

## CHAPTER 11 – SOCIETY, LAW AND ETHICS

### Ethical Issues

- Information forms the intellectual capital for a person or body, and is also the means to acquire knowledge. But, there are some ethical issues involved with the usage and availability of information:
  1. Intellectual property rights
  2. Plagiarism
  3. Digital property rights

### Intellectual Property Rights(IPR)

- Production or generation of any piece of information requires –time, effort and cost. Therefore the creator of information has every right to protect his/her intellectual property.

#### ***What can be done to protect intellectual property?***

- To protect one's intellectual property rights one can get information **copyrighted** or **patented** or **use trademarks**. Once information is copyrighted/patented, information must not be exchanged without the consent of its owner.

#### ***Definition:***

Intellectual property rights are the rights of the owner of information to decide how much information is to be exchanged, shared or distributed. Also it gives the owner a right to decide the price for doing (exchanging/distributing/sharing)so.

#### ***Benefits of protecting intellectual property***

1. Ensures new ideas and technologies are widely distributed.
2. Promotes investment in the national economy.
3. Encourages individuals and businesses to create new software applications as well as improving existing applications.

### Plagiarism

- It is **stealing someone else's intellectual work**( idea, literary/academic work, etc.) and representing it as your own work without citing the source of information or giving credit to creator.

#### ***What all activities comes under plagiarism?***

1. Using some other author's work without giving credit to the author.
2. Using someone else's work in incorrect form than intended originally by the author/creator.
3. Modifying someone's production such as *music- composition* etc. without attributing it to the creator of the work.
4. Failure in giving credit or acknowledging the contribution of others in a collaborative effort.

#### ***How to avoid plagiarism?***

You must give credit whenever you use:

1. Another person's idea, opinion, or theory.
2. Quotation of another person's actual spoken or written words.

### Digital Property Rights

- Digital property(digital assets) refers to any information about you or created by you that exists in digital form, either online or on an electronic storage device. **E.g.** social media accounts, email and communication accounts, website and blogs managed by you, software, etc.

## Who is the owner of Digital property/assets?

- Person who has created it or the owner who has got it developed by paying legally is the legal owner of the digital property.
- Therefore the owner will decide who all and in what form can his/her digital asset may be used by other.

## Threats to Digital Properties

### 1. Digital software penetration tools

- Software penetration tools such as *cracks* and *keygens* are used to penetrate software registration system and enable unauthorized users to freely access software without actually paying for it.

### 2. Stealing and plagiarizing codes of your digital properties

- People can steal your software's source code and use it to build their own versions of it, and then sell it under their own company name.

## How to protect Digital property?

### 1. Anti-Temper Solutions/Software

- These solutions use advanced technologies to prevent hackers from hacking, reverse-engineering or manipulating your digital properties.

### 2. Legal Clauses

- Add legal clause in your software's *Terms of Service* that prohibits the scraping of your software's source code for reuse. It provides a sound legal backup or you.

### 3. Limit the sharing of software code

- You should share your software code only with trusted individuals who are part of development team.
- Use of **Digital Rights Management (DRM)** solution to protect software's source code from stealing.

## Open source Philosophy and Software License

### Free Software

- Those software which is **freely accessible** and can be **freely used, changed, improved, copied and distributed** by all those who wish to do so.
- Source code is available → modification → improved version → distribution
- **No payments** are needed to be made for free software.

### Open Source Software

- Those software which can be freely used, changed, improved, copied and distributed.
- Source code is available → modification → improved version → distribution
- But it **does not have to be free to charge**, the developers may charge fees in name of support, further development.

### Features of Open source Software

1. Free Redistribution
2. Availability of Source code

3. Derived works, must be distributed under the same terms as the license of the original software.
4. Integrity of the Author's Source code should be maintained.
5. No discrimination Against Persons or groups while giving License.

### FOSS (Free and Open Source Software) / FLOSS (Free Libre/Livre and Open Source Software)

- The term FOSS/FLOSS is used to refer to a software which is both free software as well as open source software.

### GNU

- GNU refers to **GNU's Not Unix.**
- The GNU project was initiated by **Richard M. Stallman** with an objective to create a system compatible to UNIX (an open source Operating System) but not identical with it.
- With time, GNU project expanded and it is not limited to only an Operating System, now it offers a wide range of software and application.

