

## Unit - I

Electronic Commerce framework -  
E-Commerce and Media Coverage - The  
anatomy of E-Commerce applications -  
E-Commerce Consumer application - E-Commerce  
Organisation application

## Unit - II

Electronic data interchange - EDI  
application in business - EDI, Legal  
Security and Privacy issues - EDI and  
electronic Commerce

## Unit - III

E-Commerce management - Net centricism -  
Navigation - Digital design - Web matrices -  
Business models - Hyper MK - Intelligent  
agent - Actions - Design Protocol

## Unit - IV

Channel conflict management - Security  
& encryption - abuse and netiquette - internet

governance - economics of e-Commerce -  
equilibrium Price - electronic marketing  
taxing - e-business - Road <sup>map</sup> make for  
Successes.

## Unit - V

E-Commerce legal issues - Software  
intellectual Property law - Contract  
law for e-commerce, <sup>warranties</sup> ~~volunteers~~ and  
new Product - Cyber law issues -  
Privacy and transborder flows -  
fraud - Security of information and  
risk - electronic highway robbery -  
Consumer Protection.

## E-Commerce

### Definition:

Electronic Commerce "is the business environment in which information for the buying, selling and transportation of goods and services move electronically."

-  $\Phi$ . Jaiswal

### Electronic Commerce and Traditional Commerce:

Electronic Commerce is very much like traditional commerce. It also involves an exchange of goods but the exchange of goods is conducted online. Technology such as e-mail, electronic data interchange and electronic fund transfer are used to track transaction and receive payment.

The following figure depict the buying process involved between business and the consumer in traditional and electronic commerce.

## Traditional Commerce<sup>buying process</sup>

1. Customer identify a specific need
2. Such as for Product or services that will satisfied the specific need
3. Select a vendor
4. Inspect the goods
5. Negotiates the Price
6. Accept to buy the goods

## Electronic Commerce<sup>buying process</sup>

1. Customer identifies a specific need
2. Such as Product or services that will specific need by browsing through various merchants, websites.
3. Select a vendor
4. Register as an user and negotiates the Price
5. Place order it the vendor through shopping cart
6. Make payment and provide credit card information

7. Make Payment through cash / credit card

Credit card get authenticated through Payment get way.

8. Vendor delivers the Product to the customer

Vendorship the Product to the customer delivers the goods through internet

9. Customer received the Product

Customer received the Product.

## Difference between E-Commerce and Traditional Commerce

1. Cost
2. Time
3. Convenient
4. Geographical accessibility
5. Introduction of new Product
6. Profit
7. Time accessibility
8. Product Suitability
9. Customer interaction

## Cost:

E-Commerce is very cost effective when compared to traditional commerce. In traditional commerce, a large cost has to be incurred for the role of middleman to sell the company's product. E-Commerce, as there is a direct link between the business and the customer.

## Time:

It takes a lot of time to complete a transaction in traditional commerce. E-Commerce saves a lot of valuable time for both the consumer and business. A product can be ordered and the transaction can be completed in a few minutes through internet.

## Convenient:

E-Commerce provides convenience to both the customers and the business. Customers can browse through a whole

directories of catalogue. Compare price between product and choose a desired product anytime.

It is not necessary to move away from the workplace or home to locate at the purchase a desired product.

### Geographical accessibility:

In traditional commerce it may be easy to expand size of the market from regional to national level. In E-commerce it is easy to expand the size of the market from regional to international level.

### Introduction of new product:

In traditional commerce it takes a lot of money to introduce a new product to analyse to response of customer and taste of the understand to the customer.

In e-commerce it is easy to introduce the product on the website get the

immediate feedback.

### Profit:

In E-Commerce helps to increase the sales of the organisation. It helps the organisation to enjoy the greater Profit by increasing sales, cutting cost and operating process. The cost incurred on the middleman overhead, inventory and limited sales pulls down the profit of the organisation in traditional commerce.

### Time accessibility:

Business is open only for a limited time in traditional commerce. Round the clock 24hrs service is available in e-commerce.

