

---

## **UNIT 5 : COMPUTER IN MASS COMMUNICATION**

---

### **UNIT STRUCTURE**

- 5.1: Learning objectives
- 5.2: Introduction
- 5.3: Use of computer in mass media
  - 5.3.1: Use of computer in media
  - 5.3.2: Application of Internet in Media Business
- 5.4: Online newspaper
  - 5.4.1: Internet editions
  - 5.4.2 Growth of cyber newspaper
  - 5.4.3 Characteristics of cyber newspaper
- 5.5 : Comparison with other media
  - 5.5.1: Differences
  - 5.5.2: Similarities
- 5.6 : Audience of new media
- 5.7: Let us sum up
- 5.8: Further readings
- 5.9: Answers to check your progress
- 5.10: Possible questions

---

### **5.1: LEARNING OBJECTIVES**

---

After going through this unit you will be able to:

- describe the use of computer in mass media
- analyze the concept of online newspaper
- discuss the characteristics of online newspaper
- analyze the differences and similarities of online newspaper with other media

---

### **5.2 INTRODUCTION**

---

In the last unit we (Unit 4) have discussed the advent of computers and Internet and how the evolution of these two has revolutionized the human world by affecting our life in every day.

In this unit we will discuss the other aspects of computer and the Internet. How computer and internet are used in the field of mass communication and media, what is online journalism or internet edition of news papers etc. are some of the topics which will be the thrust of our discussion here.

---

### **5.3 USE OF COMPUTER IN MASS MEDIA**

---

The computer and the Internet are two of the most important innovations of mankind. These innovations have facilitated the arrival of the information age, which is undoubtedly a step ahead of the modern age which has heralded a new beginning in the post modern age. Both computer and Internet, coupled with world wide web are the twenty first century phenomenon and, as mentioned in the earlier unit, they have changed the face of human.

The impact of new media has been far and wide and we have already discussed this in the last unit. The impact on the media is also quite significant. Because of the use of computers there has been a great degree of transformation taking place in media operations world over with perceptible. Its impact on the field of journalism, entertainment industry, television productions, radio broadcasting, film making and all other aspects of media.

---

#### **5.3.1 Use of Computer in Media**

---

The computer is used in every aspect of the media business today. In fact, there is a complete computerized environment in every media house. The entire flurry of activities in the media houses is controlled and executed through the computer.

As an example we can look at the publishing business which has become much easier to manage today thanks to computers. The computer has made it possible to publish material from the desktop. The page making can be done from home now. Hence, it is possible to publish small booklets or magazines without worrying too much about their costs or volumes and thus, publishing with small investment has become feasible.

In the field of journalism the utility of computers is particularly removable because it has enable journalism to derive substantial benefit from the computerized environment. The entire editorial functions of reporting and editing can be performed at a far greater speed and with greater amount of efficiency and lesser errors, as compared to the earlier crude and cumbersome paper work.

The reporters no longer write copies on paper; instead they write their copies in the computer that are linked with the other terminals. It makes possible easy transfer and sharing of data and files. Hence, the written stories are immediately transferred to the copy editors terminals, who, at the other end, would edit the copy in another computer that retrieved the copy sent by the reporters. After performing the editing function the edited copy is immediately sent to the lay out artist who would place the story in the assigned space in the computer. The entire work would consume only a few moments.

The function of editing can be best executed with the help of a computer. Because, the computers are endowed with numerous tools for both photo and copy editing by using which all the conventional editing functions and many more can be done. The job of the intermediaries like proof reader, type setters etc are redundant in today's situation. Because all the computers do have word processors that enable it to perform all these works with greater speed and more accuracy. The cumbersome environment of paper work has been replaced by the machine assisted human job that is characterized by speed and more perfection.

Almost all the typesetting features and tools needed to bring out well designed publications are available in the latest DTP programmes for the personal computers. They can handle graphics and pictures with ease. Accompanying programmes like Photoshop can enhance the quality of the photographs. And the programmes like Corel Draw offer unlimited graphic and design opportunities.