### FSF

- FSF is **Free Software Foundation.**
- It is a non-profit organization created for the purpose of supporting free software movement. **Richard Stallman** founded FSF in 1985. FSF has funded many software developers to write free software.

### OSI

- OSI is **Open Source Initiative.**
- It is an organization dedicated to cause of promoting open source software. **Bruce Perens and Eric Raymond** were the founders of OSI, that was founded in Feb 1998.

### W3C

- W3C is acronym for **World Wide Web Consortium.**
- W3C is responsible for producing the software standards for World Wide Web.
- It was created in October 1994, to lead the World Wide Web to its full potential by developing common protocols that promote its evolution.

### PROPRIETARY SOFTWARE

It is the software that is neither open nor freely available. Source code of proprietary software is normally not available. Because of this, its modification and further distribution is either forbidden or requires special permission by the supplier or vendor.

### DIFFERENCE BETWEEN OSS AND PROPRIETARY SOFTWARE

S.no.	Open Source Software	Proprietary Software
1	It is available free of cost.	It is not free of cost.
2	Source Code of software is available.	Source Code of software is not available.
3	Modification and further distribution is allowed.	Modification and further distribution is either Forbidden or requires special permission by Supplier or vendor.
4	E.g. Linux, MySQL, NetBeans IDE	E.g. Microsoft Windows OS, Adobe Photoshop

## FREWARE

- It is a software which is available **free of cost** and which **allows copying and further distribution**, but **source code of software is not available** and therefore no modification can be done.
- Microsoft Internet Explorer (Browser) is an example of Freeware.

## SHAREWARE

- It is software, which is made available with the **right to redistribute copies**, but it is stipulated that if one intends to use the software, often after a certain period of time, then a license fee should be paid.
- In Shareware the source code is not available and modifications to the software are not allowed.
- Antivirus software Trial Versions are examples of Shareware.

## Licences and Domains of Open Source Technology

### Need for open source licence

1. Others can easily contribute to a project without having to seek special permission.
2. Protects original creator.
3. Prevent others from claiming your work as their own.

### Broadly used open source licences

1. GNU General Public Licence (GPL)
2. GNU Lesser General Public Licence (LGPL)
3. BSD Licence
4. MIT Licence
5. Apache License

### GNU General Public Licence (GPL)

- most commonly used licences for open-source projects.
- Grants and guarantees following rights to developers:
  1. **Copy** the software – as many time as needed.
  2. **Distribute** the software however you want (printed form/web link form)
  3. **Charge a fee** to distribute the software – the **modified** software will be under GNU GPL.
  4. Make whatever **modifications** to the software you want.

\*\* modified software made must be released under the GPL.

### GNU Lesser General Public Licence (LGPL)

- Offers lesser rights to a work than the standard GPL licence.
- Used to licence *free software*.

### BSD Licence

- Offers fewer restrictions on distribution compared to other free software licenses such as GNU GPL.
- It has two important versions:
  1. **New/modified BSD licence**
    - Allows unlimited redistribution for any purpose as long as its copyright notices and the licence's disclaimers of warranty are maintained.
    - **Restriction:** use of the names of contributors for **endorsement of a derived work** without specific permission.
  2. **The simplified/free BSD licence**
    - Omitted the non-endorsement clause.

## MIT Licence

- **Least restrictive** open source license.
- Very loose and **more permissive** than other licenses.
- Rights given:
  1. Use, copy and modify the software.
  2. Modified software can be distributed for free or can be sold.
  3. **Only restriction:** modification and distribution must be accompanied by the licence agreement.

## Apache Licence

- Offers following rights:
  1. Perpetual rights
  2. Worldwide rights
  3. No fee or royalty
  4. Non-exclusive rights
  5. Rights are irrevocable

## Privacy

- It is the **protection of personal information** given online.
- In e-commerce especially, it is related to a company's policies on the use of user data. Therefore, an e-commerce company must clearly state how it intends to use the customers' data (such as user's location, user's buying history, etc.)

