

Chapter- 8

Social Impacts of ICT

Information and communication technology has made the whole earth a village. It has given birth to a global economy by adding different economies of the world. All activities of society have been affected by the information revolution – religion, education (e-learning), health (e-health), trade (e-commerce), administration (e-governance), industry, research and development, organization, advertisement etc. all sectors have been transformed. Today's society has started to call information society.

The effect of the information revolution can be seen clearly on our society. ICT has made our society active and aware. The way we do our work today has changed. Through internet today we have been connected by e-mail, audio-video chatting, video conferencing etc. Today we are paying bills for water, electricity, telephone etc. seating at home. While sitting at home, we are buying the goods and are doing reservation in bus, train, aero plane etc. ICT has provided many opportunities of employment to every section of the society. In this chapter we will study the social impact of ICT.

Secrecy

It can also be called privacy. Privacy or secrecy refers to the right to use the data only by the authorized person. Any person can be authorized to read or change the data. If a person has been authorized to read data only, then he cannot make any changes to the data.

Authentication

Authentication means that before you provide any information about yourself or the business deal with the person you are contacting, get all the necessary information related to it. Prior to authorizing it, it is necessary that you find out the truth about the identity of that person by a source. This is the way to protect the security. Using this method, the operating system can detect the person being the authorized user.

Because the person is difficult to identify physically, therefore the authenticity of

the person is revealed by the operating system password. The user is expected to provide such information, which is known only to the user and the operating system. The operating system assumes that the person who gives the specific information is the real user.

Integrity

Integrity means that whatever the data reaches the receiver, should be in the form it was sent to. There should be no accidental or unwarranted changes in the data transmission. The more currency exchange is on the Internet, the authenticity becomes as hard. An independent computer, which is not connected to a network, and all input and output devices related to it are kept in a safe place, then that computer can only be harmed by the unauthorized user. The risk to the security of the computer can be reduced by the proper management of the user's identity in the cell.

Plagiarism

Publication in the form of an original work by an author, mostly by imitating someone else's language, thoughts, ideas, style etc., is known as literary theft or plagiarism. Only after 18th century in Europe did such behavior be considered unethical behavior. In earlier centuries, writers and artists were encouraged to imitate the famous masters of their field. Literary theft is considered when we publish literature written by anyone without reference to him in his own name. The literature taken in this manner is considered immoral and it is called plagiarism. Today, when information technology has expanded rapidly, literary theft has increased. Plagiarism is a social effect of internet. Nowadays, various content such as articles, audio, video, presentation, photograph etc. are available on the internet abundantly and easily. It is also easy to copy, cut-paste and edit this content, because many software and tools are available for these tasks. For this reason, the trend of imitating the work of others in students, researchers, journalists, writers etc. has been encouraged.



Diagram 8.1 Plagiarism

To prepare a research paper, many researchers raise study material improperly. These researchers either edit or distort this study material and attach it to the research paper and submit it. Researchers usually copy the study material from any search engine or other books or stole from there and submit it to their research paper. In addition to research, do the same in Projects and Thesis papers.

Due to the expansion of information and communication technology, the whole world has become a global village today and such unethical work has now started getting easier. Many software has now come in vogue to stop this, which can easily find out where the content is taken from. Whether it taken from a reference book or copied from any book or online material. These software are being proven to be very useful for the purpose of reinvesting plagiarism.

In the field of education, the literary theft made by a student, teacher or researcher is called Academic Dishonesty or Academic Fraud. Whereas in the field of journalism, the journalistic theft done by journalist, is said to be a violation of journalism. Plagiarism is not a crime but it is invalid on moral grounds.



Diagram 8.2 Stop plagiarism

To avoid plagiarism, the following things should always be kept in mind –

- ◆ You should be clear about what plagiarism is. This will save you unknowingly from the unethical use of someone else's thoughts, words or actions.
- ◆ You should know the source of the material you are using.
- ◆ Before making any new material, be fully aware of all the information and its sources related to it.
- ◆ If you are using any material, article, photo, audio, video etc. in your work, you should seek prior permission from the copyrighted person, the publisher or the organization, to avoid plagiarism and copyright infringement, and your work must be mentioned in this fact.

Intellectual Property Right

The right to possess intellectual property is from the legal authority obtained by a person as a result of the fundamental intellectual work done in the field of science, technology, literature or art. The art work created by an artist, music created by the composer or article or poetry written by a poet or authors is owned by a person or institution / organization, and the person or institution specializing the original skill or work done by him Has the right to take advantage of their original skill work. Therefore, creator or author has the right to decide on where and how to use its work.

Intellectual Property Right promotes fundamental and productive work and prevents tendency to imitate or steal.