The use of computer has also made photo editing a very easy job. The editor can do a quick adjustment of brightness and contrast besides cropping on the computer. He can also improve the quality of the photographs using the multiple tools available in the computer. This edited picture would reach

the page in a matter of minutes. With the help of wireless technology or telephone lines the pictures can also be sent from a distance to the newsroom by the photographer in matter of seconds.

The job of lay out preparation has also become quite smooth because of the use of computer. The preparation of layout is a very crucial task which requires great amount of creativity and skill on the part of the layout artists. However, this crucial work has also been taken over by computers in contemporary situation. With the application of computers in lay out preparation the layout artists have been enabled to explore with various design techniques and options available in the computer. As a result, the newspapers look more beautiful, appealing and engrossing.

Earlier, the edited news had to be pasted on to a dummy paper by hand called as the 'cut-paste' method before being sent for printing. This method was very time-consuming and cumbersome. However, with modern computer software like Adobe Indesign, Quark express, Page-maker etc the entire process can be performed with much ease and at a faster speed. Experimenting with different styles of design has also become very smooth and a less time consuming affair. Searching and pasting of photographs is become very easy.

---

### **5.3.2 Application of Internet in media business**

---

Along with the computers the use of Internet has also proved to be a great boon for journalism. Because, the e-mail facility that is there in the net help us in sharing and transferring of information instantly, cutting across geographical boundaries. It ha made the printing of different editions of a newspaper quite easy and less cumbersome.

Similarly, filing of news items from distant places by staff reporters or even from the same city, has become a matter of a few seconds only as the e-mail facility allows one to transmit messages within seconds to any place on earth. This speeds up the whole process. Similarly any kind of write ups can be sent and accessed through the computers using Internet.

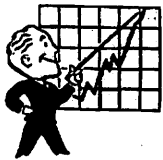
Moreover, the news agency reports are also sent and retrieved through the Internet. Another major convenience is that in this case the full list of news items and articles sent by the news agencies can be stored in the computers

hard drive for a long time and one can access them any time and select any news item from the list depending upon the need.

The concept of Citizen journalism came into existence early but due to rapid growth of Internet, concept spreaded quickly.

Another advantage experienced by the newsmen is that newspapers having multiple editions and printing facilities at different and distant places can transmit the main body of the paper or the major parts of the paper through the internet to these centres in just a few minutes.

In fact, computerization has completely revolutionized the journalism business these days. Gone are the days when one had to depend upon pen and paper for filing news items through fax or telegraph and telex. Today, one can use his or her laptop computer and send the copy to the paper's office at the click of the mouse. For many newspapers and electronic media news bulletin offices a computerized environment has almost become the lifeline of the entire system. In the normal situation editing is done on hard copy and typed and proof-read before finally going to print which needs a lot of time. This has the added disadvantage of containing mistakes and requiring the services of several persons on the line, from editing desk to DTP operators, proof readers etc. Each step causing time lapses. In comparison to this, the computerized system is far more advantageous and effecting.



### CHECK YOUR PROGRESS – A

1. Fill in the blanks.
  - a) Journalism has been receiving great benefit from the .....  
..... environment.
  - b) Almost all the typesetting features and tools needed to bring out well designed publications are available in the latest .....  
.....programmes for the personal computers.
  - c) The job of lay out preparation has also become quite smooth because of the use of .....
  - d) The news agency reports are sent and retrieved through the .....

---

## **5.4 ONLINE NEWSPAPERS**

---

The Internet is the latest addition to the media of mass communication. It offers a great range of opportunities for the news producers as well as audience. One such option is the spurt of online newspapers.

The online newspaper is the newspaper designed specially for the medium of Internet. The evolution and growth of online newspaper is ensured by the development of world wide web.

The last few decades have witnessed a proliferation of online newspapers. The term 'online' is used to refer both an internet edition of a newspaper & a newspaper published only on the world wide web.

The online medium has redefined the boundaries of journalism. It has hastened the growth of a new breed of journalists who are equipped with all the skills to operate in this medium. The journalism on the net is different from all the existing trend of journalism in more ways than one.

Online newspapers are also called cyber newspapers.

---

### **5.4.1 Internet editions**

---

It has become a customary practice for any newspaper now a days to make their printed paper available in the net. It does not mean exclusively producing an online newspaper. It means making the printed newspaper available on the net.