### **How to safeguard privacy?**

1. The merchant/seller must clearly state about **how the user data will be used**, in the terms and conditions of its website.
2. The user/buyer must go through the **terms and conditions** given on seller's website.
3. Merchant/seller must provide proper data safety and security measures such as **https protocol** and other security mechanism so that users' data is safe from hackers too.
4. The user/buyer must ensure availability of proper security on seller's website before providing any sensitive information.

## Online Fraud

- Fraud committed using the Internet is called Online fraud.
- Online fraud may occur in many forms such as:
  - Non-delivered good
  - Non-existent companies
  - Stealing information
  - Fraudulent payments

} Credit card frauds, identity theft

**Credit card frauds:** stealing of credit card details of user from his/her online activities and then carrying out some payment fraud with the help of stolen card details.

**Identity theft:** stealing someone's online identity (social media account, email etc.), and posting fraudulent post or carrying out malicious activity (spread of rumours etc.)

## Cybercrime

- Any criminal offence that is facilitated by or **involves the use of, electronic communications** or information systems, including any electronic device, computer, or the internet is referred to as Cyber Crime.
- e.g.
  - \* Credit card frauds
  - \* Phishing
  - \* Illegal downloading
  - \* Child pornography
  - \* Cyber bullying. etc.

## Phishing

- It is the **practice of attempting to acquire sensitive information** from individuals over the internet, by means of deception.
- Information targeted by phishing include:
  - User-name, passwords
  - Bank account information
  - Credit/debit card details
- In phishing, an imposter uses an authentic looking email or website to trick recipients into giving out sensitive personal information.

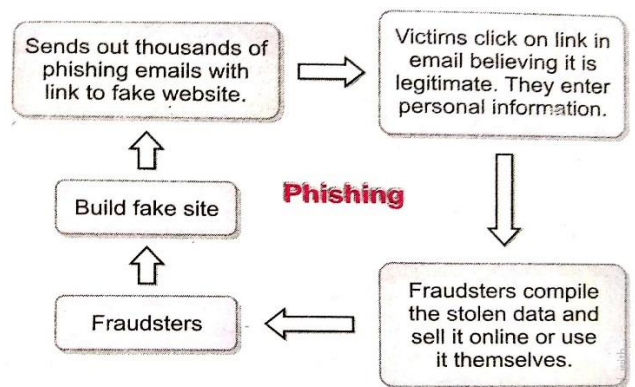


Figure 11.2 How Phishing attacks are carried out.

## Social Engineering/pretexting

- They **pose as a legitimate business or government officials** to obtain your personal information from financial institutions, telephone companies, and other sources.

## Scams

- Any fraudulent business practice that extracts money from people is called a scam. Scams committed over the internet are called **online scams**.

### **How to avoid scams?**

1. Never enter personal information or any financial information (banking information or credit/debit card information) on unsecure websites, i.e., the sites that do not employ HTTPS and do not have padlock sign.
2. Never reply to emails from any unknown or unreliable source.
3. **Never click on any links** that you have **received in your email**. Rather open a browser window and type the URL yourself than clicking on the link in the email.
4. Never respond to an e-mail or advertisement claiming you have won something.

## Illegal Downloads

- It refers to *obtaining files for which you don't have the right to use* or download from the Internet.
- E.g. downloading a movie or software which is not available for free download.
- Most items that are protected under copyright law are available against a payment. Violating this is known as illegal download.

## Child pornography

- It is defined as any **visual or written** representation that depict or advocate sexual activity (including sexual molestation or exploitation) of anyone under the age of 18.

