Tribune (Punjab and Haryana), The MP Chronicle (Madhya Pradesh), The Gomantak Times (Goa), The Kashmir Times (Jammu and Kashmir), and the Mid-Day (Mumbai) have all gone on Net.

In case of language newspapers, however the activities of online editions are dominated by the Systems Department, rather than by Editorial staff. This
indicates the quality of the online editions of vernacular newspapers. Most of them just dump the day's newspaper on the Net without any updates till the next day's edition comes in. Most of the newspaper publishers launched their online editions because of the 'me-too syndrome', to be with the latest Information Technology and as an investment for the future.

But it was on January 3, 2001 that The News Today.com India's first e-newspaper was launched, revolutionizing news dissemination through personalized interactive and up-to-the-second news. Many purely online newspapers (which did not have a print or broadcast counterpart) came up at around the same time. 'tehelka.com', 'samachar.com' and 'webdinuya.com' were among those few that became quite popular.

The Times of India went a step further and started not only a Net edition, but a full fledged portal indiatimes.com, which has become one of the leading portals in India. As Dubey, (2002) pointed out, rediff.com, launched in 1996, sify.com launched in 1998, indiatimes.com launched in 1999 and yahoo.co.in and msn.co.in launched in 2000 are either backed by parents with deep pockets, or are riding on money raised from stock markets during the boom. Although still not in the black, these portals are slowly getting there, with a clear pecking order emerging.
2.1.1 Reach and Access

Shikarpur, (2001) maintained that the Internet has been one of the fastest growing medium in the world. It reached a user base of 100 million in only five years compared to 10 years for cable television and 38 years for telephone communications. Their audiences are an inherently fragmented collection of individuals, and there in lies the greatest source of its strength.

*Nielsen Media Research* (1995) estimates indicated that 37 million people in the United States and Canada used their computers to access the Internet and online services, and these people spent considerable amount of time online. Specifically the Nielsen Study found that use of the internet and online services averaged 5.5 hours per week, which was equivalent to playback of rented videocassettes.

*Pitkow and Kehoe* (1995a) found that 78.4 per cent of respondents used the World Wide Web daily. Users must find the computer and online services more effective than other media in fulfilling needs. There was no reason to devote large amount of time to the use of the medium nor would *www* users be reporting that they were using the web instead of watching TV.

Though these optimistic figures boost the reach of Internet in the world, there is a dangerous divide between the technology haves and have-nots. The world seems to be divided, which is often referred to as the digital divide.
Rao and Natesan (1996) indicated that Asian countries collectively formed only a small percentage of the total number of Internet users worldwide. When Japan was excluded, the numbers were further reduced. However, the growth rate was high and the impact could be significant.

Mahiznan (2001b) indicated that, according to one estimate, in 2000, the world had about 230 million active adult Internet users. That was just about five per cent of the world’s adult population at that time. Of these 230 million users, North America had about 98 million, slightly less than half of the total number. Europe had about 70 million users, Asia Pacific 49 million, Latin America about 10 million with Africa and Middle - east making up a total of 3 to 4 million users. There were more than twice as many Internet users in New York City alone as there were in the all of India, one of the most populous and most IT savvy nations in the world.

The digital divide occurred not only between regions, but within regions, between countries in the region, and within countries.
The following table gives Internet penetration in Asia by country (in millions).

<table>
<thead>
<tr>
<th>Country</th>
<th>Internet Users (in millions)</th>
<th>Internet users as a percentage of adult population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>1.06</td>
<td>39.92</td>
</tr>
<tr>
<td>Hon Kong</td>
<td>0.75</td>
<td>14.06</td>
</tr>
<tr>
<td>Japan</td>
<td>10.3</td>
<td>10.04</td>
</tr>
<tr>
<td>Taiwan</td>
<td>1.8</td>
<td>11.19</td>
</tr>
<tr>
<td>South Korea</td>
<td>0.9</td>
<td>2.63</td>
</tr>
<tr>
<td>Malaysia</td>
<td>0.16</td>
<td>1.27</td>
</tr>
<tr>
<td>China</td>
<td>2.47</td>
<td>0.28</td>
</tr>
<tr>
<td>Philippines</td>
<td>0.12</td>
<td>0.27</td>
</tr>
<tr>
<td>Thailand</td>
<td>0.11</td>
<td>0.26</td>
</tr>
<tr>
<td>India</td>
<td>0.27</td>
<td>0.05</td>
</tr>
<tr>
<td>Vietnam</td>
<td>0.01</td>
<td>0.02</td>
</tr>
</tbody>
</table>

According to a survey in 2000 almost 70 per cent of the web pages on the Net were in English. The next highest scoring language was Japanese, at about six per cent. Chinese which came in the fourth position had about four per cent and Korean the next highest ranking Asian language, came at the 10th position with just a little more than one percent of the total content on the web. In 2000, US
dominated the world with nearly 70 per cent of the revenues compared to 30 percent for the rest of the world.

The above data confirms the existence of digital divide. The North South divide that existed in the old economy continues in the new globalized economy as well. The rich countries with better technological advancements, money power, man power and technically trained people are much ahead of the ignorant masses of the developing nations. Communication, which is supposed to bridge the gap, seems to be widening this gap between the information haves and have-nots. There has been a considerable growth in the awareness about the new media in India as well. The reach and access has grown significantly.

Gupta and Jasra (2002c) pointed out that, there were an estimated 50,000 Internet connections in India in early 1998. There were also an estimated 3 lakh India-registered Hotmail accounts. This was a multiple of six parallel personal computer use. Six people usually shared personal computers, which penetrated to the ratio of 1.8 per 1000. India domain hosts grew from 7,175 in January 1998 to 13,253 in January 1999 and 14,027 in February 1999. Network Solutions rated India as the fourth most active source of domain registrations from Asia and the tenth most active in the world.

