UNIT – 4: NEW MEDIA

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4.1 LEARNING OBJECTIVES

After going through this unit you will be able to;

- explain concept of new media
- describe the different types of new media available
- discuss the history and growth of computers and Internet in India
- discuss the role of computers in journalism
- examine the impact of new media in communication business

4.2 INTRODUCTION

You have already been made acquainted with different types of media in the last units. By now you must have gained a fair understanding about the different types of media available for communication with the masses. These media are newspaper, television, radio, books, journals etc. These media apart, we also have different types of traditional media and folk media which have been used both in the past and in the present era for more effective communication with the rural people.

Having done this, now it is the time to look into the other types of communication channels that have come into being in the last few decades, especially after the advent of computers which have ushered in a new era in the communication diaspora. The computers, enhanced by new communication technologies, have changed the way the information is collected, processed and disseminated among the mass people.

4.3 CONCEPT OF NEW MEDIA

We are living in a world of information and tele-communication. The world we are living now is characterized by computers, internet, world wide web, digitalization and host of other new technologies with far-reaching impact on environment. Information is acknowledged as a potent power in contemporary situation and those who own it are considered being blessed with the most powerful tool.

The media has assumed an important role in today's information society and the new technology is the driving force behind all the developments that have taken plan. The aura of the old media like newspaper, television and radio, which have been relegated to the status of traditional media in the new situation, seems to be fading away. In the growing new media situation, the old media is vying for existence and to regain its old charm. Nevertheless, the technological advancement that has followed in the last few decades has been making it possible for them to appear in a new avatar that is capable of withstanding the threat posed by the new media.

But what is this new media? How is it different from the existing old media? What are the characteristics of new media? All these questions will find an answer in this unit.

4.3.1 The Meaning of New Media

Today's era is aptly called the era of new media. The concept of new media has come into being after the advent of computer and subsequently its application into the process of information dissemination with the masses after the arrival of Internet. Before it, newspapers, magazines, television and radio were used as the media through which information was disseminated and entertainment was provided to the masses. These media channels were the characteristic product of modern societies and hence they are called modern media.

However, the modern mass media, dominating the media business for quick some time, were also threatened after the proliferation of new media and subsequently by its use in the information dissemination process.

The evolution of computers has paved the way for the development of Internet. And when Internet was used for information dissemination, it gave birth to a new medium which later became synonymous with the new information era. The Internet has revolutionized the whole concept of the news and entertainment business. Anytime and anywhere the availability of information has become the order of the day, which was not the case earlier. The Internet has empowered the audience by way of allowing the audience to receive information at their own convenience and also in a very customized way. Interactivity between the audience and the Internet has transformed the way the messages were retrieved by the audience. Audience became more involved and demanding while consuming messages, which removed the passivity on the part of the audience that was prevalent before. Considering the nature in which information and entertainment were processed, distributed and consumed by the audience in this medium, it became difficult to put it in any of the existing categories of modern mass media like radio, television or newspapers. Hence, entirely a new medium was conceived by the mass communicators that become to be known and popular as the new medium.

However, even though the new media has revolutionized the entire communication business, the growth and the pace at which this transition is taking place is accelerated by the latest technology in the offing. Also becoming commonplace with us are such things as coaxial cables, fibre optics, satellite communication, fax machines, cellular phones, tele text, video text, tele conferencing, video conferencing, digital sound and video, interactive TV, DBS (Direct Broadcasting System), video phone, video on demand etc to name a few. These innovations have male it possible for us to read our newspapers in the Internet, to watch our favorite TV shows and videos on larger than life size screen in our living room, do most of our shopping and banking online, and to book air and railway tickets using the computers and Internet from home. We also to do business and all kinds of transactions online, keep in touch with our near and dear ones through the cellular phone that we carry with us wherever we go, chat with friends and others through virtual chat rooms.