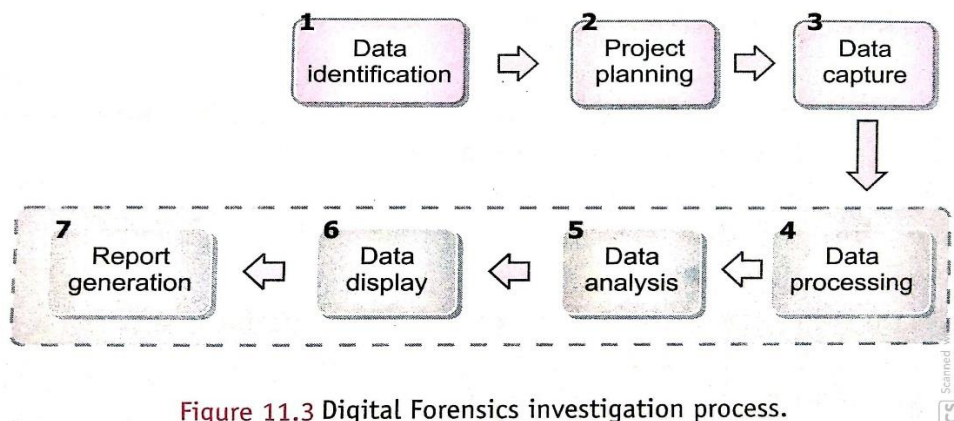
### Safeguard against Child pornography

1. **Information Technology Act, 2000 & Indian Penal Code, 1860** provides protection from child pornography.
2. According to the Information Technology (Amendment) Act, 2008, section 67 has been amended – that not only creating and transmitting obscene material in electronic form but also browse such sites is an offence.

## Computer forensics/Digital forensics

- It refers to methods used for **interpretation of computer media for digital evidence**.
- It provides our legal system (courts) with a way to recover data from electronic or digital services.
- **Goal of process:**  
To **preserve any evidence in its most original form** while **performing a structured investigation** by collecting, identifying and validating the digital information for the purpose of reconstructing past events.

### **Process:**



## Cyber Law and IT Act

- Cyber law is a **generic term** which refers to all the **legal and regulatory aspects of Internet and the World Wide Web**.
- The **growth of e-commerce and accessibility of internet to common people has propelled the need** for vibrant and effective regulatory mechanisms which would further strengthen the legal infrastructure.

### India's IT Act and IT (Amendment) Act, 2008

- In India the cyber laws are enforced through **Information Technology Act, 2000** (IT Act 2000). Its prime purpose was to provide legal recognition to electronic commerce.
- This act was amended in December 2008 through the **IT (Amendment) Act, 2008**. It came into force from Oct. 27, 2009. It *provided additional focus on Information Security and added several new sections on offences including Cyber Terrorism and Data Protection*. Other major amendments of IT Act(2008) included:

1. Authentication of electronic records by digital signatures gets legal recognition.
2. E-documents gets legal recognition.

## **Technology and Society**

- Information and Communication Technology (ICT) capabilities has led to social and economic development of society.

Reasons:

1. Enable **greater efficiency** in economic and social processes.
2. Enhance the **effectiveness of cooperation** between different stakeholders ; and
3. Increase the **volume and range of information** available to people, businesses and governments.

### **Social Impacts/Benefits of Technology:**

1. Enhanced freedom of expression and associations.
2. New pattern of work and human settlements.
3. Change in relationship between government and citizens.

### **Economic Impacts/Benefits of Technology:**

1. Globalisation of production in goods and services.
2. Change in international trade and distribution networks.
3. Facility of Secure Transactions to most part of world with a greater security.
4. Ease and Availability of making payments (24 x 7)
5. With ICT, now the market is entire globe. Small business can reach any part of the world.

## **E-Waste Management**

### **E-WASTE**

- E-waste i.e. electronic waste refers to discarded electrical or electronic devices such as discarded computers, mobile phones, television sets and refrigerators etc.

### **Characteristics of E-Waste**

1. **Fastest growing** segment of waste
2. Most **valuable** due to its basic composition
3. Very **hazardous** if not handled carefully

### **Composition of E-Waste**

- Electrical and electronic equipment contain metallic and non-metallic elements, alloy or compounds such as copper, Aluminium, Gold, silver, Platinum, Nickel, Tin, Lead, Iron, Sulphur, Phosphorus, Arsenic etc.

### **E-Waste disposal methods**

#### **1. Dismantling**

- *Removal of parts containing dangerous substances (CFCs, Mercury); removal of easily accessible parts containing valuable substances.(copper and other precious metals).*

#### **2. Segregation of Ferrous & non-ferrous metals and plastic**

- Separation is normally done in a shredder process.

#### **3. Reuse**

- Some parts in e-waste can be easily reused with minor repairs.



#### **4. RECYCLING**

- e-waste can be recycled also to obtain other useful materials.

#### **Benefits of e-waste recycling**

##### **1. Allows for recovery of valuable precious metals.**

- electronic equipment contain precious metals like platinum, gold , zinc etc. which can be recycled.