According to the data available with the National Association of Software and Service Companies in the year 2000, (NASSCOM), Internet penetration in
India crossed one million mark and it is all set to surpass 11 million users by the end of 2003. Survey conducted in 68 cities and towns in June-July 2000 showed that Internet penetration in the country reached 1.4 million by June 2000 from a mere base of 1,70,000 subscribers in November 1998. The data predicted that the total number of PCs was going to increase from 4.8 million in year 2000 to 20 million by 2008 and Internet subscribers from 0.8 million in 2000 to 35 million by 2008. By December 2000, there was a PC base of five million of which 3.7 million machines could be used effectively to access Internet. More than 120 private Internet Service Providers were expected to be fully operational in 2001. Seven private international gateways were already operational and five more were expected to be commissioned. There was almost 200 per cent jump in bandwidth in six months. Department of Telecommunications had already said that by March 31, 2001, almost 155 cities and towns of India would have 2.5 GBPS of Internet bandwidth.

Most of the media organizations in India have gone online and some of them are doing quite well. The Indian Express claims that they were probably the most popular Indian website, averaging about 2.5 million hits a day. They also got about 300 e-mails a day, some of which were published in the letters to the editor column. Similarly, the India Today online got two million page views a month. The daily inflow of e-mails was about 125. The hindustantimes.com got over 100 e-mails a day and The Times of India online got one million hits per day.
The estimated number of India based portals range from 9,000 to 90,000.
There are 30 known portals on cricket, 15 on women, a dozen on youth and at least 16 broad portals on India (India Today, July 2000).
<table>
<thead>
<tr>
<th></th>
<th>indiatimes.com</th>
<th>rediff.com</th>
<th>sify.com</th>
<th>yahoo.co.in</th>
<th>msn.co.in</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2001-2 revenues</strong></td>
<td>Rs 52.67 cr</td>
<td>Rs 121.32 cr</td>
<td>20.58 cr</td>
<td>N.A</td>
<td>N.A</td>
</tr>
<tr>
<td><strong>Revenue streams</strong></td>
<td>Ads, SMS, E-shopping, auctions, e-commerce, content sale</td>
<td>Ads, e-commerce, subscription</td>
<td>Ads, brand promotions, sponsored sections</td>
<td>Ads, direct marketing, sponsorship, content sale</td>
<td>Ads, promotions, content sale</td>
</tr>
<tr>
<td><strong>No of page views</strong></td>
<td>650 million</td>
<td>505 million</td>
<td>N.A</td>
<td>8.92 million (Feb)</td>
<td>42.79 million (Feb)</td>
</tr>
<tr>
<td><strong>Avg. user session</strong></td>
<td>14.48 minutes</td>
<td>26.01 minutes</td>
<td>8.57 minutes</td>
<td>53.24 minutes</td>
<td>28.12 minutes</td>
</tr>
<tr>
<td><strong>Registered Users</strong></td>
<td>7 million</td>
<td>17.4 million</td>
<td>N.A</td>
<td>N.A</td>
<td>N.A</td>
</tr>
<tr>
<td><strong>E-mail users</strong></td>
<td>3.8 million</td>
<td>15 million</td>
<td>N.A</td>
<td>N.A</td>
<td>4 million</td>
</tr>
<tr>
<td><strong>E-mail traffic as % of total traffic</strong></td>
<td>37 per cent</td>
<td>83 per cent</td>
<td>33 per cent</td>
<td>50 per cent</td>
<td>80 per cent</td>
</tr>
<tr>
<td><strong>Free e-mail storage</strong></td>
<td>10 MB</td>
<td>5 MB</td>
<td>2 MB</td>
<td>6 MB</td>
<td>2 MB</td>
</tr>
<tr>
<td><strong>Free data storage</strong></td>
<td>20 MB</td>
<td>Nil</td>
<td>Nil</td>
<td>30 MB</td>
<td>Nil</td>
</tr>
<tr>
<td><strong>No. of Channels</strong></td>
<td>60</td>
<td>39</td>
<td>30</td>
<td>53</td>
<td>15</td>
</tr>
<tr>
<td><strong>No. of clients</strong></td>
<td>68</td>
<td>70</td>
<td>100</td>
<td>100</td>
<td>43</td>
</tr>
</tbody>
</table>
The table given above published in the *Business World, 3 June, 2002* gives a clear picture of the performance of the major portals like *rediff.com* which was launched in 1996, *sify.com* in 1998, *indiatimes.com* launched in 1999, *yahoo.co.in* launched in 2000 and *msn.co.in* launched in 2000 which have been able to survive the global recession.

The [www.samachar.com](http://www.samachar.com) gives the top 25 stories and the top ten portals everyday. The top publications and their click throughs as on 25 June, 2002 were as follows. The following table also throws light on the performance and popularity of the websites during the time of study.

<table>
<thead>
<tr>
<th>Publication</th>
<th>Click Throughs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sify News</td>
<td>40908</td>
</tr>
<tr>
<td>Times of India</td>
<td>26280</td>
</tr>
<tr>
<td>Indian Express</td>
<td>20215</td>
</tr>
<tr>
<td>Hindustan Times</td>
<td>8454</td>
</tr>
<tr>
<td>The Hindu</td>
<td>7358</td>
</tr>
<tr>
<td>NDTV News</td>
<td>5667</td>
</tr>
<tr>
<td>Deccan Herald</td>
<td>3415</td>
</tr>
<tr>
<td>CNN</td>
<td>2515</td>
</tr>
<tr>
<td>BBC News</td>
<td>2245</td>
</tr>
<tr>
<td>Financial Express</td>
<td>1981</td>
</tr>
</tbody>
</table>
Though there were estimates and presentations of data regarding the increasing number of users, most of the users formed the youth and older generations still remained little far from the new media, which they thought was not their cup of tea.

The data presented in the *PC Quest, (2000)* showed that there were about 3 per cent users of the Internet in the age group of 55 years and above, 8 per cent users in the age group 40-45 years, 28 per cent under the age group 25-40 years, majority, that is 49 per cent of the users were in the age group 18-24 years, and 12 per cent under the age group of below 18 years.