The media and entertainment industry have intertwined themselves with technology and providing innumerable possibilities to the audience. Newer concepts such as ICT (Information Communication Technology), Convergence, Information overload, information superhighway, information explosion, media implosion etc have been attracting the communication critics. Media is no longer a separate entity now, - instead media and technology are integrated concepts and we call it ICT. We no longer have isolated mediums. Instead, different mediums with different characteristics are converging into one and giving rise to an entirely newer medium with innumerable possibilities (convergence). We will deal with all these concepts in this unit. Let us now discuss a few characteristics of the new media.

4.3.2 Characteristics of New Media

The new media have certain characteristics that are similar in some respects to those of both interpersonal and mass media communication. And, on the other hand, there are certain characteristics that are very unique about the new media and can not be matched with any other media available for communication.

4.3.2.1 New media Vs Interpersonal and Mass Communication

Interpersonal communication is the face to face communication in which exchange of messages takes place in proximity between the two individuals. The feedback is instant because of this proximity and also the amount of feedback is more as compared to other kinds of communication processes. The messages are also relatively high in socio-emotional content.

On the other hand mass communication is always a mediated communication and, hence, it takes place through a medium like newspapers, radio, television, film etc. the feedback is always delayed and most of the time feedback never exists. The source always works through a complex organization and it is institutionalized. The entire process of distribution and consumption pattern is complex and involves multiple stages.

However, the new media integrates the characteristics of both interpersonal and mass communication. When communication takes place in the Internet, it is always between the source (which may even be an institution) and the receiver which may be one or a small group of people. There is a personal relationship that exists between the communicator and the receiver where the feedback is instant (may be delayed too) for example, chatting in the internet virtual chat rooms, e-mail, scrapping etc. In this sense the new media is like interpersonal communication because in that the messages are directed to specific individuals (de-massification). Information exchange via the new media is also very interactive, meaning that the participants in the communication process have control over and can exchange roles in their mutual discourse. Such interactivity is also a characteristic feature of face to face communication.

At the same time, communication via the new media is also like mass communication, because there is always a machine or a mediation involved. Communication never takes place in proximity of the exchangers of information and hence there is a high degree of impersonality that exists there.

4.3.2.2 Fundamental Characteristics of the New Media

The basic characteristics of the new media are as follows:

- **Interactivity :**

Participants involved in the exchange of information process through the new media can interact with each other. Interactivity may take various forms like consumers with the providers, consumers with consumers and consumers acting as provider.

- **Hypertext :**

Another important characteristic of new media is hypertext facility that allows to link different types of texts. The text here means both words and audio or video.

- **Multi-media :**

The ability of the new medium to combine photo, sound, audio, video, pictures and words into one medium is called multimedia. This characteristic of the new media makes it unique from all other media.

- **Selectivity :**

Moreover, new media also offers the audience all and many other possibilities at a speed faster than probably a human mind can think of. The non-linear programs are constructed in a cluster of web, enabling the audience to move to any content of their choice subsequently linking them to galore of other sources for more information until the users are tired of consuming them. The reading or the news consumption pattern is driven by user's choice not by that of the provider.



CHECK YOUR PROGRESS – A

1. What do you mean by the new media?

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2. What are the characteristics of new media?

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4.4 COMPUTER REVOLUTION AND INTERNET IN INDIA

As mentioned earlier, computer paved the way for the growth of the new media called Internet. The development of Internet was only one aspect of the multifaceted possibilities that computers provide to us. More importantly, what computers do is multi-tasking by replacing labour. When computers are used in the workplaces it replaces labour by doing the functions of many people at a time.

4.4.1 History and Growth of Computers

In 1945, the world's first computer, ENIAC was developed. It was developed for Military purpose at the University of Pennsylvania of United States and funded by U.S. Department of Defence. At that time it was a massive structure which was developed at the cost of millions of dollars and which consumed a huge amount of electricity. So much so that when ENIAC was turned on, it drained away the entire electricity supply causing all the lights in the city of Philadelphia to dim. Hence, the use of computers and its operations were also restricted to only a handful of corporations. However, later on micro computers were developed in the seventies and eventually the use of computers became easier.