### Product Suitability:

E-Commerce is not suitable for Perishable goods and high valuable item such as jewellery. Traditional commerce is suitable for Perishables and "touch and feel" items. Purchasing software music in



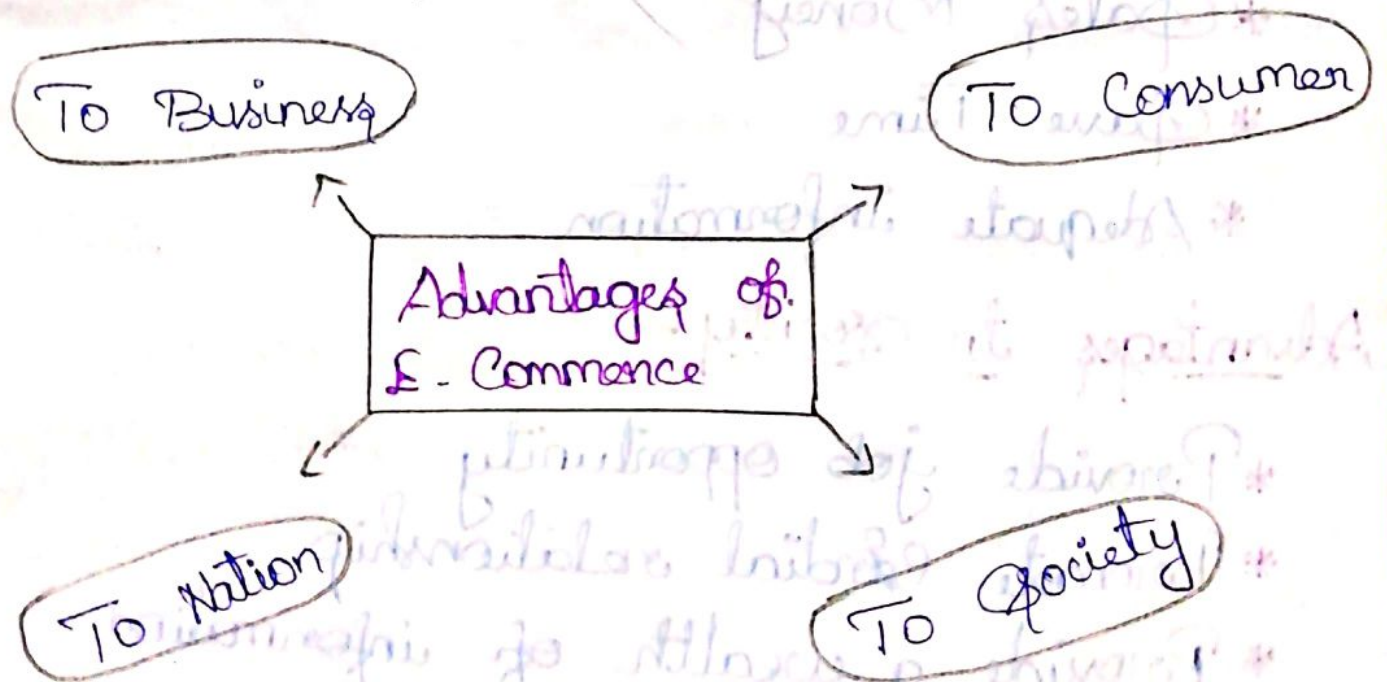
traditional commerce may appear expensive.

## Customer interaction:

In traditional commerce the interaction between the consumer is a face to face. In E-commerce the interaction between the business and the consumer is "screen-to-face".

## Advantages of E-Commerce:

The advantages of e-commerce can be classified on the basis of benefit it provide to business, consumer, nation and the society.



## Advantages to Business:

- \* Decreasing cost
- \* Effective customer service
- \* Increase in revenue
- \* Transaction efficiency
- \* Effective information Management
- \* Global reach

## Advantages to Consumers:

- \* Product and services
- \* Convenience
- \* Save Money
- \* Save Time
- \* Adequate information

## Advantages to Society:

- \* Provide job opportunity
- \* Promote cordial relationship
- \* Provide a wealth of information
- \* Provide entertainment
- \* Less Pollution

\* Online Education

\* Health Care

### Advantages to Nation:

\* Reduces regional imbalances

\* Reduces unemployment

\* Economic Development

\* Availability of goods

&

### Limitation of E-Commerce:

\* Security

\* Lack of Privacy

\* Tax issue

\* Fear

\* Product suitability

\* Cultural obstacles

\* High labour cost

\* Legal issue

\* Technological cost

## E-business and E-Commerce:

The terms "E-business" and "E-Commerce" are often used interchangeably when electronic medium is used in day-to-day activities. Then it may be termed as E-business. When a commercial transaction takes place over electronic then it is termed as E-Commerce.

