# DON BOSCO INSTITUTE OF TECHNOLOGY, MUMBAI - 400 070 Department of Computer Engg. & Info. Technology (Academic Year ODD Semester 2021 – 2022)

Course Code and Name: ILO 7016 - Cyber Security and Laws (BE Sem VII)

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#### **ASSIGNMENT 4**

### Q1. Write a brief note on classifications and Advantages of B2C E-Commerce and explain the challenges faced by it.

Business-to-consumer, is a business model based on transactions between a company that sells products or services, and individual customers who are the end-users of these products. Online B2C can be broken down into 5 categories: direct sellers, online intermediaries, advertising-based B2C, community-based, and fee-based Advantages of B2C:

- Increased access implies that your buyer will be able to purchase from anywhere and at any time of the day.
- With the B2C model, you can forego the additional costs of infrastructure, electricity, staffing, etc. This helps you lower your operational costs considerably.
- The B2C business model lets you communicate with the buyer in an extremely personalized way with emails, SMS, and push notifications.

#### Challenges of B2C:

- Consumer traffic: A B2C website must be optimized to not attract traffic; the structure, architecture, and content management system must work for you as from its creation.
- Payment processing: Many customers are hesitant to submit their personal data to websites due to security reasons.
- Product Findability: If a client can't find a product, he can't buy it. An online store platform must contain usability-related tools to make the searching process as easy as possible

#### Q2. Explain the contractual obligations in Cyberspace.

Contractual obligations are those duties that both employers and employees are legally responsible for in a contract agreement. It is important that both parties follow their sides of the contract.

The Indian Contract Act 1872 defines Contract as an agreement enforceable by law. All agreements are contracts if they are made by the free consent of the parties competent to contract, for a lawful consideration, and with a lawful object and are not expressly declared to be void.

Contracts may be classified under three heads.

- Contracts of record such as judgements, and recognisances (recognisance is a bond or similar obligation made and recorded before a court by which a person binds himself to perform some act or fulfil some condition at a specified time.)
- 2. Contracts under seal which includes categories of contracts like contracts unilateral, (like bonds) and contracts inter partes (like indentures of demise).

3. Simple contracts or contracts not under seal or specialty which are either written or verbal.

### Q3. Define Electronic Data Interchange (EDI) and explain the process of checking the Electronic Signature.

Electronic Data Interchange (EDI) is the computer-to-computer exchange of business documents in a standard electronic format between business partners.

Process of checking the Electronic Signature:

- 1. Verifying the identity of the signatory.
- 2. Verification of the integrity of the signed document, i.e. that it has not been modified after the signature has taken place.
- 3. Verification of the term validity of the certificate used.

### Q4. Define the term 'Online Contracts' and Explain the terms and conditions required for making 'Online contracts'.

Online contracts refer to contracts that are created and signed over the Internet. Also referred to as electronic contracts or e-contracts, these contracts provide a fast and convenient way for individuals and organizations to enter into legally-binding agreements with other parties.

Conditions for Online Contracts:

Consent which is defined under Section 13 of the Indian Contract Act, 1872 is an essential requirement of a contract. It is basically the meeting of the minds of the parties. When both agree upon the same thing in the same manner, they are said to consent.

#### Q5. Explain about E-Governance under Indian Perspective.

The Government of India inspires to provide a hassle-free information system that allows the citizens of India as well the businesses and other governmental bodies to engage in digital transactions over services and other useful applications, with each other. India has its 'National Portal' comprising various services and information about E-Governance and its programs visible on <a href="http://india.gov.in">http://india.gov.in</a>. The Government of India embraces E-Governance in the following three areas:

- Governance
- Public Services
- Management

## Q6. Discuss whether various International Treaties and Conventions have been instrumental In defining the path of intellectual property rights in the cyber world.

Intellectual property has a dual nature, i.e. it has both national and international dimensions. For example, patents are governed by national laws and related country regulations, while international conventions on patents protect minimum rights and provide some measures for enforcement of rights by contracted states. Strong protection for intellectual property rights (IPR) worldwide is really important for the future economic growth and development of all countries. Because they include common rules and regulations, international IPR treaties, in turn, are essential to achieving strong intellectual property protection that promotes global economic expansion and the growth of new technologies.

### Q7. Explain the provisions for protection of Online Trade Marks under the Trade Marks Act, 1999.

Trademark rights in India are statutorily protected by the Trademark Act, 1999 and also under the common law remedy of passing off. The administration of such protection under the Act is done by the Controller General of Patents, Designs and Trademarks. The Trademark Act, 1999 deals with the protection, registration and prevention of fraudulent use of trademarks. It also deals with the rights of the holder of the trademark, penalties for infringement, remedies for the damage as well as modes of transference of the trademark.