In India, the first computer was acquired by Indian Statistical Institute, Calcutta in the year 1955. However, due to its big size and pattern of functioning, its use was restricted. Also, the government policies at the initial stages were not encouraging enough for foreign investors as well as local entrepreneurs to facilitate its proliferation. However, it was in 1984 when Rajiv Gandhi, the then Prime Minister of India changed government policies to encourage indigenous micro computer industries, that computers became an all round operation mechanism in the country.

The micro computer was designed to be owned and used by a single person; hence it was called as personal computer or PC. The micro-computer was developed in the early 1970's. It was small enough to sit on a desktop and the cost dropped to only a few thousand dollars. The first personal computer was developed at Xerox PARC (Palo Alto Research Park) in Silicon Valley. Xerox Park researchers also developed the bit-mapped computer display, pull down menus, icons, mouse and laser printing. Gradually personal computers began to be used not for number crunching (which was the case before) but for communication messaging purposes, especially as millions of people throughout the world began to use the internet during the 1990's.

In India, a boom in the use of micro-computers took place in the 80's and gradually it expanded in the 1990's. However, its rate of adoption in India, as compared to United States, was slow. In 2000, almost 50% of US households owned at least one personal computer at home. Whereas the computer had penetrated to only 1% of the total households in India during the same period. Similarly, in the same year every employee of an office owned a computer at his desk in United States, whereas in India this was not the case.

Despite all these differences computer entered into Indian context, and gradually became a part of every operation. It has also facilitated a new breed of technology to prosper. The face of every operation has been transformed in an unconceivable manner. It has also affected the media business.

4.4.2 The Internet

The most important impact of computers on societies has been generated by Internet. Internet is a network of networks intended to allow general communication between users of various computers. It is a medium for collaboration and interaction between individuals and their computers without regard for geographic location. The Internet is also a mechanism capable of instantaneous information dissemination world wide.

Simply put, Internet is a vast system of computers that are networked or linked together to share and exchange information. It is a global network connecting millions and millions of computers. Each internet computer, called a host, is independent and the operator can choose which Internet services to use and which local services to make available to the global Internet community.

4.4.3 History and Growth of Internet

The history of Internet dates back to the Cold War era. During the height of the Cold war in 60's, the U.S. government wanted to have control structure that would be immune to Soviet nuclear attack. They felt that if all the resources were kept with a central authority that would be the first target of attack. So they came up with the idea of having a network with no central authority. The principle of this network was that all the computers in the network would be equal in status. And each computer in the network could send as well as receive messages in packets.

Therefore, the American Government created a network of computers that was spread across the country. The system was such that even in the event of one or more computers in the network fails, the entire network does not suffer. This was called as ARPANET, the predecessor of the Internet.

In 1973, the U.S. Defence Advanced Research Projects Agency (DARPA) initiated a research programme to investigate the techniques and technologies for inter-linking packet networks of various kinds. The objective was to develop communication protocols which would allow networked

computers to communicate transparently across multiple, linked packet networks. This was called the “Internetting project” and the system of networks, which emerged from the research, was known as the “Internet”. The system of protocols which was developed over the course of this research effort became known as IP protocol suite or Transmission Control Protocol (TCP).

Internet in India

However, even though the Internet was developed for a specific purpose in mind, yet gradually it was allowed for public use. Later on, its services were also provided across borders. Compared to other communication channels, communication through the Internet is quicker, cheaper and more reliable. In India, the popularity and the widespread usage of internet developed after 1995, when it was made available to individuals & organizations for commercial purpose.

India had as on September 2008, 45.3 million active internet users (Source-International Internet and Mobile Association of India). The numbers of broadband connections in India have seen a continuous growth since the beginning of 2006. At the end of November 2009, total broadband connections in the country have reached 7.57 million. After economic liberalization in 1992, many private ISPs have entered the market, many with their own local loop and gateway infrastructures. The telecom services market is regulated by TRAI.