According to the *Wall Street Journal*, of the estimated 62 million people who use the Internet regularly, 70 per cent or 43 millions look for entertainment when they go online.

A study conducted by *Thakur (2001c)*, showed that the readers of Indian newspapers on the Net were; mostly male (88 per cent), below the age of 40 years (81 per cent), most of them (90 per cent) were Indians abroad; of them 62 per cent were in the US while 4 per cent were in Canada. There was no bigger patriot than the Non Resident Indian. Most of the readers (47 per cent) were computer professionals followed by Executive / Managerial staff and students (10 per cent each). Most of them (79 per cent) were employees while 9 per cent were self employed. The readers were interested in news from India (77 per cent) as against the global news (4 percent), while 15 percent readers sought news
from the respective native state. This could be attributed to the nostalgia factor. Readers accessed the Indian newspapers mainly to read news (88 per cent) rather than editorial or opinion pieces (57 per cent), features (3 per cent), advertisements (1 per cent) and cartoons (0 per cent). Of those readers who read news on Net, 43 per cent preferred political contents, followed by business and economy (23 per cent).

In a study conducted by Natarajan (1999c) on "New Media, culture and change, Access and uses of Internet in Chennai", he found that, people accessed Net from one hour weekly to one hour daily. With a median five hours per week, on an average most of the respondents accessed 4.25 hours per week. Quantum of use was more among youth than the middle aged and the elders.

By the year 2000, PC penetration in India had reached about 13 per thousand from three per thousand in 1997. A growing number of PC users in metropolitan cities had begun using Internet. Yet, Internet has remained out of reach for the people because of high fees for connectivity and poor telecommunications infrastructure. Public sector Videsh Sanchar Nigam Ltd. (VSNL), then the only Internet Service Provider in India, had a small number of Net subscribers, about 1.50,000, by the end of 1998. By the turn of the century, there were 1.8 million subscribers and over 5.5 million users in India (The Times of India, 2000g).
VSNL and private ISPs have cut down the Internet price by almost 70 per cent. Even as cyber cafes or cyber kiosks have become a new way of life in cities and towns, cable connectivity is the biggest hope to attract television users to Internet. Satyam Infoway for example believes that the ISPs can tap 16 to 18 million cable-connected homes in the country to offer Internet service onto the television screens. This would have great impact on the reach and access of Internet.

A study conducted by Vinita Borges (2001), on the media ownership of respondents in Dharwad city revealed that television and radio were on the top at 83 per cent and 67.3 percent respectively. Computer ownership was low at 20 percent and the Internet connection still lower at 8.6 per cent. The browsing of Internet was more at cyber cafes (75 percent), than a home PC. Although respondents had Internet services at home, they preferred to browse the Net at cyber cafes.

In another study conducted by Kavita Kakhandki (2001), 33.3 percent of the post-graduate and research students were not exposed to Internet. Those who were exposed to Net spent on an average Rs 300 on Net access. Most of them that is 52 percent of the respondents found information on Internet highly credible compared to 32 percent television, 6.6 percent radio, 36.6 percent newspapers and 20.6 percent who voted for magazines for high credibility.
The study also revealed that, 46.6 percent of the respondents accessed Net for mailing, 16.6 percent for chatting, 46 percent for educational purpose and 48.6 percent seeking specific information.

2.1.2. Impact on journalists

Online journalism has brought in many changes in the media scenario. Any one with a minimum technology and investment can become a publisher. Initially this was considered as a threat to the traditional media houses who have built their image and credibility over years. The gate-keeping theory was being questioned. But this did not happen in reality. Even in the online environment, it is mostly the media organizations which have been from years in this business are more popular and have been able to survive and perform.

Schudson (1995), states that by inviting readers to imagine a world in which everyone is able to deliver information directly to everyone else through a computer, a world in which everyone can be his or her own journalist. He suggests that people would quickly become desperate to figure out legitimate sources and would soon be begging for help in sorting through the endless information. Furthermore, he said, they would prefer to have that help come from a source that was at least relatively savvy about all those other people were talking about, relatively nonpartisan and therefore relatively trustworthy.
A study by Singer (1997c) indicates, people inside the newsroom are modifying their definition of the gatekeeper to incorporate notions of both quality control and sense making. In particular they see their role as credible interpreter of an unprecedented volume of available information as fundamental to their value – even their survival - in a new media environment. Her findings are in line with the most recent survey by Weaver and Wilhoit (1996) who found that journalists continue to see their primary role as interpreters, rather than mere gatherers and disseminators of information.

McCombs ad Shaw (1972), and McCombs, (1992) indicate that agenda setting theory suggests that although the media do not tell people what to think, they do tell people what to think about and perhaps even how to think about it.

The impact of Internet on journalists can be clearly seen when we look into the new newsrooms, the way journalists of today gather information and to some extent the way it is presented. The increased usage of Internet in newsroom has been responsible for bringing out stories that are more informative and have legible sources.

Researchers also, have begun to trace the use of computers within the newsroom for a variety of information – gathering tools, from data analysis (Friend, 1994a) to searches of online records (Davenport et al 1996).
Garrison (1997), who did extensive earlier work with adoption of computer-assisted reporting, has been at the forefront of effects to trace the increasing use of the Internet and the other interactive media by journalists. He has documented, among other things, a steady rise in the use of online information sources by reporters and a strong perception that such sources can be valuable journalistic tools.