#### Q8. Explain the UNCITRAL model law on electronic commerce.

The UNCITRAL Model Law on Electronic Commerce was adopted by the United Nations Commission on International Trade Law (UNCITRAL) in 1996 in furtherance of its mandate to promote the harmonization and unification of international trade law, so as to remove unnecessary obstacles to international trade caused by inadequacies and divergences in the law affecting trade.

It has adopted the following fundamental principles of the modern electronic-commerce law:

- The principle of non-discrimination It ensures that any document would not be denied legal validity, effect, and enforceability solely on the basis that it is in electronic form.
- The principle of technological neutrality It mandates the adoption of such provisions which are neutral with respect to technology used. This aims at accommodating any future developments without any further legislative work.
- The functional equivalence principle It sets out the specific requirements that e-communication ought to meet in order to fulfill the same functions that certain notions ,in traditional paper based system, seek to achieve, for example, "writing", "original", "signed", and "record".

#### Q9. Briefly explain the basics of copyrights.

A copyright grants protection to the creator and his or her representatives (by way of an agreement), for the works and prevents such works from being copied or reproduced without their consent.

The creator of a work can prohibit or authorise anyone to:

- reproduce the work in any form, such as print, sound, video, etc.;
- use the work for a public performance, such as a play or a musical work;
- make copies/recordings of the work, such as via compact discs, cassettes, etc.;
- broadcast it in various forms;
- translate the same to other languages

Further, moral rights which are the rights to be identified as an author of a work or to object to derogatory treatment of a work, are also protected. The Act grants an author special rights which exist independently of the author's copyright, and subsist even after the assignment (whole or partial) of said copyright. The author has the right to:

- claim authorship of the work
- restrain or claim damages with respect to any distortion, mutilation, modification, or other act in relation to the said work if such distortion, mutilation, modification, or other act would be prejudicial to their honour or repute.

### Q10. Briefly explain the basics of the trademark and the traditional infringement methods followed in the trade mark.

A trademark is a word, phrase, symbol or design, or a combination thereof, that identifies and distinguishes the source of the goods of one party from those of others. Trademarks, unlike patents, can be renewed forever as long as they are being used in business.

To get a trademark, you need to meet the following six requirements:

- 1. Provide your name and address as owner of the trademark.
- 2. State the entity type (individual or corporation) and your national citizenship.
- 3. Demonstrate actual use or a real intent to use the trademark in commerce.
- 4. Give a detailed description of the product being trademarked.
- 5. Submit a drawing or specimen of the trademark.
- 6. Offer the date of the first use of the trademark.

### Q11. What are the procedural directions given by the Hon'ble Supreme Court of India for initiating telephone tapping?

The Central and the State Governments have a right to tap phones under Section 5(2) of Indian Telegraphic Act, 1885. There are times when an investigating authority/agency needs to record the phone conversations of the person who is under suspicion. Such authorities are supposed to seek permission from the Home Ministry before going ahead with such an act. In the application specific reasons have to be mentioned. In addition, the need for phone tapping must be proved. Then the ministry considers the request and grants permission upon evaluating the merits of the request.

#### Q12. Explain the provisions relating to Infringement of Intellectual Property rights.

IPR infringement refers to the unauthorized use, duplication, or sale of materials or products that are legally regarded as protected intellectual property (IP). According to federal and state law, the definition of infringement depends on the intellectual property right (IPR) that is being disputed. Since copyrights and patents are under the protection of the federal law, violation of these rights is defined by the same laws. These statutes generally define IPR as the unauthorized production, use, or sale of protected IP.

#### Q13. Write short notes on the following:

#### 1. Electronic records retention

Where any law provides that documents, records or information shall be retained for any specific period, then, that requirement shall be deemed to have been satisfied if such documents, records or information are retained in the electronic form, if-

- the information contained therein remains accessible so as to be usable for a subsequent reference.
- the electronic record is retained in the format in which it was originally generated, sent or received or in a format which can be demonstrated to represent accurately the information originally generated, sent or received.
- the details which will facilitate the identification of the origin, destination, date and time of despatch or receipt of such electronic record are available in the electronic record:

Provided that this clause does not apply to any information which is automatically generated solely for the purpose of enabling an electronic record to be dispatched or received.

#### 2. Consumer Protection in Cyber World

- One important thing that can be done in the context of protecting the rights of the
  consumers is that connecting the cybercrimes with that of the crimes done against
  the consumers together. As of now there is no mention about a crime done against
  the consumer in the listed cyber crimes. we can frame a legislation that will connect
  these two crimes together. As of now if there is any crime or a miss happening to a
  consumer he cannot take the advantage of the IT Act,2000 to seek redressal for the
  same.
- Creating a special redressal courts only for crime against e-consumers as we know
  the use of internet is increasing day by day to such great extends that cannot be
  measured easily thus there is a very important need for creation of redressal Court
  that is specially only for delivering justices to the wrong done against the consumers
- A proper definition to the terms such as e-commerce, e-consumers, should be
  provided along with a proper legislation on the jurisdictional issues providing a
  common dispute resolution system. and all the other definitions that are needed in
  the case of e-commerce.