The Internet was one medium which hit the media business at the same time all across the world. Its spread was fast and happened at a rate unconceivable in ordinary circumstances. One reason for this was, perhaps, the widespread use of personal computers with the help of which the services of Internet could be accessed. The Internet has fundamentally transformed the way people learn, play, communicate and work. It has changed the way people do business, carry transactions, travel,buy goods, and so on and so forth. The concepts like e-commerce, e-business, e-banking, e-governance, e-learning etc are omnipresent in contemporary situation we will discuss this in later part of this unit.

4.4.4 Internet and the concept of Global Village

The Internet has made possible the quicker and, in fact, instant transfer of messages across countries. In other words, the Internet has squeezed the gap of time and space between individuals, between nations, and between institutions. The geographical boundaries between nations are no longer felt when individuals are communicating through the Internet. Hence, it is said that the Internet has turned the world into a single abode for all. The geographical distances between individuals and nations are getting extinct and people communicate as if they are a part of a single village without realizing the differences and separation that exists between them.

The term Global village was coined by Canadian media guru Marshall Mc Luhan in 1960's when the Internet had just arrived. He foresaw a world connected through the Internet. Like the way the highways connect different places, similarly the Internet would also connect different nations, cutting across geographical boundaries. He termed this as 'Information Superhighway' because people exchange information in the Internet. Or, in other words, people are connected through the Internet superhighway via which information travels.

Hence, Mc Luhan believed that the information superhighway would eventually transcend the world into a single global village. What Mc Luhan saw decades ago, has eventually turned into reality. We all have, in fact, become a part of a global village.

4.4.5 Convergence and the New Media

Convergence is the process through which different modes of communication converge to form a different medium for communication. The new media, called the Internet, has evolved out of this convergence process. In the new media we can read, see photographs, listen to music and other audio materials and also watch moving pictures, video, films etc. It is said that the internet has converged all modes of communication that have been invented so far into a single medium, with anytime and anywhere availability of data and information at a faster pace. This makes this medium a unique one, different from all others, yet imbibing them all into its own embrace.

World Wide Web:

Initially it was developed by Tim Berner for world wide communication in the field of high energy physics. But later on the concept of 'hyperlink' to this computer network popularized the WWW, as users could jump from one page to another without using complicated command.

If you have a PC with a modem you can connect it via a telephone line, to the internet, & then to the web. Your PC has to be loaded with a browser. This is the software that allows you to navigate the web & access its content. You also have to sign up to an internet service provider. This ISP hooks you into the system & provides you with an information storage area. Web information is usually kept on websites. It has made the world a common place.

Differences between internet & WWW

Internet is not just www. It is the infrastructure that allows computers to talk to each other throughout the world. The web is the interface that allows people to exchange, data-text-pictures-graphics-audio-video on the internet. There are other occupants of the internet like email, as well as the www.



CHECK YOUR PROGRESS – B

1. When has the world's first computer, ENIAC was developed?

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2. In India, the first computer was acquired by whom and when?

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3. What do you mean by media convergence?

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4.5 IMPACT OF NEW MEDIA & INFORMATION OVERLOAD

The Internet has emerged as a new medium for communication which has brought brings in massive competition to other medium, even forcing changes in content. The Internet is presumably the most widely used source of information in present day's context. It brings in great sense of enlightment to the audience as the volume of data and their range that it covers is much wide than one can ever conceiver of.

The Internet has, over the last decade, created a different set of audience which is very unlike earlier category of audience of television and radio, or print media for that matter. This new breed of audience is more demanding and more selective. And this change in their attitudes has forced the other existing media to change the way they deliver content to the audience. The need for empowering the audience has become the paramount concern for media producers.

On the other hand, the Internet or the new media has also created **netizen**, who are addicted to Internet and this is a health hazard, especially for the children. The new media has also created secluded audience, who are far from social discourses but more prone to indulging in cyber activities. This is again more prevalent among the children who find the new media more interactive, entertaining and full of fun.