##### **2. Protects Public health and water quality**

- e-waste contains toxic substances, such as mercury, lead etc. Improper disposal releases these harmful toxins in environment.

- therefore proper disposal of e-waste ensures public health and environment safety.

##### **3. Creates Jobs**

- Recycling e-waste domestically creates jobs for professional recyclers.

##### **4. Saves landfill space**

- e-waste is a growing waste stream. Recycling these items will help conserve landfill space.

#### **Identity Theft**

- stealing someone's online identity (social media account, email etc.), and posting fraudulent post or carrying out malicious activity (spread of rumours etc.)

#### **How stealing carried out?**

1. Through Phishing
2. Stealing your information, provided during online purchase.

#### **What after stealing information?**

1. **Credit card fraud.**
2. **Change your personal information** – like mobile number, and you may not get any SMS updates even after your bank accounts are being robbed.
3. **Phone or utilities fraud** – the thieves may get new cell phones or get some other utilities.
4. **Bank/Finance fraud** – Thieves may take out loans for mortgage or a car in your name.

#### **Protection against Identity fraud**

##### **1. Protect personal information**

- All your identification and financial documents should be kept in a safe and private practice.
- You should provide personal information only when:
  - You know how it will be used.
  - You are certain it won't be shared.

##### **2. Use unique IDs to protect your devices and accounts**

Login and password should be made in such a way that they are unique and not easy to guess or break.

Other practices:

- (i) Avoid names, addresses, and birth dates for your passwords/login details.
- (ii) Make passwords that are hard to guess.
- (iii) Password should be a mix of upper case and lower case letters, and special characters.
- (iv) Do not use same password for multiple accounts.

### 3. Use Bio-metric protection

- **Biometric** – metrics related to human physical features such as your voice waves, hands, fingerprints, iris patterns etc.
- Modern computing devices (mobiles, laptops etc.) provide biometric protection such as finger print and face detection technology.

## Gender Issues while Teaching/Using Computers

- Major issue : '**under representation**' of girls. i.e. there are far less girls than boys who opted for computer science subject in the high school.

### Reasons:

- 1. Preconceived Notions** – 'boys are better at technical things', 'girls must take up a career keeping in mind that they have to raise family', 'teaching is best career option for girls', etc. have their impact in decision making of girls while taking up subjects.
- 2. Lack of Interest** – playing games (mostly boys-centric) increases boys interest in computers. Moreover, boys get to play more on smartphones/computers (in Indian scenario) and develop more interest in computers than girls.
- 3. Lack of motivation** - Girls are pressurised to choose a career option which will give them 'work life balance'.
- 4. Lack of Role Models** – Girls these days see less of role models in the field of 'Computer Science' whom they can imitate. This also influence girls psychologically and they infer that 'Computer Science' is for boys and do not take up the subject.

### Possible solutions to remove this under representation:

1. There should be **more initiatives supported by government and run by many tech-giants** to encourage more girls to take up 'Computer Science' subject.
2. The film and TV censor board should ensure **fair representation of female role models** in TV, Cinema etc. so that more girls get encouraged to take up 'Computer Science'.
3. In practical labs, girls should be **encouraged more to work on computers on their own**. They should be encouraged to celebrate small success in the lab (successfully executing a program) to big success (such as completing a project within time).

## Disability Issues while Teaching and using computers

- In order to provide conducive study environment for students with disabilities in the field of technology, the emphasis has been given to 'Inclusive Education' and 'Promotion of Accessibility'.
- But still there are some **challenges** which needs to be addressed:

### 1. Unavailability of Teaching Materials/Aids

- Students with different disabilities need different types of teaching aids/materials.
  - e.g. visually challenged students** would want there are **screen readers** that could read the digital content to them; also programming lessons should not involve visual inputs.
- Similarly, **hearing impaired students** would want more of **visual input than oratory**, rather oratory instructions should be available in sign language, if possible.
- For most students with locomotor disabilities, virtual keyboard is required for writing programs. For such virtual keyboard, a sophisticated virtual keyboard hardware is required.

Unavailability of such supportive programming aids and software are a big issue that must be handled by schools and their managements.

