

Electronic Commerce

1.1 Electronic Commerce:

- Electronic commerce, commonly known as E-commerce is trading in products or services using computer networks, such as the Internet.
- Electronic commerce draws on technologies such as mobile commerce, electronic funds transfer, supply chain management, Internet marketing, online transaction processing, electronic data interchange (EDI), inventory management systems, and automated data collection systems.
- Modern electronic commerce typically uses the World Wide Web for at least one part of the transaction's life cycle, although it may also use other technologies such as e-mail.

Definition of E-commerce:

Sharing business information, maintaining business relationships and conducting business transactions using computers connected to telecommunication network is called E-Commerce.

1.2 E-Commerce Categories:

1. Electronic Markets

Present a range of offerings available in a market segment so that the purchaser can compare the prices of the offerings and make a purchase decision.

Example: Airline Booking System

2. Electronic Data Interchange (EDI)

- It provides a standardized system
- Coding trade transactions
- Communicated from one computer to another without the need for printed orders and invoices & delays & errors in paper handling
- It is used by organizations that make a large no. of regular transactions

Example: EDI is used in the large market chains for transactions with their suppliers

3. Internet Commerce

- It is used to advertise & make sales of wide range of goods & services.
- This application is for both business to business & business to consumer transactions.

Example: The purchase of goods that are then delivered by post or the booking of tickets that can be picked up by the clients when they arrive at the event.

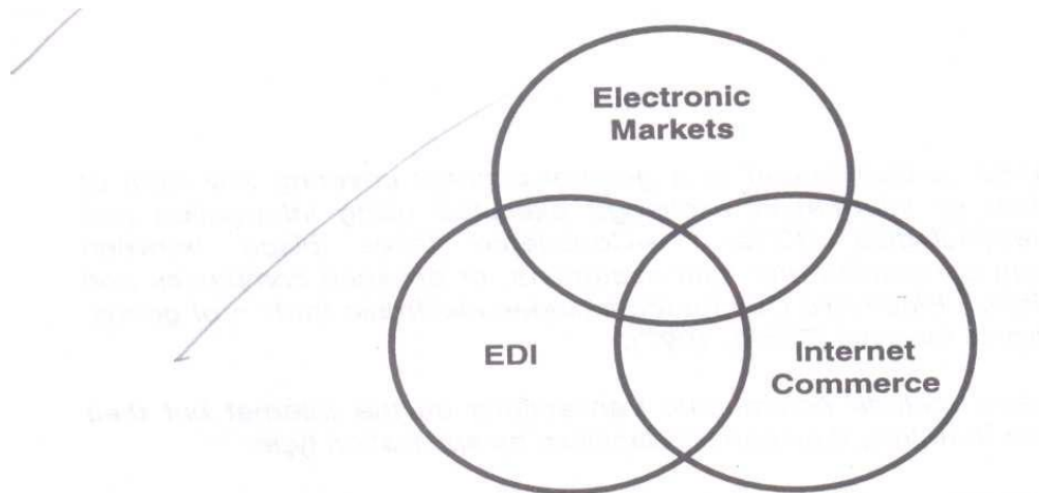


Fig. 1.1 The three categories of e-Commerce.

1.3 Advantages Of E-commerce:

- Buying/selling a variety of goods and services from one's home or business
- Anywhere, anytime transaction
- Can look for lowest cost for specific goods or service
- Businesses can reach out to worldwide clients - can establish business partnerships
- Order processing cost reduced
- Electronic funds transfer faster
- Supply chain management is simpler, faster, and cheaper using ecommerce
 - Can order from several vendors and monitor supplies.
 - Production schedule and inventory of an organization can be inspected by cooperating supplier who can in-turn schedule their work

1.4 Disadvantages Of E-commerce:

- Electronic data interchange using EDI is expensive for small businesses
- Security of internet is not very good - viruses, hacker attacks can paralyse e-commerce
- Privacy of e-transactions is not guaranteed