For examples, all the major newspapers of India are now available online. The Times of India, The Hindustan Times, The Hindu, The Asomiya Pratidin, The Assam Tribune, only to name a few. Even the television channels have their online versions like Times Now, NDTV, Aaj Tak etc.

---

### **5.4.2 Growth of cyber newspaper**

---

The growth of cyber newspapers is a new phenomenon. Even though computers came to India long time ago and the use of Internet was also on the rise, yet it took almost a decade to make the use of Internet in journalism in India. There were some web portals prevalent which were providing the

audience with general information along with tit bits of news, yet the serious outlook towards news business in the online medium was a hard to come by till 1995.

The United States was the first to set the trend of online journalism and gradually this new trend created ripple among the net surfers all across nation. In the United States, the penetration of computers and the Internet to individual households was fast which provided the impetus for the growth of cyber journalism. Despite the fact that India was undergoing a technological renaissance and was amidst a tele-communication revolution in 90's, the multifarious cyber media remained untouched by journalism potentials in India. Cable television, satellite television, and other kinds of products of tele-communication revolution were slowly gaining ground. But it was slow in adapting to the new medium due to various reasons.

'The Hindu' newspaper took the initiative to bring out its first Internet edition in India. That was the beginning and gradually all other newspapers followed suit. A serious approach towards the potentialities of the online media thus started to gain grounds and in a matter of just a decade all the media houses started to have their own online edition of newspapers apart from their conventional print counterpart. Eventually the electronic media channels have also started their online editions. The creative contents of the web pages are simultaneously becoming more luring and engaging.

However, there are many benefits of online media. The Indian media had already started applying new communication technology such as computers and the Internet in their day to day operations. This has changed the way the data were collected, processed and delivered to the masses. Earlier congestions created by pile of copies filed by the reporters were significantly reduced to merely a few computer terminals through which the reporters could write their copies directly and send it to the copy editors for editing via them.

The correspondents who are operating from distant places can now send their reports via Internet using e-mail facility. The digitalization process has also enhanced the way the photographs could be captured, retrieved, processed and printed using computers. More variety could be achieved by using new software in the computer and thus ensuring wide coverage of

media content. It not only helps in cost cutting by eliminating intermediary labor support, it also saves a lot of time by hastening promptness in operations.

Considering the potentialities and effectiveness of the new medium the producers of news and entertainment business have started looking towards it and spending a huge sum of money to develop web newspapers and editions of existing ones. This new breed of journalism that takes place in the cyber space is getting immensely popular day by day.

---

### **5.4.3 Characteristics of cyber newspapers**

---

Cyber newspapers offer a great range of options to the users. Because of its unique features, which are so different from the features of the existing ones, cyber newspapers are getting increasingly popular among the audience. Considering its incremental form of audience and the pace at which this has been achieved, the media producers are now turning towards this medium and venturing out to explore the galore of opportunities provided by it.

Some of the characteristics of the online newspapers are discussed below.

#### **■ Multimedia:**

The new media has this multimedia facility which is not found in the conventional media system. It means combining sound, audio, pictures, texts, video etc into just one medium. Digitalization has made it possible for different kinds of traditional media, which earlier had been completely separate, to combine into one in order to communicate through a common computer language

#### **■ Hypertext:**

In the printed text it is difficult to link texts to another. But the main characteristic of virtual text is the combination of many separate texts through embedded links. This phenomenon is called hypertext. Here the text means not only words, but also picture, sounds etc.



**■ Interactivity:**

It is a unique feature of the online media. It allows the audience to interact with each other online. Because of this feature, audience can now participate in content formation and hence become more involved while using the media. The passivity which existed before is getting extinct and people remain active while using the media.

The interactivity on the net happens from

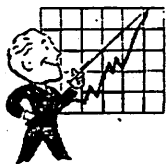
- Consumers with providers: When consumers give feedback to the producers of their used goods
- Consumers with consumers: when the consumers share their views with the fellow consumers
- Consumers acting as providers: when the consumers produce content for their own websites.