## 2. Lack of Special Teachers

- For different types of special needs, if **special needs teachers are available**, disabled students get their needs addressed in right manner.
- There should be teachers who know what types of hardware, software, tools etc. can be used for the differently able students as per their specific needs, e.g. **special types of specialized hardware** such as Braille keyboards, monitors, printers, synthetic speech generators etc.

## 3. Lack of Supporting Curriculum

- Curriculum should be designed while keeping focus on inclusive education.
- There always should be possible alternatives keeping in mind special needs of the students.
- Software and programs should be so used so that the disabled students can easily work on that.

## Possible Solutions

1. Schools must work toward **making available the required teaching aids**/materials to fulfil special needs of students with disabilities.
2. There should be **proper budget allocated for buying the required material** and equipment to promote inclusive education.
3. School must **employ special needs teachers** and should also train other teachers as well about how to interact with students with special needs.
4. School **must support the inclusive curriculum** and refrain from any other practice that directly or indirectly puts the disabled students at the disadvantaged side.
5. School must **Encourage and teach the use of software**, such as Microsoft Cortana and Narrator which blind people can use for a variety of essential tasks. Blinux(special version of Linux), especially meant for the blind.

## Role of New Media in Society

- In recent years, impact of modern media on society and people has increased manifold times. The main **reason** behind this is the development of **Social Media**.

### Online Campaigns

- An online campaign is a planned set of activities carried online for a goal or purpose.
- **E.g.** Some recent campaigns are: **Stop Acid Sale campaign** in support of acid attack victims, **Pride campaign** in support of LGBTQ community.
- **Reasons for success of online campaigns in India:**
  1. About 65% of India's population is below the age of 35. It indicates **presence of large no. of Youths**, and who combined energies can do wonder.
  2. **Smartphone revolution** also contributed significantly in success of online campaigns. It is expected that no. of internet users in India will reach 500 million users by 2020. With **advancement of Technology such as reach of 4G to rural areas** and introduction of 5G, this impact will even be more and wider.
  3. **Impact of social media**, which encourages masses to participate in online campaigns for a cause of issue. It keeps the audience engaged into the cause through variety of media, such as online posters, videos etc.
  4. The reach of social media is 24 x 7.
  5. Connectivity is easier and faster with social media.

## Crowd Sourcing

- It refers to the **practice of obtaining the contribution from crowd in the form of needed services, ideas, or content**, mainly from the online community.

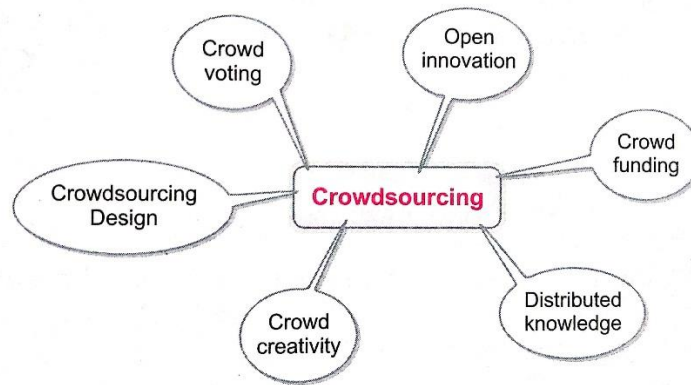


Figure 11.4 Crowdsourcing applications.

- Crowdsourcing can give organizations different ideas and solutions. Through an organization's crowdsourcing campaign, the users and individuals collectively contribute to a design idea or a product launch. E.g. **McDonald Burger builder** asked for an idea of burger as per your taste from its customers; **Lego**, the toy maker allows its users to design its own toys, which after market survey can be manufactured and sold.

### Factors for success of Crowdsourcing

1. **Connectivity and reach offered by modern age media** especially social media.
2. The structure and the reach of modern age media makes it **easy to collaborate with public** and the interest groups, which can actually work on a project or goal without meeting in person.

### Crowdsourcing can be used for various purposes:

1. Designing new products
2. Updating design/features of products
3. Crowd voting
4. Crowd Funding
5. Creative tasks such as collective writing
6. Feedback

### Benefits of crowdsourcing include:

1. Accelerated collaborative Innovation
2. Sharing of ideas
3. Co-creation
4. Engagement of important stakeholders such as Consumers or Citizens
5. Cost Saving
6. Increased Efficiency

### Smart Mobs

- A smart mob is an organised group of people who have **gathered through the use of social media to protest or lobby for a publicised social or political cause**.