- E-commerce de-personalises shopping

1.5 Threats of E-commerce:

- Hackers attempting to steal customer information or disrupt the site
- A server containing customer information is stolen.
- Imposters can mirror your ecommerce site to steal customer money
- Authorised administrators/users of an ecommerce website downloading hidden active content that attacks the ecommerce system.
- A disaffected employee disrupting the ecommerce system.
- It is also worth considering where potential threats to your ecommerce site might come from, as identifying potential threats will help you to protect your site. Consider:
- Who may want to access your ecommerce site to cause disruption or steal data; for example competitors, ex-employees, etc.
- What level of expertise a potential hacker may possess; if you are a small company that would not be likely to be considered a target for hackers then expensive, complex security may not be needed.

1.6 Features of E-Commerce:

➤ Ubiquity

Internet/Web technology is The marketplace is extended beyond traditional available everywhere: at work, at home, and boundaries and is removed from a temporal and elsewhere via mobile devices, anytime. geographic location. “Marketspace” is created; shopping can take place anywhere. Customer convenience is enhanced, and shopping costs are reduced.

➤ Global reach

The technology reaches Commerce is enabled across cultural and across national boundaries, around the earth. national boundaries seamlessly and without modification. “Marketspace” includes potentially billions of consumers and millions of businesses worldwide.

➤ **Universal standards**

There is one set of technical media standards technology standards, namely Internet across the globe.

➤ **Richness**

Video, audio, and text messages Video, audio, and text marketing messages are are possible. integrated into a single marketing message and consuming experience.

➤ **Interactivity**

The technology works Consumers are engaged in a dialog that through interaction with the user. dynamically adjusts the experience to the individual, and makes the consumer a co-participant in the process of delivering goods to the market.

➤ **Information density**

The technology Information processing, storage, and reduces information costs and raises quality. communication costs drop dramatically, while currency, accuracy, and timeliness improve greatly. Information becomes plentiful, cheap, and accurate.

➤ **Personalization/Customization**

The Personalization of marketing messages and technology allows personalized messages to customization of products and services are be delivered to individuals as well as groups. based on individual characteristics.

CYBER LAWS

Today markets have changed their faces. Physical markets are now becoming obsolete as the consumers are shifted to the digital screen market place. But as nothing comes without drawbacks, e-commerce is also have some ailments. Cybercrime is one of biggest problem for the e-commerce industry. Millions of rupees, personal data theft every year from the internet. Cyber-crimes are the hurdles in the road of success of online business.

No holiday, no time limits, no distance bound, today commerce is getting its new sphere; it is shifted from its old physical markets to electronic & mobile commerce, where one can shop, do transactions any time anywhere, all are just one click away. E-commerce is providing the easy & convenient way for financial transactions and shopping. All Banks have setup their desktop and mobile formats to ease the online transactions. Global e-shopping giants Amazon, e-bay and Indian originated flipkart, snapdeal and lots more have developed a new roadmap for shopping.

When most of the transactions are going on electronically they are also becoming the source of crime. Lots of information shared, money transferred are on the target of cyber criminals. All organizations are increasing their technical base, more and more depending upon the internet for transactions without analysing the risk associated with the technology. Cyber-criminals manipulate financial data, can move the electronic ownership, interrupted communications with employees or business partners, steal intellectual property, damage an organisation's reputation, or bring e-commerce (or an entire business) to shut down.

Internet Revolution – *The Pivot of e-commerce*

Smartphone revolution in telecom industry has boost up internet usage and e commerce trends in India. Today, with 243 million internet users more than the United States, India at second after China and facts shows that mobile internet user is more than traditional desktop users.

Cyber-crime & Cyber Law

Cyber-crime is unlawful act wherein the computer is either a tool or a target or both. Criminal activities theft, fraud, forgery, defamation and mischief through internet or electronic media are also considered the Cyber Crimes .

Unsecured networks, IT infrastructure, lack of awareness in consumers and organizations make the cyber-crime complex.