**■ Archives:**

It means availability of different database & archives. The online media is a store house of information and data. It can provide any kind of information on any topic, probably more than what people can ever use. There are a number of search engines that allow the audience to locate and retrieve data. It helps the journalists to provide large amount of background information. In discussion groups archives can be used for reading previous postings. In archives users can look for articles on a specific topic through search engines.

**■ Instant Feedback****■ Combination of Print, Audio & Video Newspaper****■ Flexible delivery platforms**

The online media provides flexible content delivery system. The same information can be delivered through various means on the web. It means that a single news provider can take one piece of information & put it on a web news page, include it in the searchable database or send it to a mobile phone display screen. Since gathering information is very expensive it makes sense to send information to as many people and in as many ways.



### CHECK YOUR PROGRESS – B

1. What is an online newspaper?

.....

.....

.....

2. What do you mean by internet edition of newspaper?

.....

.....

.....

3. Briefly discuss the characteristics of cyber newspapers.

.....

.....

.....

## 5.5 COMPARISON WITH OTHER MEDIA

### 5.5.1 Differences

As mentioned earlier, online media is different from other existing media like newspapers, magazines, radio, television etc. in more ways than one. Some of the differences are discussed here.

#### a) Hyperlinks to other information sources:

In the net one page may be linked with thousand other pages. The user just needs to enter into one page that eventually leads to many other pages full of data, sound pictures etc. This multiple pagination system is a distinguishing character of the web media.

#### b) Discussion groups for those who use online media:

Another distinguishing characteristic of web media is formation of discussion groups. The discussion groups are created in which the audience participate in discussions relating to any issue, give their opinion, etc. This makes the

online media more democratic as compared to other types of media. This is not possible in other media types.

**c) Feedback to journalists & editors:**

Unlike other media, the new media allows the audience to give feedback to the editors, reporters or producers. And this feedback is instant. This response may take the form of e-mail, through which a direct contact may be established with the concerned person.

On the other hand, it may also take the form 'chatting' through which the audience can engage in a one to one talk with the concerned person. This makes the online media distinct from the radio or television or may be its print counterparts as this facility is not available there.

**d) Access to archives:**

Another feature that distinguishes online media from the rest of the existing media is its archival facility. Because of the multiple pagination or hyperlink facility the online media can provide infinite range of data and can link the audience with multiple sources of information and data.

**e) Multimedia publishing (picture, sound, text):**

Multimedia facility is another distinguishing character of the online media which makes it unique in its own way. Now it is possible for audience to read newspapers, books, journals or any other printed materials, view pictures, videos, movies and listen to music or other kinds of audio material using the same medium. This combination of different media into one is not available in other kinds of media.

**f) Upgrading & publishing of news in real time:**

The online media is bridging the gap of time by allowing news to be upgraded and uploaded in real time, probably swifter than the television which is the only media among the rest that is capable of doing so. This makes online media a convenient publishing option.

**g) Packaging of content :**

TV/radio are linear mediums, that send out texts in a linear fashion i.e. headlines followed by the top story, anchored by the presenter, then a few

other news stories, the weather report, a soft story etc. But in case of online medium the users have the choice to go to any content of their choice as the packaging is web-like.

#### **h) Online publishing**

The publication process of the old media is quite complex. Publishing a high volume daily newspaper is an intricate business, requiring the synchronization of many different activities by a large range of people.

As an information dissemination tool, it is quite crude too. Even if the paper runs to several editions, when it is done, it is done and will not be done again for another 24 hrs. And what you get is what you get. Take it or leave it

But online media is different in the sense that

- ☐ Not many people are required to produce a news & publish it
- ☐ If the readers want more than what is given then there are links to take them to the places where their kind of content exists

#### **i) Pull-medium:**

Online media is a pull media. That is, nothing comes to the user until he pulls the content down using the mouse. In that way it is more user friendly medium, as it empowers the audience to select the content to use. It is not the case for other kinds of media as the contents are pushed to the audience and the audience takes up whatever is coming their way.

#### **j) 24+7 Media every minute is deadline**

The speed at which the data and information could be sent to the recipients through the Internet has provided greater impetus to the communication process. The 24-hour life cycle of news in case of newspapers has been reduced to only a few minutes or so by the use of the internet. It means that the readers had to wait for 24 hours till next morning to get the fresh and updated version of the news of the day's happenings to appear in their papers. On the other hand the broadcast media may take lesser time, probably a few odd hours, but still it can not compete with the speed of the web newspapers. The new media has enabled the producers to update and flash the information in the computer screens minutes after its occurrence.