### How different from traditional mob?

- Traditional mob – unorganised and unguided, often without a common goal or purpose.

## **Role of Social media in organising a Smart Mob**

- Deciding about the goal or the issue.
- Deciding about the event, event size, place, date and time.
- Forming a short digital message informing people about it.
- And finally, sending this message through the use of social media to the target group of people.

## **Issues with Internet**

- Internet has played a substantial role in bringing the technological revolution in past decade, but at the same time has led to many issues that are not for the mental, social and emotional health of a society.

### **Internet as an Echo Chamber**

- The term '**echo chamber**' means listening or reading or viewing something that reflects your view.
- So, Filtering and matching of the content being displayed and delivered on the Internet, as per the reader's personal interests, views and liking, is known as '**Internet as Echo Chamber**'.
- The *echo effect* show only those contents to the users/readers that fit into the domain of their current political or social views. This way the content they get to read on the Internet is never challenging or thought-provoking for them, instead it just reinforces their beliefs.

### **Reasons for Echo Effect**

1. Modern age algorithms that use machine learning algorithms.
2. Digital footprint created by people are ultimately used against them by influencing their social, political views.

### **Who makes use of or benefit from echo effect?**

1. Social media websites like Google, Facebook, Instagram etc.
2. Marketing companies.
3. Political Parties.
4. Insurgency Groups.

### **Is it beneficial or harmful?**

1. In most cases it is not useful, as it prevents you from seeing the real picture or the real scenario, which is your right, but you are deprived of it.

## **NET Neutrality**

- It refer to a principle implemented so that an ISP(Internet Service Provider) enables access to all sites, their content and applications regardless of the source, without favouring or blocking particular content, products or websites.

### **Why it is required?**

- It was noticed that some websites and ISP have the same owner. So, that ISP was found to be giving **preferential treatment to its owner's sites** over others and other sites' performance should be made to appear so pathetic that you do not think of using them more.

### Steps taken to enforce Net Neutrality

- Government all over the world enforced Net Neutrality through law. With such laws, ISP must ensure that:
  1. It provides access to all sites in the same way.
  2. It loads the content and applications of sites or web applications at the same speed.
  3. All contents gets loaded under the same conditions without blocking or giving preference to any content.
- In India, Net Neutrality was implemented by law in 2017, on recommendation of TRAI (Telecom Regulatory Authority of India)

### Internet Addiction

- When someone uses Internet excessively on social media, blogs, online gaming etc., this poses a great affect to the person's mental health. Such a condition is termed as **Internet Addiction**.

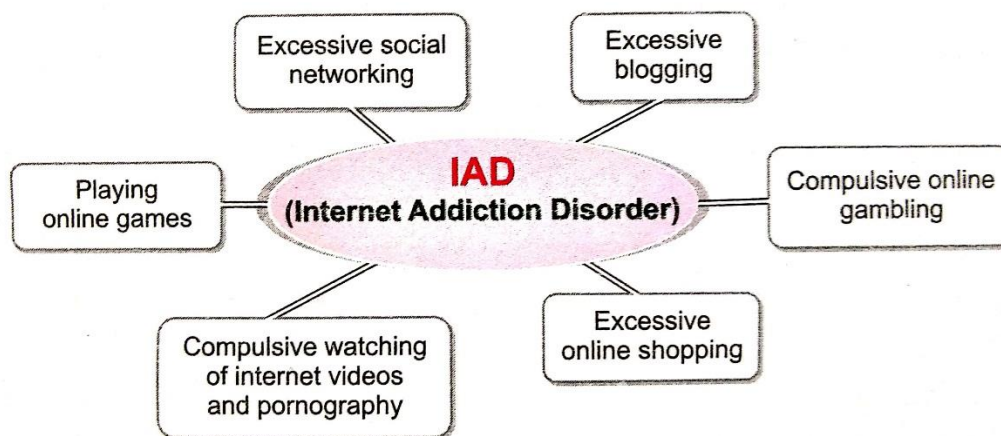


Figure 11.6 Internet Addiction

### Problems arising out of Internet Addiction

1. One suffers from personal, family, academic, financial, and occupational issues, just like these happen in other types of addictions.
2. Sufferers start lying about the time spent on the Internet and avoids interaction with people around.
3. Sufferer's **change habits and behaviour** leads to **loss of trust** in the people or relations around him, and it leads to more **loneliness**.
4. **Mental and emotional symptoms** – Anger, depression, mood swings, procrastination etc.
5. **Physical Symptoms** – eating irregularities, upset stomach, headaches, backaches etc.