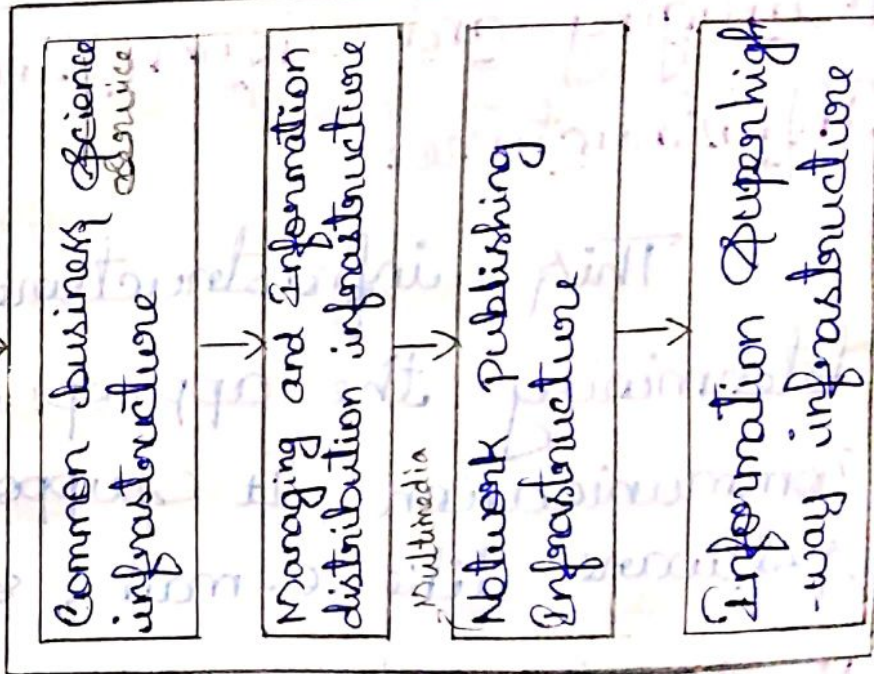
## E-Commerce framework and application

### E-Commerce framework:

E-Commerce mainly involve B2B and B2C transaction some of the popular e-Commerce application or e-banking, Online shopping, supply chain management, online marketing, online publishing etc...

Technical Standards

E-banking, online shopping, supply chain management, online marketing, online Publishing



Public Policy  
Privacy and  
Legal issues

## Common business service infrastructure:

This infrastructure enables buying and selling of the goods electronic in environment. This infrastructure includes electronic catalogue, and electronic payment and other e-security involvement the transaction.

## Managing and Information Distribution Infrastructure:

This infrastructure helps in determining the appropriate means of communication. It supports a variety of software like e-mail, faxes, EDI.

## Multimedia Network Publishing Infrastructure:

This infrastructure helps in determining the appropriate means of communication among the various parts and verification for delivery of information. Multimedia content include a,

text, graphics, videos, audio etc.

## Information Superhighway Infrastructure:

The information highway infrastructure helps in transporting. It facilitates e-commerce application, computer, internet, telephone cable, satellite communication all information superhighway

## Anatomy of E-commerce application:

- \* Multimedia content
- \* Multimedia server
- \* Client-Server Architecture
- \* Architecture
- \* Network service providers
- \* Information delivery infrastructure
- \* Video server
- \* Consumer devices

## Multimedia content:

Multimedia refers to usage of digital data in more than one format. It is a combination of text, audio, video, graphics in a computer file. In e-commerce application

is innovation of multimedia content.

### Multimedia Server:

Server store and distribute large amount of digital information to consumers.

Multimedia server can handling a variety of data books, advertisement, catalogue, movies, games etc.

### Client and Server architecture:

Client server model enables the client to communicate with the server. Client are the device that requires information from server.

### Network Service Providers:

Network Service Providers assess Points NSB is actually a business and organisation.

### Information delivery infrastructure:

Information delivery infrastructure helps in distribution of information the transport providers play an important role.



in transportation of information. Tele communication, cable, wireless, commercial network etc.

### Video Server:

Today, consumer application require video on demand. Video servers delivery information to types of consumer networks and tele communication. video server link between content providers and transport, entertain producer, media industry etc...