---

## 5.5.2 Similarities

---

However, the online media is also similar to other media in some ways like-

**(a) Mass media :**

Like the conventional media online media is also a mass medium used for disseminating messages with mass audience. It has all the characteristics to be called as mass media. Except for certain situations, the messages of online media are created keeping in mind the mass audience.

**(b) Medium of Infotainment :**

Like its counterparts, the online media is also a powerful medium of infotainment. It provides information in lore and like the print, radio and the television, online media also provides entertainment to the audience in numerous possible ways. Due to its multimedia facility, the content of online media becomes more appealing to the audience. The audience finds it more interesting and engrossing to access the text, sound and the moving images in the same medium.

**(c) Democratic medium:**

Like its counterparts the online media is also a democratic medium. The audience can give instantaneous feedback to the source in a number of ways. However, this democracy of participation and feedback system is more flexible in case of online medium as compared to other types of media.

**(d) Similarities with Print:**

Print media is predominantly a medium of words and texts. Online media also shares this character with the print media by providing texts and words to the audience.

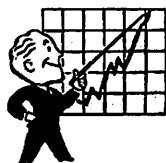
Unlike radio and television, print media is used as reference material. As the print materials like newspapers, magazines and journals can be kept for future use, they are of tremendous help as reference material. Similarly, the online media is also a powerful reference material as the audience can have access to any type of information, anytime and anywhere.

**(e) Similarities with radio :**

Radio is an audio medium. The very nature of online media also makes it possible to provide any kind of voice, audio, music, and any kind of audio material. In that sense online media matches with the character of radio or any kind of audio medium.

**(f) Similarities with television :**

Online media shares many characteristics of television medium. It is audio-visual like television. Due to technological advancement, television can also provide news as it is happening. The concept of breaking news is quite popular in today's context. In that sense online media is, to some extent, similar as it can also provide updated information to the audience.

**CHECK YOUR PROGRESS – C**

1. How is the audience of cyber media different from print media?

.....

.....

.....

.....

.....

**5.6 AUDIENCE OF NEW MEDIA**

New media has created a potentially large audience, yet the audience is fragmented one. It means that the messages are no longer simultaneously and uniformly received by the audience as they make selective use of the media content. And, hence, the messages are not meant for mass audience. New media, therefore, is not a mass media in the traditional sense, sending a limited amount of messages to a homogenous mass audience. Because of the numerous messages and sources that are stored in incremental form, the audience of the new media tends to be selective and this deepens further segmentation.

The web has challenged the primacy of news and skill for professionals. The audience has become more demanding and more specific when it comes to using media content. Their demand is shifting from news to 'news they can use', information to 'intelligent information', content to 'useful content' and impersonal to personalized or customized news.

In such situation, the journalists no longer pay attention to providing enough background information because of the inherent archival facility of the net. Hence, the text in the screen tends to be shorter which also makes it more user-friendly. The definition of news content has changed and a journalist has been shoved into the position of a news mediator, because anybody can now become a news producer provided he or she has access to the Internet. So in one way the volume of news has increased but journalistic values have decreased as the journalists would be spending more time in news formatting and processing leaving no scope for lending traditional journalistic practices.

---

## **5.7 LET US SUM UP**

---

Computers, Internet and world wide web (www) have been some of the unique creations of mankind, which have arguably changed the face of the world. They have brought in a new way of life and have started touching upon every aspect of human life.

The field of media has also been blessed with the impact of computers and Internet. Since their inception they have transformed the whole aspect of media and entertainment. There has been computerized environment in every media establishments. Computers have become the life blood of media operations without which media operations can not be conceived of in today's situation. Be it reporting or editing or making the layout of the newspaper pages, the use of computer is a must. The age of snarled paper work has been reduced to machine assisted neat and clean environment that is far off from creating any kind of congestion. The reporters use computers to write and file their copies. The entire editing work is done using multifaceted computer tools available without any fuss. There prevails a hassle free environment everywhere. Photo editing has become flawless,

thanks to the blessings of computers. The computers have also come as a boon for layout artists with the help of which the pages of the newspapers look beautiful, attractive and striking. Not just that the job of newsmen has become smooth; but the computers have also made the job more prompt and saving a lot of valuable time for the news personnel.