The internet has the potentiality to change the taste and mindset of the people. The audience is exposed to a variety of cultures some of which may not have parity with our culture. It has been accused of creating an alien culture among the Indian youth, who are not aware of the traditional values and systems but more favourably disposed towards western values and cultures.

The new media is a store house of information. The Internet coupled with WWW has provided easy access to information. The infinite range of information is just a click of a button away from users. The multimedia, hypertext and hyperlink facility of the new media enable it to archive millions and millions of data and information. One can not even imagine the volume of information that can be housed by this new media, perhaps more than one can ever use in his life time.

Hence, what is actually happening in the new media situation is an information explosion, i.e. availability of more information than can be ever utilized by anybody. This explosion of information is leading to information overload. There is too much of trafficking of information because of which a state of overload of information has taken place.



CHECK YOUR PROGRESS – C

1. What do you mean by information overload?

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4.6 LET US SUM UP

The concept of new media has come into being after the advent of computer and especially after the arrival of Internet and World Wide Web. Internet is most appropriately called the new media because it has offered a new medium for communication. The Internet has changed the way communication is attained.

The new media embraces some of the characteristics of the old media (radio, television and newspaper) and also offers some characteristics which are strikingly different from the rest of the existing media. Some of the characteristics of new the media are multi-media, selectivity, hyper-text, interactivity etc.

The multimedia means the ability of the new media to combine words, pictures, images (both still and moving), sound and any kind of audio. The new media enables the people to select what kind of content to use according to their taste which was not available for other media. The audience just has to click the mouse and select the content they would like to consume. Unlike other kinds of available media, the new media engages the audience a great deal while using the content the audience takes part in content formation and prefers to use customized content. This interactivity makes

the new media different from other media and removes the passivity on the part of the audience. Hypertext means the ability of the new media to have multiple pages connected with each other. The number of pages connected in such manner is unlimited.

The Internet is the store house of information. It can provide information on any topic under the sun. Perhaps, the volume of such information is so vast that one would hardly be able to make use of all the data in his life time. Hence, it is said that the new media is creating a state of information overload. It means that there is a congestion of information or data on offer for individuals.



4.7 FURTHER READINGS

- India's Communication Revolution, by Arvind Singhal and Everett M Rogers, Sage Publication
- Journalism Online, by Mike Ward, Focal Press



4.8 ANSWERS TO CHECK YOUR PROGRESS

CHECK YOUR PROGRESS : A

1. The Internet is called as the new media.

2. Some of the characteristics of new media are multi-media, selectivity, hyper-text, interactivity etc.

   The multimedia means the ability of the new media to combine words, pictures, images (both still and moving), sound and any kind of audio. The new media enables the people to select what kind of content to use according to their taste which was not available for other media. The audience just has to click the mouse and select the content they would like to consume.

   Unlike other kinds of available media, the new media engages the audience a great deal while using the content. Audience takes part in content formation and prefers to use customized content. This interactivity makes the new media different from other media and

removes the passivity on the part of audience.

Hypertext means ability of the new media to have multiple pages connected with each other. The number of pages connected in such manner is unlimited.

CHECK YOUR PROGRESS : B

1. In 1945, the world's first computer, ENIAC was developed.
2. In India, the first computer was acquired by Indian Statistical Institute, Calcutta in the year 1955.
3. Convergence is the process through which the new media combines words, texts, pictures, images, sounds and any kind of audio material. It is the process of combination of different mediums to form a totally different medium.

CHECK YOUR PROGRESS : C

1. The new media is the source of information. The volume of information is so vast that most of the time it creates a congestion of information in individual's lives. This congestion of information leads to information overloading which is a state of containing more information than what is required.



4.9: POSSIBLE QUESTIONS

1) What do you mean by new media?
2) Briefly discuss the characteristics of the new media.
3) How is the new media different from the old media?
4) What do you mean by convergence?
5) Discuss the history and growth of Internet in India.
6) How did computer arrive in India? Discuss.
7) Analyze the impact of the new media.
8) Write short notes on

(a) Netizen (b) www (c) information overload (d) Marshell Mc Luhan