Nath, (2002b) in his book, ‘The Seventh Annual Survey of the Media in the Wired World’ looked at the practices of more than 500 newspaper, broadcast, and magazine journalists, and found that nearly all agreed that the Internet had made their jobs easier and improved the quality of their work. The study found that reporters spend an average of 15 hours a week reading and responding to e-mail, and that journalists are increasingly using the Net to conduct article research and to find sources and press releases. The survey also found that the Internet is helping reporters stay in touch with their readers; more than 70 per cent of those surveyed said they regularly used e-mails to respond to readers’ comments and queries. The converged newsroom, viewed as a living, self-organizing system, is a substantially different environment when compared to the traditional pyramid bureaucracy driven titles, positions, and flowcharts. But this self-organizing, seemingly chaotic work environment where processes were continually improvised still needed to meet deadlines, produce shows and get the paper to press.
There are many occasions when the newspapers turned to the Internet for data. Clinton – Lewinsky affair drew record attention in the US and other countries with over 1.1 million users accessing MSNBC.com. This record was broken when two million people accessed Starr report. On the same day CNN interactive reported three lakh hits per minute. This was the first major occasion when the newspapers turned to the Internet for data in a big way.

Cyberspace holds a host of problems and possibilities that journalists have not seen before. As Weaver and Wilhoit, (1996b) observe, the digital age global journalist has to come to grips as never before with the problems of accuracy, balance and perspective. As he rightly says, the global journalist in the digital, multimedia age has to know and use the resources of the Internet (Negroponte, 1995) and this is a worldwide demand (Stepp, 1996).

Friend (1994b) is of the opinion, that computer assisted reporting allows reporters to see statistical and database manager software to dig deeper and final patterns not possible by customary journalism techniques.

John Herbert (2001b) also agrees with him and says going online gives reporters the key to the world’s largest library 24 hours a day.
Koch (1990b) was of the opinion that news content has always relied on the pronouncements, interpretations, statements and proclamations of officials and too often journalists can be unwitting carriers of manipulated data, carrying it from the desk of officials to the general public. But says Fitzgerald (1995) no longer do global journalists have to depend on these sources to select, explain and interpret volumes of data and information. They have the raw information at their computer-tips. The selection by officials which has been the norm in the past is fast disappearing. And so is the reliance on information sources which have vested interests and want to manipulate the news flow for their own ends.

According to some experts there is also a negative impact on journalists, with Internet offering more information and less evaluation of the happenings. Online journalists are blamed of trivializing journalism. Critics say it has reduced journalism to the mere reportage of events where presentation is given more importance than the content.

McClintick (1998) pointed out that online journalists who sometimes are thought to be nerdy looking youngsters are sometimes thought to be readier than most to bypass traditional journalistic process because they are more likely to weigh technology and marketing over journalism.
Contrary to this, Brill found that online journalists ranked the traditional skills of good news judgment, analytical thinking and good grammar and editing skills, higher than the new media skills of computer design skills and knowledge of the Internet.

Quick (1997) found out that there are indications that online journalists have not yet achieved parity with their traditional peers. Some report being denied equal access to work. According to Online Guild work (Guild Jurisdiction, 1996), pay and benefits for a media organization’s online staff vary widely, but online staffers often are young and relatively inexperienced, and their compensation reflects that status. How to treat them is a subject of ongoing debate among union and management negotiators in many newsrooms.

Despite the interactive options open in the online medium, Burgoon et.al. (1987) found out that journalists have reported feeling isolated from their audience, either by tradition, choice or circumstances such as odd working hours.

2.1.3. Impact on journalism or newspaper content:

Computer has brought a sea change in the way newspapers, or for that matter any media organization worked. In 1964, Robert Kenagy of IBM told the Associated Press Managing Editors Association “the computer will remove a great
deal of the drudgery that exists in the newsroom today and free all people in the editorial department to be far more creative", other editors felt that, used properly; computers can be valuable tool towards the more creative aspect of editing. But if studied in detail, the impact of Internet on journalism can be seen as a far reaching one.

According to Koch (1990c), Internet has brought in many changes in the very journalism itself. He says, news that does no more than quote officials and experts is dead. Computer assisted journalism brings an end to 'he-said' or 'she-said' journalism which only makes each story exactly as truthful as the person, expert or official the reporter quotes.

As Dahlgren (1997), the information sharing that now goes on in cyberspace is increasingly bypassing the traditional journalism's role of gathering, selecting and disseminating. But for critics like Hardt (1996) and Bromley (1999), it is the end of journalism.

Grossman (1999) maintains that cyberspace is teeming with virgin sources and experts overlooked and unquoted by the media masses. It's just a matter of hanging out at the best virtual watering hole.
Katz (1994b) also believes that no other medium has ever given individual people such an engaged role in the movement of information and opinion or such a proprietary interest in the medium itself.

Studies within the newsroom that have been undertaken by Russial et al (1994) showed that the adoption of such new technologies as computer pagination, to offer an example from the world of print journalism, has received considerable attention.

Fredin (1997) indicated that the very nature of story telling may shift because of this new media form; hypertext may challenge the journalistic role by creating a personally involving narrative experience that brings "a more flexible and profound understanding of issues than many people are currently able to get as a practical matter from existing media".

A study by Arant and Meyer (1997) revealed that sensitivity to ethical concerns is increasing in today's college-educated newsrooms. Weaver and Wilhoit's (1996c) study also found strongly held ethical beliefs - beliefs that may be challenged by the ease of shedding constraints online.
In the online environment, *McManus (1994)* maintains that market logic can now prevail over journalistic logic. Many even say that online journalism is not journalism but mere reportage.

According to a study conducted by *Arrant and Anderson (2001)*, online editors agree that standards should be the same whether publishing online or print. However, many say that online standards are affected negatively by the speed of publishing and the lack of an adequate number of online staff. They also found that, because many people who work in online operations are not trained journalists, they not only lack training in ethics, they have little of the background in editing, fact-finding and news ethics expected of journalism school graduates.