To protect the intellectual property rights on international level, the United Nations established the World Intellectual Property Organization (WIPO) in Geneva in 1967. Its original work is the preservation of the worldwide Intellectual Property.

184 countries of the world are members of World Intellectual Property Organization (WIPO). India is also a member of this organization. This organization operates 24 international treaties.

In 1965 World Trade Organization was constituted. Agreement on the trade related aspect of intellectual property rights (TRIPS) is an agreement of this organization. All the countries which are members of the World Trade Organization, they have to accept it and make their laws accordingly. We are also changing the laws related to intellectual property rights due to this so that they become conformity with the trips. For many, this is to say that we are not changing the law because we need them, but that is because Trips says and because of the World Trade Organization and Trips, we have lost our sovereignty.



Diagram 8.3 of Intellectual property rights

In the trips, about seven types of intellectual property rights have been discussed. In India, intellectual property rights have been protected under the following eight acts:

1. The Biological Diversity Act, 2002
2. The Copyright Act, 1957
3. The Design Act, 2000
4. The Geographical Indications of Goods (Registration and Protection) Act, 1999
5. The Patents Act, 1970
6. The Protection of Plant Varieties and Farmers' Rights Act, 2001
7. The semiconductor Integrated circuits Layout design Act, 2000
8. The Trade Marks Act, 1999

Apart from these, two more areas are the areas under which intellectual property rights are protected.

1. Trade Secret
2. Contract Act

The open source software has a different kind of intellectual property rights. Open Source is a software whose source code is open to all. Code of such software can be modified by any person, contributing to his development or using it for free in his own work.

Careers in Information Technology

Current era is the era of information revolution. The way the information technology is being used for the upliftment and development of humanity, there will be hardly any area in the world that would have been untouched by the use of information technology. This is the reason that if a person chooses information technology as his employment to extend his life, then he has many options.



Diagram 8.4 Careers in Information Technology

To select information technology as employment, there is no restriction on selecting a particular area. Generally, people of all areas can acquire knowledge of computer according to their interest and select information technology as employment.

Some of the options available for livelihood in Information Technology are as follows:

- ◆ Animator
- ◆ Desktop Publishing
- ◆ Network Manager
- ◆ Network Administrator
- ◆ Programmer
- ◆ System Analyst
- ◆ Computer Operator
- ◆ Computer Technician
- ◆ Computer Engineer

- ◆ Software Engineer
- ◆ Database Manager
- ◆ Data Entry Operator
- ◆ Web Developer
- ◆ System Administrator
- ◆ Web Programmer
- ◆ Web Master

Social Media

To exchange dialogue with each other, letters were sent through pigeons and postmen. It took months for a letter to reach another man. The response to the letter also had to wait for months, but today people can be talked directly with the people sitting across the oceans. Sufferings and pains of each other can be shared. Can be acquainted with the happenings of the surroundings. It can be said that today the entire world is in the fist, and its full credit goes to social media.



Diagram 8.5 Symbols of various social media sites

Websites and applications that enable users to create and share content, or participate in social networking, are called social media. Social media is a social interaction between people, under which they prepare information on the virtual community and networks, share them or exchange them. Altogether, social media or social networking sites are an electronic medium through which people can exchange views (in-

cluding photos and videos) with the members included in the said medium.

There are around 200 social networking sites in the world, including Facebook, Twitter, Arkoot, MySpace, LinkedIn, Flickr, Instagram (photo, video sharing sites) are the most popular. According to a survey, there are around 1 billion 28 million Facebook users are using Facebook worldwide. At the same time, the number of Instagram users is 15 million, the number of linked users is 20 million, the number of MySpace users is 30 million and the number of tweeter users is 9 million.

Initially these sites were away from the middle class but when these services started getting on the mobile phones, this class accepted it with heart. There are more than 10 million active Facebook users in India at this time and they have been targeted to reach 10 million in the coming times.

Social media is continuously progressing in popularity these days-in India and outside of India. Experts believe that social media is a medium for the general public, through which they can keep their views in more empowered way. In the last decade, many big news came only through the social media in Limelight. The common man has got such a tool in the form of social media, through which he can convey his views to a large population. That is why the politicians, along with the common man, have come to Facebook, Twitter.

Social media is an important medium to communicate to people. Social media has become a very important medium today. Through this medium, a large population can share their views. This medium has expanded in the last decade.

In recent years, many big movements were started by social media only. In January 2011, a tremendous movement was carried out in Egypt by Facebook itself. Even in Tunisia, the general public began to mobilize against the government through Facebook. The situation became such that the government had to ban the Facebook and Twitter accounts but the movement did not stop and the president Mubarak was forced to resign.