### How to Overcome Internet Addiction?

1. Help of a qualified doctor, counsellor.
2. Family Support.

# Role of New Media – Case Studies

## Case Study 1 – Arab Spring

- Started in Dec 2010, in Tunisia.
- a Tunisian citizen, *Mohammed Bouazizi* was not allowed to sell fruits and vegetables without a permit and police asked him to hand over his wooden cart, he refused and a policewoman allegedly slapped him. Angered *Bouazizi* set himself on fire in front of a Government building.
- This act resulted in massive people protest. These protest and people's anger were ***captured by cell phone cameras and shared on the Internet.***
- Social media's enormous power and reach, made this movement to reach other parts of the country and more people joined the protest.

### **Result:**

1. President *Zine El Adidine Ben Ali* and his regime was forced to step down.
2. President *Zine* fled from the country.

### **Role of Social Media in Arab Spring**

1. **Announcing** the **date and place** of mass protests.
2. Posting the **pictures and videos** of the protests.
3. **Mobilizing** more and more **people** through the reach of social media.

## Case Study 2 – WikiLeaks

- WikiLeaks is a **non-profit organisation**, founded by an Australian **Julian Assange in 2006**, which publishes secrets and leaked documents.
- It ***publishes confidential documents of importance such as government files***, which are somehow obtained through anonymous sources.
- Some confidential documents released are:
  1. Diplomatic cables relating to US activities in Syria.
  2. Documents about the wars in Iraq and Afghanistan.
  3. Secret files about prisoners in the Guantanamo Bay detention centre.
- ***Internet played a significant role*** in their success, as they use Internet to release confidential documents and diplomatic cables.

## Case Study 3 – BitCoin

### Why BitCoin came into existence?

- In 2008, ***some papers accused big banks of misusing borrowers' money***, duping clients, rigging the system, and charging boggling fees. This disappointed people and laid the foundation of Bitcoin.

### What is BitCoin?

- Bitcoin is a **virtual and crypto currency**, which is in the form of a software code, written and controlled by **open source software based decentralized system**, which governs the issuing of more bitcoins from time to time and keeps track of bitcoins issued so far.

### How Bitcoin Work?

- Bitcoins ***work without any middleman*** (such as banks) without any corruption, and make transactions transparent. Modern age media is the sole reason for the existence and success of bitcoin.

**Process:**

1. In order to make transactions in Bitcoins a **virtual wallet** needs to be installed.
2. Real payment takes place online at a **third part website** where bitcoin is traded.
3. Buyers can now buy bitcoins, which are then transferred to his/her virtual wallet.
4. Bitcoin owner can now use bitcoins for various purposes.

**Is Bitcoin legal?**

- In India, Bitcoins has not made legal so far. It means bitcoins cannot be used for financial transactions.
- But countries like USA , Australia , Canada , European Union have made bitcoins a legal tender.

\*\*\*\*\*

**Practice Questions**

1. Using someone else’s twitter handle to post something, will be termed as:  

(a) Fraud	(c) Online stealing
(b) Identity theft	(d) Violation
2. Standard security protocol that establishes encrypted links between a web server and a browser is called:  

(a) Online safety technology	(c) Web encryption technology
(b) SDT technology	(d) Secure sockets layer technology
3. Things like these, e.g., online email account, social media account or handle, online shopping account, online photo sharing account etc. are collectively called:  

(a) Online identity
(b) Online estate
(c) Digital identity
(d) Digital property
4. Name some specialized software, features that may be used by special needs students?
5. Which countries have declared bitcoin as a legal tender?
6. Which countries are associated with Arab Spring?