According to *Bennett (1988)*, global journalism practice in the digital age suffers from a credibility gap. Readers, listeners and viewers throughout the world are tending to believe that the media is increasingly untrustworthy. He describes several kinds of bias in the news:

Personalizing news into human interest accounts, limiting the public’s ability to see the ‘big picture’, and causing a focus on trivial aspects of important news events, like personality flaws and behavioural gaffer. Dramatizing news to present stories that stem from events, leaving no professional convention for addressing many of more serious problems confronting contemporary societies, like hunger,
racism, resource waste and depletion. Information fragmentation makes it difficult to see larger issues. A source bias - news media seek out authoritative voices of officials, who offer views that normalize the news for members of an average public.

The Internet has the advantage of hypermedia which can take the audience directly to the source. Quoting sources becomes easier in case of online journalism than any other media.

A study was conducted on the effects of source attribution on perception of online stories by Shyam Sunder (1998). A within – subjects experiment was designed to answer this question. On a web site, forty eight subjects read three online news stories with quotes and three without source attribution. They rated stories with quotes significantly higher in credibility and quality than identical stories without quotes. However, quotes did not seem to affect their ratings of likings for - and representativeness (newsworthiness) of online news.

Lasica (2001a) found out that as Americans grow more reliant on the Internet news, they also have come to find online news outlets more credible. Despite the controversy over news gathering techniques employed by some Internet sites, those who go online generally give Internet news operations high marks for believability. In fact, the online sites of such well-known news
organizations as ABC News get better ratings from Internet users than the ratings accorded by the traditional broadcast or print outlets.

A study by Johnson and Kaye (1998) surveyed politically interested web-users online to examine whether they view web publications as credible as their traditionally delivered counterparts. Credibility is crucial for the Internet because past studies suggest people are less likely to pay attention to media they do not perceive as credible. This study found online medium tended to be judged more credible than their traditional versions. However, both online and traditional media were only judged as somewhat credible.

In case of most of the newspapers, the information available on the Net edition is only the shovel ware content of the parent organization. Hardly any of them have an independently operating content section. The business compulsions of online publications do not allow them for such extravagance. There is no proper revenue streaming as of now for online business.

Massey and Levy (1999a), also consider that while much of what passes for online journalism today, generally is the content that has been repurposed from an affiliated news organizations' “legacy”, the online future goes beyond shovelling legacy news stories into cyberspace.
Ross and Middleberg (2000) found that, twenty per cent of American online newspapers claimed that at least half of their daily content was original. In 1996, this percentage was seven per cent. Original content is the content, which is produced exclusively for the online news site and is not 'shovel ware' print media content reproduced for the web.

A survey report of the Swiss Company Interactive Publishing among online news sites included 30 European newspapers, 100 American and 11 Asian news sites, the results showed that most online news sites employed a staff of about eight people and expected a growth rate of 4 percent.

The impact of online journalism can be seen on the language used in newspapers as well. The idea that a newspaper should have a standard language to reach out to the people has changed.

With the advent of Net, there is a change in the language the journalists used. As Deuze (1999e), observes Net has produced an informal and grammatically very relaxed kind of language. Roger Fidler (1997) is of the opinion that the language used in e-mails and newsgroups is a new third form of language next to spoken and written word, a sort of in between language or smartly 'digital' language.
Interactivity which is a striking feature of the Internet has also influenced journalism considerably. Inspired by Internet, and amazed at the interest aroused by its interactive options, all media forms are concentrating on this concept of interactivity.

*Newhagen and Levy (1998)* opine Internet is supposed to offer the technical capability for “interactivity”, which is often considered the most distinctive contribution of online journalism.

*As Youngman (1997)* says Interactivity is the “change element” that may make some journalists uncomfortable, means, “we can no longer hide behind the Gothic façade of the Tribune Tower. We have to be responsible, ready to hear what people say”.

*Brecht et al.* are of the opinion that people easily become passive consumers of mass media’s manipulated or at least commercialized content. *Habermas (1962)* argued that the hierarchical structure of modern mass communication imposes a “don’t talk back” format on audience.

But for *Rosen (1996)*, properly approached, public journalism is about challenging people to interact with journalists and with each other as concerned citizens.
Lasica (1996b) and Saila (1997) are of the opinion that based on rather impressionistic observations critics insist that traditional organizations offer only illusions of interactivity on Net.

Katz (1994c) argued that most of the online newspapers did not even provide the e-mail addresses of their reporters and editors. A study by Newhagen et al (1995) revealed that editors of a news cast did not even look at e-mails from their audience, although they had encouraged people explicitly to send comments.

According to a study conducted by Tankard and Ban (1998), interactive features were scarce. Despite the potential for hypertext, 94 per cent online newspaper articles contained no links. Only 49 per cent reporters answered their messages. Search engines were present at 64 per cent of online newspapers and readers seldom could add information to an online newspaper's website.

A study was conducted by Ha and James (1998) on interactive features at business websites rather than online newspaper sites. They thoroughly examined the concept of interactivity, suggesting it has five dimensions: playfulness, choice, connectedness, information collection and reciprocal communication. They found a generally low use of interactive devices. According to them, when interactive features were available, they often created a false sense of empowerment, because consumer choice was still defined by the company.
Carrie Heeter, (1989) identified six dimensions of interactivity, they are: complexity of choice available, effort users must exert, responsiveness to the user, monitoring information use, ease of adding information and facilitation of interpersonal communication.

Schultz, (1999b) states, it is obvious that the mere availability of tools that allow for interactive communications tells little about how journalists and their audience use them. Still it is a necessary condition for the initiation of interactive discourse. In that respect, online journalism can exploit e-mail, chat rooms, online polls and bulletin boards primarily. These feedback tools can help establish reactive and possibly interactive communication processes. They constitute interactive options. In a study conducted by him "Interactive options in online journalism: A content analysis of 100 US newspapers", he found that almost every newspaper in the sample provided at least one general e-mail address to contact the newsroom, and only 6 did not offer this opportunity. 92 out of 100 online newspapers offered no synchronous chat at all. Three provided a direct link to another chat provider. Only five newspapers in the sample offered their own chat rooms. 24 out of 100 conducted online polls or surveys, 33 out of 100 online newspapers ran discussion forums. 15 required a simple registration with e-mail and pass word, while forums of the other 18 newspapers could be accessed without registration.
In a study conducted by Massey and Levy (1999b), in which English language online newspapers in Asia, were content analyzed using five-dimensional conceptualization of interactivity. Although all of the online newspapers examined provided users with a relatively complex choice of news content, most did not rate highly on the remaining four dimensions of Interactivity.