### Consumer devices:

Some of the consumer devices that provide access to information on video phone, telephone, personal computer, laptop, desktop computer, television etc.

### E-Commerce applications:

1. E-Commerce is growing that contribute to its growth include tele communication infrastructure changing attitude, customer, awareness of business.

2. E-Commerce and the role played by the government.

3. The application of e-commerce can be seen in various industries and trade related activities. Such as banking, trading, education, job market, real estate, insurance, health care, e-agriculture, trade and tourism.

### Banking:

Electronic banking saves time and money for a banker. It offers an expensive, alternative to branch banking. It provides a banker a chance to service customers even at remote places through internet.

### Trading:

Electronic trading utilises the internet to bring together the buyers and sellers on a virtual common trading platform in the context of stock market.

### Education:

The internet is being used as a delivery vehicle for driving and learning. E-learning is a technology and the

utilises internet for education delivery.

### Trade and tourism:

The internet is an ideal place to plan explore and arrange almost any trick money to be saved by making travel and hotel reservation through internet.

### Job market:

The Job market is one of the largest markets in the world. When employers are looking for employee with specific skills and employees are looking for a suitable job. The internet offers a perfect environment for job and companies seeking employees.

### Real estate:

Real estate transaction are an ideal area for electronic commerce for the following reason properties can be viewed on the screen. It save time for both the seller and the buyer of the tenant, and the owner.

### Insurance:

An increasing number of companies

offer insurance policies. Such as auto, home, life or health at a discount through internet. Several large insurance and risk management companies offer insurance contract online.

### Health Care:

Many health services are provided through online. The website provide information eligibility, inquiry and patient referral transaction services.

### E-agriculture:

It involve using of information and communication technologies by the community of development scientist, farmer and other agencies to share and manage knowledge and information, and agricultural practices to improve agricultural productivity.

To Pillars that support e-Commerce application in Superhighway.

\* Public Policy, Privacy, and legal issues.

\* Technical Standard

Public Policy, Privacy and legal issues:

The government rule like universal access and privacy. Such issues support and mechanism for safe transfer of information in Superhighway.

It protect the consumer from it protect the life of consumer

Technical Standard:

Technical Standard are very important in e-commerce. They ensure integration across different transportation network. It dictate the nature of network.

## Unit-11

# Electronic Data Interchange (EDI)

EDI is the exchange of structured business information between application among trading partners by agreed message standard. B2B e-commerce is based on the principles.

### Definition:

The Electronic Data Interchange is simply define as a electronic exchar of <sup>structured</sup> business information in standard formats from one computer to another.

### Process of EDI:

- \* Translation of business data
- \* Transmission and reception of data
- \* Re-translation of data

## Translation of business data:

The EDI enabling software translates the outbound file from the business application into EDI format.