Similarly, the Internet has been an integral part of media operations, too. The reporting and filing stories from distant places are no longer difficult for the correspondents as the e-mail can immediately send and receive files without losing on time.

The new media has brought in the concepts of cyber newspaper and cyber journalism. Cyber newspaper includes both Internet editions of newspapers and only online newspapers. When the printed newspaper is made available on the net then it is called as Internet edition. On the other hand there are some newspapers especially created and designed for the online medium. It has become a tradition now to have internet editions of newspapers and broadcasting channels. Online medium has transformed the traditional practices of journalism and an entire new breed of journalists is created who are termed as cyber media journalists.

The new media has also created a type of audience who are segmented and more demanding. The audience members now take part in content formation by demanding customized content from the producers. The days of the passivity on the part of the audience has been replaced by active participation and involvement by the audience while using media products.



---

## 5.8 FURTHER READINGS

---

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





## 5.9 ANSWERS TO CHECK YOUR PROGRESS

### CHECK YOUR PROGRESS : A

1. Fill in the blanks
  - a) The field of journalism has been yielding a great benefit from the computerized environment.
  - b) Almost all the typesetting features and tools needed to bring out well designed publications are available in latest DTP programmes for the personal computers.
  - c) The job of lay out preparation has also become quite smooth because of the use of computer.
  - d) The news agency reports are sent and retrieved through the Internet.

### CHECK YOUR PROGRESS : B

1. The online newspaper is the newspaper designed specially for the medium of Internet. The term 'online' is used to refer to both an internet edition of a newspaper & a newspaper published only on the world wide web. Online newspapers are also called as cyber newspapers.
2. The Internet edition of newspaper means making the existing print newspaper available on the internet. It does not mean producing a newspaper especially for the new media. For example: The Times of India can be accessed at [www.timesofindia.com](http://www.timesofindia.com); NDTV can be accessed [www.ndtv.com](http://www.ndtv.com); the Hindustan Times can be accessed at [www.hindustantimes.com](http://www.hindustantimes.com), so on and so forth.
3. The cyber newspapers are different from other existing newspapers. There are certain characteristics of online newspapers. They are discussed below:

Multi-media: The cyber newspapers can carry voice, sound, music, words, texts, pictures, moving videos etc.

Hyper-text: The cyber newspaper can have multiple pages connected with each other and the number of such pages increases as the user goes on clicking the mouse.

Interactivity: The audience can really engage in the formation of content in the sense that they can opt for owning customized content, tailor

made according to their individual taste.

**Selectivity:** The new media empowers the audience by way of allowing them to select and choose what content to use and what not to use.

**Archival facility:** the cyber media is the source of all kinds of information. It archives every bit of information in an incremental form

**Flexible delivery system:** The online media provides flexible content delivery system. The same information can be delivered through various means on the web. It means that a single news provider can take one piece of information & put it on a web news page, include it in the searchable database or send it to a mobile phone display screen.

### **CHECK YOUR PROGRESS : C**

1. The audience of the new media is different from the existing audience for the old media like newspapers or electronic media. The audience of the New media is large, but a fragmented one. The messages are no longer simultaneously and uniformly received by the audience, because the audience makes selective use of the media content. Therefore, it is said that in new media situation the messages are not meant for mass audience. New media therefore, is not a mass media in the traditional sense as it sends a limited amount of messages to a homogenous mass audience. Because of the numerous messages and sources that are stored in incremental form, the audience of the new media tends to be selective this deepens further segmentation.



## **5.10 POSSIBLE QUESTIONS**

- 1) Briefly discuss the use of computers in media operations.
- 2) What do you mean by online newspaper? How is it different from print newspaper?
- 3) What is an Internet edition of newspapers? Answer with suitable examples.
- 4) What are the characteristics of online newspapers?
- 5) Briefly examine the differences and similarities of online newspapers with other media.