The five dimensions of Interactivity included complexity of choice available, responsiveness to users, ease of adding information, facilitation of interpersonal communication and immediacy as interactivity.

This idea of interactivity has also taken on the newspapers of today. Traditionally, only the "letters to the editor" column offered some kind of interactivity in newspapers. With the changing scenario, newspapers are coming out with new ideas of opinion polls, weekly discussion forums and many such interactive options to bring readers closer to the newsrooms.

Hypermedia is one of the virtues of online journalism. According to Fredin and David, (1998b) hypermedia, allows users unprecedented access to information, "richness" of which the user can enjoy, "only a few mouse clicks away".

Iyengar (1991) states that the laudatory remarks on web-based news services seem to touch upon an idealized notion of journalism, considering the
criticism that, in practice, both of print and broadcast journalism tend to offer mere episodic news rather than "thematic" news.

David (1998) suggests that, through dynamic user interaction with a hypermedia story, a user creates his/her "hypermedia interaction cycle". All in all the richness of web-based news seems to remain one of the hugest potential goldmines waiting for journalists to exploit.

Neuberger et al (1998b), who conducted a study on "Online – the Future of newspapers? Germany's dailies on the World Wide Web", confirm that the majority of publishing houses take a cautious approach to their Internet presence. Only every second publisher (48 percent) created a separate editorial board for the online version. In approximately one-third of the cases (37 percent) the online version was produced by editorial staff who also worked for the print version. One in ten dailies (11 percent) employed an external company for the production of the online version.

The average online editorial board has a staff of three of which 61 per cent were familiar with programming language generally used on the Internet. 87 per cent of online newspapers were updated at least once daily, 21 per cent of these twice and 10 per cent three times or more.
When the survey was carried out all the publishers were making a loss on their online editions. They considered the hesitation of advertisers as the biggest obstacle.

A study by Schaefer and Dillman (1999), where in 686 editors of online editions were contacted by sending questionnaires through e-mails, revealed that, 31 per cent said they updated their online editions more than once a day and another 65 per cent said they updated their newspaper daily. Frequency of updating correlated positively with the circulation size. Editors were asked about the changes they made to print edition material before putting it online. Sixty per cent of the editors said, they added hypertext links, 13 per cent said they changed the wording of the new stories, 23 per cent changed the story structure and 30 per cent changed the artwork and photographs. Fifteen per cent of the respondents said they made no changes to the material from the print edition that was published online. Respondents were asked to choose from three general statements about the role of advertising at their online news operation. Only 3 per cent agreed with “advertising in the online product is our primary reason for being on the Web and thus must come first in any decision making regarding content.” 64 per cent checked “advertising in the online product is a key to Web profitability and should be worked in wherever possible”. The remaining 33 per cent agreed that “advertising in the online product is always secondary to the function of informing the public and is carefully and visibly separated from news content.”
Among the online managers surveyed, 47 per cent said the speed of internet has eroded the key standard of accurately verifying the facts of a story before putting it before the public, whereas, 30 per cent reported that, online print outlets are not as likely to follow the general ethical standards of journalism as are traditional newspapers. Majority of the respondents felt that it was the inadequate number of employees on the online desk that is to be blamed more than the speed of the Internet.

2.1.4. Impact on users:

The consumers of information are now offered a choice between various forms of media like, print, radio, television and the Internet of which they choose the one that satiates their needs.

Lometti et al. (1997) found that the strength of needs (gratification sought) will ultimately determine the impact of any selected communication channel. Rubin (1994) states that Media selection is goal directed, purposive and motivated in order to satisfy felt needs or desires.

Lichtenstein and Rosenfield (1984) who studied the decision making process of the audience felt, the decision to utilize mass communication channel involves a two part process. The first part involves the acquisition of normative
expectations about gratifications from different media. The second part concerns individualistic decisions about how to seek gratifications.

*Webster and Wakshlag (1982)* found that group viewing affected patterns of programme choice and suggested that adaptation and integration of new media by users, caused changes in their resource allocation, behaviour and content reactions.

*Stephenson (1988)* in his *play theory* notes, that people use media because doing so is pleasurable in and of itself.

*Perse and Courtright (1993)* in a study conducted prior to the advent of the World Wide Web, compared how twelve different communication channels including television, VCRs, cable television, movies, newspapers, telephones, music, books, magazines, radio and computers fulfill needs. Their study found computers to be ranked lower than the other media studied at fulfilling most of the needs. In a study conducted by them on learning needs, passing time and diversion were found to be the top three gratifications sought when using computers.

*Nath, (2002c)*, says that today, news consumers have information flooding them from all directions. If television displaced newspapers as the medium people
turn to for breaking news, the Net is the medium, people turn to; in order to get a richer news experience. That richness may come from the Net’s immediacy, which rivals broadcast’s from its depth, for the news hole on the Net is limitless; and from its most powerful feature, interactivity, which online news organizations still have not grasped, much less exploited.

The Nielsen study and the Pitkow and Kehoe (1999b) study found that common uses of the Internet include searching for information, browsing and exploring, e-mails, discussions, and accessing news and magazines and shopping. According to market research 70 percent of computer owners cite entertainment as the most frequent use of computers. WWW user survey found that 79 percent of respondents used the web for browsing, 63 percent for entertainment and 51.8 per cent for work.