Facebook has also worked to meet a long-awaited father-daughter, siblings and friends.

It is said that everything has two sides-good and bad. The social media, which has gained popularity for many different types of merit, is no exception.

The criminal activities through social media have also been started. In 2013, 5212 cases were registered in the country under the provisions of the Information Technology Act and Indian Penal Code. Of these, 1203 are related to putting objectionable

material on social sites. The people of criminal tendency are hacking accounts of others and throwing objectionable pictures and other materials in their accounts.

Here, even young people have started using Facebook, which has a negative effect on them. According to a survey conducted by Assocham in the last few days, 73% of all children using Facebook are between the ages of 8 to 13 years (children under 13 years of age are prohibited from opening a Facebook account). It has been said that most of the children's families are employed and they cannot give time to their children, so these kids are beginning to struggle on Facebook and other social sites because social media gives them a society so that they share their things.

The psychological effects of the use of social sites are also dangerous. Psychiatric practitioners say that the use of social networking sites makes people addicted to it and they leave commitment to their families and stick to hours to computers or mobile phones. Social media is a virtual means. People use it virtually in connection with people but they are isolated from the real society. The effect of this is that they do not develop social qualities. On the other hand, people are much busy in social media, so they cannot do outdoor activities. Apart from this, many types of physical illnesses also occur due to sitting for long. There are also cases of social media addiction. Some such patients spend 10 to 12 hours on the Internet. This addicts grow up so much that they are unable to give time to their family. When their families oppose it, they become offensive and if the Internet does not work properly then they get angry and start breaking household items.

Deaddiction centers have been opened for the treatment of social media addicts in many cities. It is clear from the fact that the use of social media is now taking the form of a disease.

There are no two opinions that social media has become very necessary for the people, but the other aspect of this is to avoid it because when anything starts to misuse, it becomes a curse and not a boon.

Important Points

1. Information and communication technology has made the whole earth a village. ICT has made our society active and aware.
2. Privacy or secrecy refers to the right to use the data only by the authorized person.
3. Authentication means that before you provide any information about yourself or the business deal with the person you are contacting, get all the necessary infor-

mation related to it.

4. Integrity means that whatever the data reaches the receiver, should be in the form it was sent to.
5. Publication in the form of an original work by an author, mostly by imitating someone else's language, thoughts, ideas, style etc., is known as literary theft or plagiarism.
6. In the field of education, the literary theft made by a student, teacher or researcher is called Academic Dishonesty or Academic Fraud.
7. Intellectual Property Right promotes fundamental and productive work and prevents tendency to imitate or steal.
8. The open source software has a different kind of intellectual property rights. Open Source is a software whose source code is open to all.
9. ICT has provided many opportunities of employment to every section of the society.
10. Websites and applications that enable users to create and share content, or participate in social networking, are called social media.

Exercises

Multiple choice questions

1. An author is called the publication of another writer by his name.
(a) Privacy (b) Credentials
(c) Integrity (d) Plagiarism
2. When established organization for intellectual Property ?
(a) 1947 (b) 1950 (c) 1967 (d) 1986
3. How many acts established in India for protected the Intellectual property right?
(a) 6 (b) 7 (c) 8 (d) 10

4. Which employment is not include in Information Technology?

- (a) Database Manager (b) Web Developer
(c) System Administrator (d) All of these

5. Which social networking site is most famous?

- (a) Facebook (b) Instagram (c) Twitter (d) LinkedIn

Very Short Type Questions

1. What is called the right of an authorized person to use the data?
2. Who does identify the authorized user on the computer?
3. What is called the imitation of a creation of an author by another author?
4. What is the name given to the whole world today as the expansion of ICT?
5. What is used to prevent plagiarism?
6. What is called the literary theft made by the students, teachers or researchers in the field of education?
7. When was established the Intellectual Property Association?
8. What is called the software whose source code is open to everyone?
9. Name one of the employment under ICT areas.
10. What is the name of the most popular social networking site?

Short Type Questions

1. Why has the literary theft increased due to the extension of ICT?
2. How do the investigators plagiarize?
3. What is literary theft? why is it important to know about it?
4. You want to use the content of another author in your article. What would you do?
5. What is the right to intellectual property?

6. Describe the full name of the WIPO.
7. What is TRIPS?
8. Explain the usefulness of intellectual property rights.
9. Why is there more employment potential in the field of ICT today?
10. Write the definition of social media.

Essay Type Questions

1. What is plagiarism? How can it be stopped?
2. Write essay on intellectual property rights
3. Explain the advantages and disadvantages of using social media.
4. Write articles on ICT and employment.
5. Write Comments –
 1. Privacy
 2. Authentication
 3. Integrity