#### 3. The Security Aspect of Cyber Law

Electronic data and its transmission are vulnerable to unauthorised interference form criminals and persons having vested interests.

- Ensuring security of data through legal and technical means has become a matter of concern.
- A legal infrastructure has become imperative to protect data and information.
- The gainful use of IT in all walks of life and the development of E-Commerce, hinge to a great extent on the availability and efficacy of the legal infrastructure.
- Security is now viewed as the gateway to new business opportunities, with time out of four respondents indicating that their companies would expand their use of the Internet for business transactions if the security of this medium were improved.
- The vast majority of companies say their risks have increased over the past two years, and many organisations have responded by increasing their attention to this area

#### 4. The Criminal Aspect in Cyber Law

Amendments to Indian Penal Code, 1860

- 1. Section 29A Electronic Record
- 2. Section 167 Public servant framing an incorrect document with. intent to cause injury
- 3. Section 172 Absconding to avoid service of summons or other proceeding
- 4. Section 173 Preventing service of summons or other proceeding, or preventing publication thereof
- 5. Section I 75 Omission to produce (document or electronic record) to public servant by person legally bound to produce it
- 6. Section 192 Fabricating false evidence
- 7. Section 204 Destruction of document or electronic record to prevent its production as evidence

- 8. Section 463 Forgery
- 9. Section 464 Making a false document
- 10. Section 466 Forgery of record of court or of public register etc.
- 11. Section 468 Forgery for purpose of cheating
- 12. Section 469 Forgery for purpose of harming reputation
- 13. Section 470 Forged document or electronic record
- 14. Section 471- Using as genuine a forged document or electronic record

#### 5. Law Relating to Electronic Banking

#### a) ECS Credit

In ECS Credit, a series of electronic payment instructions are generated to replace paper instruments. The system works on the basis of one single debit transaction triggering a large number of credit entries. These credits or electronic payment instructions which possess details of the beneficiary's account number, amount and bank branch, are then communicated to the bank branches through their respective service branches for crediting the accounts of the beneficiaries either through magnetic media duly encrypted or through hard copy.

#### b) ) ECS Debit

ECS Debit is a scheme which facilitates payment of charges to utility services such as electricity, telephone companies, payment of insurance premia and loan installments etc. by customers. ECS Debit envisages a large number of debits resulting in a single credit simultaneously. ECS Debit works on the principle of pre-authorized debit system under which the account holders' account is debited on the appointed date and the amounts are passed on to the utility companies.

#### c) Cheque Truncation

The paying bank has a right to insist for a physical presentation and possession of the cheque are designed to provide the bank with an opportunity to examine the signature and other authentication of the cheque. This is meant essentially to protect the interest of the drawer. Cheque Truncation is a method of payment processing where under movement of the paper instrument is truncated by substituting with electronic transmission of the cheque details or data. Under the Negotiable Instruments Act, 1881, cheques would have to be presented for payment to the drawee/drawer bank. Without such presentment, no cause of action arises against the drawer.

#### d) Electronic fund transfer (EFT)

In India, the Retail EFT scheme enables an account holder of a bank to transfer funds to another person having an account with any of the participating commercial banks, without any physical movement of instruments from one centre to another centre. This scheme is meant for small value funds transfer, and it uses RBINet as its carrier. Electronic Funds Transfers (EFT) eliminate the ongoing inconvenience of accepting, processing and handling monthly payments by check, cash or other paper instruments. Designed to dramatically improve customer service and reduce the inherent cost of processing paper transactions, EFT is the means by which pre-authorised debits and credits are electronically transmitted from a customer's account to the businesses' accounts.

#### 6. The Need for an Indian Cyber Law

The National Information Technology Policy (NITP) says that there is an urgent need, not only to computerise Government departments and ministries, but a central mechanism is required, so that the Government can get feedback from citizens electronically. This would

also require putting up information kiosks; Government websites; complete intranet connectivity amongst Government departments and information flow from Government to citizens and vice versa. Issue of smart cards which is a more useful and intelligent version of today's credit card, containing microchips encoded with various classes of confidential information, such as- personal financial information, allowing transfers from one's bank to various payees and personal medical information, accessible only to qualified medical care givers. Changes in Evidence Act, 1872 Indian Penal Code 1860 and Indian Patents Act General Clauses/Act would be undertaken to recognise emerging technologies, keeping in view of the following:

- Prevention of computer crime
- Digital Signatures especially as related to Electronic Fund Transfer
- Copyright and Digital Intellectual Property Rights especially with regard to
- Internet and World Wide Web
- Electronic Governance
- Computerisation of Land Records
- Bar Coding of all consumer goods and related amendments in the Weights and
- Measures Act
- Cryptography and Encryption
- Privacy of data