Sharma (2002a), quotes, according to a recent poll by Roper Starch Worldwide, Television remains Americans’ number one source of news. When asked where they usually get most of their news, 69 per cent of adults cited television versus 37 per cent for newspapers, 14 per cent for radio, 7 per cent from other people and 5 per cent from magazines, the study noted. Only 2 per cent of the general public, mentioned online sources for news. Among the households that have internet access, television was still the top source of news, with online
services mentioned by 15 per cent. The most important reason for one in three people who use the Internet is to send electronic mail, but nearly as many use the Internet and the World Wide Web for research. One in six is looking for specific information. The study revealed that, the habit of picking up the daily newspaper religiously is found among those over 50. Network television news is joining newspapers as a medium for older citizens.

*CNN* reported in June of 1998 that a survey showed more and more people were turning to the web for their daily news, making the web the foremost competitor for the television newscasts instead of print media.

According to a study conducted by *Neuberger et al (1998c)* approximately 4.1 million adults used online services in Germany in 1997. This represented 6.5 per cent of the population over the age of 14. Compared with the print version, the online newspaper was rated by 43 percent of the respondents as providing more "breadth" of information, while only 28 per cent voted in favor of the print version on this criterion; 25 percent rated both versions the same on this count. The print newspaper was rated by considerably more respondents as providing greater "depth" of information (62 percent and online 24 percent).

*Sharma (2002b)* quotes, "In a study conducted by Stanford University, sixty-seven web users in Chicago and Florida were tracked for a total of forty
hours to ascertain their reading habits online. The 'eye-track technology' they used tracks readers' eye movements and matched them against the pages being read. The technology enabled researchers to map exactly where readers' eyes were focused when they displayed each page. According to the study, text seems favoured over artwork for front-page attention. Visitors to news sites focus on text, not photos or graphics. Briefs or captions got the initial eye fixations when the first page came up. Then the eyes came back to photos or graphics, sometimes after readers had clicked away to a full article before returning to the first page. Even when using a high-speed Internet connection that displayed photos and graphics quickly, readers focused on text. According to the study, only 64 per cent of displayed photos and 22 per cent of graphics on a page attracted readers' attention. The findings were very different from eye track newspaper studies, which over the years have found that newspaper readers focus first on photos, then text. Information designers and photojournalists were stunned by the results which seemed to go against everything they had always assumed that pictures and splashy graphics were the draw. Display size might be a factor in the outcome. The smaller size of photos and graphics may not grab readers right away in the same way that larger artwork does in a print newspaper.

Irrespective of all these arguments, Internet has become a potential threat to the various media of communication. Its immediacy which meets the needs of the impatient younger generations, interactivity which stirs the participation among
users, hypertextuality that adds to the depth of a story definitely overcome the loopholes in all forms of media and hence pose a threat to their survival.

Eric Meyer says consumption of online news accounted for declined use of traditional media among only 0.1 per cent of the total marketplace in 1995 and only 0.7 per cent in 1998.

Stempel and Hargrove (1996) observe that, almost every one still gets at least some information from traditional media; most users still get the vast majority of their news from printed and televised sources.

A study conducted by Johnson et al. (1999), examined the extent to which heavy users of the Internet and other users of traditional media, differ from heavy users of traditional media in their knowledge of the issue stances of Bill Clinton and Bob Dole as well as their images of the two candidates. The study revealed that nontraditional media (which included Internet) had little influence on political knowledge. Although nontraditional media had a greater impact on images of the two candidates than traditional media, few relationships remained significant after controlling other factors. In 1996, the Internet was getting a "test drive" as a new campaign medium.
The Internet emerged as the dominant "new media" in the US in 1996 campaign, on that indeed represented the birth of a new medium rather than simply a different strategy for using an existing one. All the major candidates running for Presidential elections in 1996 created their own home pages, cyber campaign offices that featured speeches, position papers, pitches for funds and volunteers and in some cases audio and video clippings. The Republican National Committee reported that more than 8000 people signed the site's guest book in the first few months of operation, more importantly; the home page of their candidate Bob Dole received more than three million hits during the first six months of its operation. More than 10,000 joined the campaign e-mail list and 1,700 registered to vote. Similarly Bill Clinton and Al Gore bragged that their sites received one million hits in first ten days.

Sharma (2000) observes that, in India, traffic on the Internet is driven by events, be it world cup cricket, Kargil war, nuclear tests or natural calamities. Election too falls in this category. Elections-1999 was perhaps the first election when the Internet was used extensively, from campaign to announcements of results. Majority of the political parties had set up their own websites to attract voters. Sonia Gandhi's campaign managers used the website to answer queries that came in from the netizens. Around 10,000 questions were answered by Sonia Gandhi during the two months campaign period. BJP, TMC, Shivsena, CPI(M), AIADMK all used Net to attract voters. A plethora of election related websites were
setup by newspapers, online news services, private entrepreneurs and even the Election Commission. Among the main players were www.indiadeicides.com a website created by the India Today group; www.indiavotes.com a website of the India World; election 1999 setup by www.123india.com ; India a2z elections 1999; www.elections.timesofindia.com setup by The Times of India; www.polls99.surfindia.com a website of rediff.com and www.india.elections.com official website of the Election Commission.

Murali, (2001b) observes that the growth of online journalism does not seem to have affected the circulation of the newspapers in India as yet. The aggregate Audit Bureau of Circulation (ABC) certified circulation has increased over the last five years by 21.1 percent and in 1999 over 1998 by 5 percent. However dailies registered a growth of 13.8 per cent in 1999 which comprises growth as well as a large number of dailies certified. Newspapers are published in as many as 100 languages and dialects – mainly in the 18 official Indian languages and English. In respect of circulation, Hindi newspapers lead with 57.3 million, followed by English with 18.5 million and Malayalam with 6.7 million. For all purposes, we need to take into account only around 5000 newspapers that are significant and in regular circulation.