Cyber Crime & e-commerce:

With the new mode of Business activities, e.g. banking, retail etc. that is depends upon electronic media, internet is like a candy for the cyber-criminals. Companies which are moving towards online business are excited about their growth and on another side worry about security. Their all information and money are on risk of cyber-crime.

E-commerce industry is different in terms of operations so it has unique challenges and the risks as the absence of physical presence increase the chances of frauds and crimes. There are many more reasons in India for uncontrolled ecommerce cyber frauds. The cost of cybercrime will continue to increase as more business functions move online and as consumers and organizations around the world are gathering on the cyber space. Risk of theft of intellectual property increases resulting in replicate products with use of technology theft cause the huge loss to the parent companies as it reduce the rate of return on the innovations. Government should take serious initiative to combat the challenges of cyber-crime otherwise technology

will do the adverse effect on the business. Globally cyber-crime losses are more than 400 billion dollar every year.

How to deal with the Cyber-Crimes:

Cyber-crimes can be controlled by mutual cooperation of organizations and internet users. Organizations, govt. should provide the safety and technical support to prevent the cybercrimes. Internet user also have to take some precaution to not fall in trap and be the victim of this electronic frauds. Its mutual responsibility of user, govt. and organizations engaged in ecommerce to fight against such crimes.

Keep computer OS updated: Computer software must be updated regularly as the flaws in the software are continuously monitored

Use Antivirus: A good quality antivirus can help to prevent cyber-attacks, antivirus can block the malwares that may be used to theft the information from the pc. Antivirus should be updated to ensure the reliability.

Use Secured Networks: Always use the secured internet connection. Public Wi-Fi spots are vulnerable to intrusion

Shop only through trusted sites: Today most people are preferring the online shopping. Hundreds of websites are present. Criminal may create such websites, as on these websites people will give their personal information and bank related information. So one should go through only trusted websites for shopping without being trapped in lucrative offers from fraud websites.

Different passwords for different websites: If hackers crack your one password they may crack all others if you are using same or similar password for all. So use different t password d for all websites. However it is more complex to remember all passwords but it will add the safety layer too.

Don't save the card details or bank details on websites: Do not store the card no either debit or credit on the shopping websites. Hackers may enter the security chain of the servers of shopping websites and can take the details of the customers. So it's better to give some extra time to enter card no every time for safety purpose.

Don't open the award / lottery promising emails: Criminal trap the people by sending them the mails promising lottery or award, they ask people to give their information including the bank account no etc. Even some time people are asked to deposit some money as participation fee. More over these websites may be infected with virus or malware which can damage your PC or accounts.

Don't Share your passwords: Do not share any password to anyone it should be used confidentially. Also do not save your password on pc or any websites.

Change passwords frequently: Don't use a single password for a long time, change your email id, bank account, credit-debit card passwords frequently.

Precaution by Organizations and Govt.

Bank & IT: Banks should focus on developing own IT wings rather than focusing only to increase their business & dependency on other's IT framework for their business. It will give more security to banking.

E-commerce Websites: There must be verification of the sellers before adding them on the websites. Customer's order must be cross checked for the genuine customer and genuine product as well.

Strong Laws, Rules and regulation: Govt. has taken initiative to fight against the cyber-crime. Framing of strong laws and regulation can help in reducing the cyber-crimes.

Conclusion

Cyber-crime is getting its roots across the world and affecting badly the global business directly or indirectly. Government, organizations are making provisions to prevent the consumer and to develop the cyber-crime free e-commerce. Consumer should be aware and cooperate in the prevention of cyber-crimes

REFERENCE

Cyber Law: Intellectual Property and E-Commerce Security Hardcover – January 1, 2011
by Kumar & Sharma (Author)

Cyberlaw and E-Commerce 1st Edition by David Lee Baumer (Author), J. C. Poindexter
(Author)

CYBER LAW AND E COMMERCE IN 60 MINUTES Jun 3, 2014 by sukhdarshan sehgal

Managing Cyber Attacks in International Law, Business, and Relations: In Search of Cyber
Peace Jul 10, 2014 by Scott J. Shackelford