He says, according to “Press in India 1999”, that refers to the year 1998 and the latest one available there are 43, 828 newspapers registered, out of which
dailies are over 4,700. The total circulation based on reporting by 6030 papers was 126.8 million copies. The circulation of daily newspapers on the basis of about 1,500 reporting dailies in 1998 was 58.4 million copies. ABC which has a membership of 368 newspapers but account for a significant proportion of serious newspapers circulated certified a total circulation for the period July-December 1999 of 43 million copies and 40.9 million the previous year. According to the Annual Report of the Indian Newspapers Society (INS) the aggregate circulation of its member publications as on 30, June, 2000 was 53.4 million copies. Online editions of Indian newspapers have so far been a happy situation of primarily having overseas readership in the form of hundreds of thousands of Indians residing abroad. These editions have not yet cannibalized the print editions in their home markets. But this situation may not continue for long looking at the way in which Internet usage in India is exploding.

According to the latest round of NRS’99 the press reaches 39 per cent of individuals over 15 years in urban plus rural India, while TV reaches 53 per cent, radio 28 per cent and cinema 26 per cent. In urban India, however, the reach is - press 62 per cent; TV – 80 per cent; radio - 26 per cent and cinema – 35 per cent.

Mark Deuze (1999f), explains, newspaper is right in the middle of technology and everyday life, made up of content that is relevant to the individual and the collective – whereas, web casting or similar new technology based
developments in journalism can only but serve a small, technology-adapted elite of either individual or collective consumers. The public service function of the newspaper cannot be taken over by 'streaming video' or 'read audio' – simply because the newspaper can provide both informative and entertaining content without having to switch on, log on, download and scroll. The traditional newspaper will disappear, though when newspaper journalists – especially in Europe, will not wake up and open their eyes to the possibilities and threats to their profession; a profession which desperately needs to (re-) emphasize its value to the people.

Though Internet is a potential threat to the other forms of media, Gokhale (2001b), believes, Internet would not replace newspapers, television did not replace radio and the VCR or Cable did not replace movie cinemas. New media like the Internet will add to and complement, not replace the existing media. Though the popularity of the Internet and the WWW syndrome has challenged the dominance of print newspapers as a low cost, user friendly mass information distribution medium, it is still the daily newspaper in print that is much talked about and praised. After all, objectivity, credibility and dependability are the pillars of print journalism. He says print is portable. It can be used anywhere, anytime and has pass-along value. Print is personable. It speaks to distinct individuals with personalized ink jet messages and custom collated pages. Print is convenient. It
satisfies people of their fast food mentality for information, drive through, take home, and take out. All service, no fuss and of course no tips!

*Murali (2001c)* opines there is still a long way to go for the press in India to catch up with its counterparts in the developed world in terms of dispersion with only about 46 daily newspapers per 1000 population. In terms of total newspaper circulation however India is now in second place behind Japan, but ahead of USA. Riding on the crest of the economic boom between 1992 to 1996, newspaper advertising volumes and revenues reached new heights and newspapers also attained new levels of growth in their circulation. With cover prices of newspapers remaining untouched, their advertising rates were increased steeply and frequently. Newspapers also made increased investments in technology, product improvement, improved color and new supplements and started new editions to spread their geographical reach.

He says, Indian newspapers are amongst the lowest priced anywhere in the world. This gross under recovery of costs from the selling price automatically places unduly high reliance on advertising for not only covering direct costs and overheads but also to provide for newspapers profits and investments in product improvements, in technological upgradation and also in marketing initiatives. And when an advertising slump comes along as was experienced during the last two
years, one can well imagine the plight of the newspapers which are literally burning the candle at both ends.

Jethmalani (2001c) maintains that in the early days of any new media, there is much hype and euphoria. While old media players ridicule newcomers, the upstarts claim they will wipe out old media. The truth is somewhere in between. Just as TV did not destroy newspapers, it is unlikely that any new media will destroy the old. However, what does happen is that the relative shares of revenue change to accommodate the new entrants.

2.2.0 Hypotheses:

Based on the objectives set for the study and review of literature, the following hypotheses were formulated for testing.

H1. There is no difference in the explanation of reasons for starting an online edition among newspapers of different size and language.

H2. There is a difference in the number of hits received by newspapers belonging to different size and language.
**H3.** There is a difference among the editors of newspapers belonging to different size and language, regarding their opinion on whether maintaining an online edition is an opportunity or liability for newspapers.

**H4.** There is no change in the circulation of newspapers of different size and language of newspapers after starting online editions.

**H5.** There is a difference among the newspapers of different size and language in responding to the challenges posed by the Internet.

**H6.** There is no difference among the editors of newspapers of different size and language in their opinion on the future of online journalism.

**H7.** There is a difference among the online journalists belonging to different groups of sex, age and educational qualification in familiarity with the programming language used on the Internet.

**H8.** There is a difference among the online journalists belonging to different groups of sex, age, and educational qualification in the use of different interactive options on the Net.
H9. There is a difference among the online journalists belonging to different groups of sex, age, educational qualification and experience in the comfort level in the online environment.

H10. There is a difference among online journalists belonging to different groups of sex, age, educational qualification and experience in their opinion on the future of online journalism.

H11. There is a difference among the Internet users belonging to different groups of sex, age, educational qualification, occupation and monthly income in the readership of English and Kannada newspapers.

H12. There is a difference among the Internet users belonging to different groups of sex, age, educational qualification, occupation and monthly income in the ownership of personal computers.

H13. There is a difference among the Internet users belonging to different groups of sex, age, educational qualification, occupation and monthly income in the quantum of use of internet.

H14. There is no difference among the Internet users belonging to different groups of quantum of use in the preferred use of Internet.
H15. There is no difference among the Internet users belonging to different groups of sex, age, educational qualification, occupation and monthly income in the readership of news on Net.

H16. There is no difference among the Internet users belonging to different groups of quantum of use in the manner of reading newspapers on the Internet.

H17. There is no difference among the Internet users belonging to different groups of quantum of use in the preference of different editions of newspapers.

H18. There is no difference among the Internet users belonging to different groups of quantum of use in the readership of newspapers, after being exposed to the Internet.