## Transmission and reception of data:

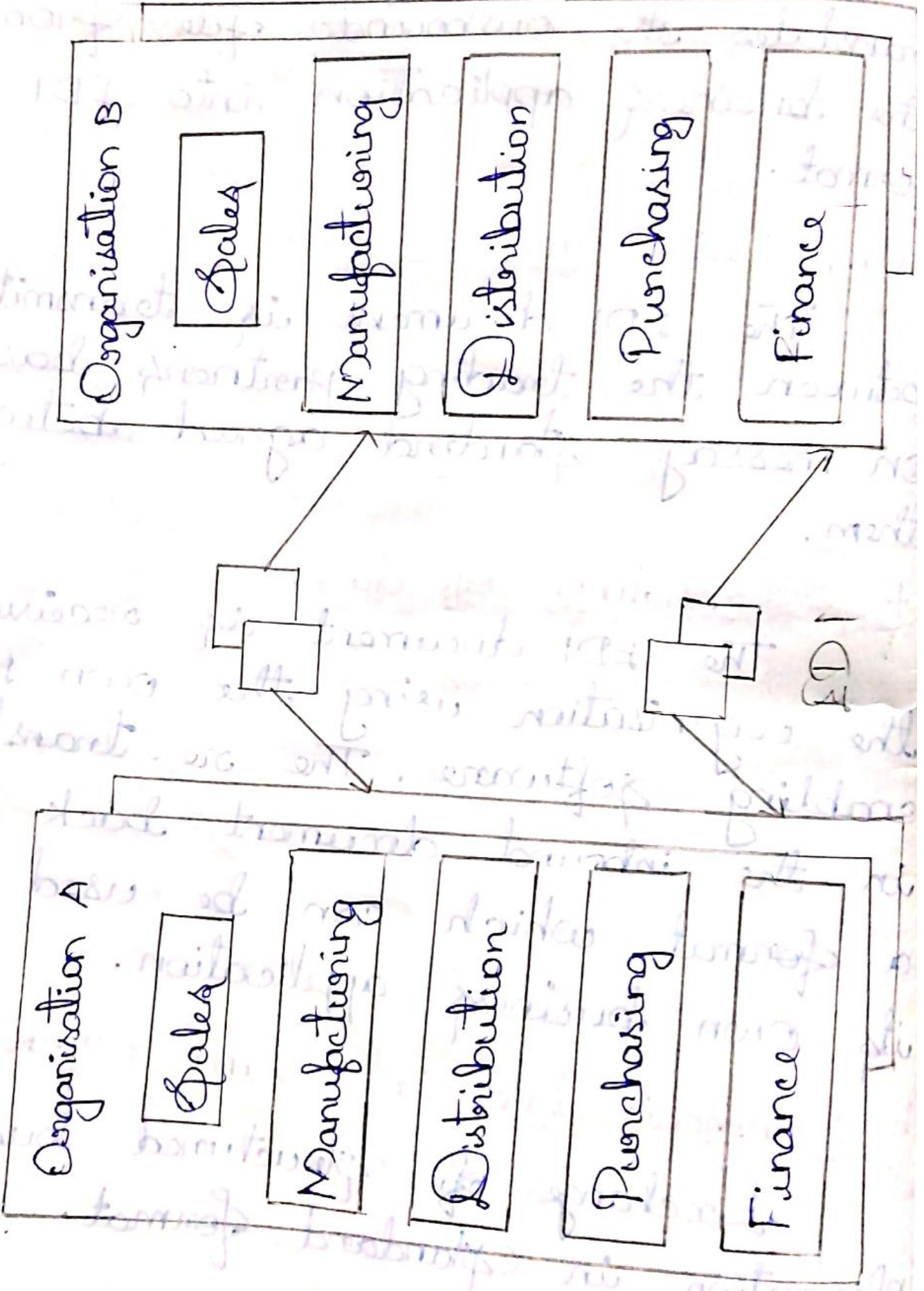
The EDI document is transmitted between the trading partners based on message standard agreed between them.

## Re-translation of data:

The EDI document is received by the organisation using the own EDI enabling software. The re-translation in the inbound document back into a format which can be used by its own business application.

## E - Electronic data interchange work:

Exchange of structured business information in standard format.





## EDI Com.

1. Representative of two business Organisation interested of electronic exchange of data must need and the application in the EDI.
2. Each business organisation had EDI Program to the computer to translate the company data into standard format for translation and data.
3. Business Organisation A and B can exchange data electronically in the standard format agreed between them

## EDI Components:

\* Application Service

\* Translation Service

\* Communication Service

## Application Service:

It enables the means of integrating existing or new application into the EDI System

## Translation Service:

It converts the data from internal format and standard to all external format. It translate the data from internal to external format.

## Communication Service:

It transfer the document on to a network — through the agreed communication Protocol.

## Benefits of EDI:

\* It is a convenient way to exchange business documents during business or non-business hours.

\* It ensures speed, economy and accuracy in handling business documents.

\* It reduces business transaction cost.

\* It enables business organisation to enjoy one time data entry and reduces errors.

\* It improve customer service.

\* Data available in electronic form can be shared by various department in an organisation.

\* It reduces paper work as business documents are exchanged through electronic means.

\* It reduces inventory carrying cost.

\* It improve cash flow <sup>statement</sup> ~~management~~

\* It helps in efficient flow of data both interna and inter company level.

\* It reduces the Processing time involved in a business cycle by reducing the time of transfer of business documents.

### EDI & E-Commerce:

B to B e-commerce is based on the principle of today EDI methods is used for B to B transaction

EDI is used in a variety of industries. The business applications include distribution, finance, health care, manufacturing, purchasing, retail, tax etc.

EDI exchanged documents

- \* Sales and marketing
- \* Manufacturing
- \* Purchases
- \* Finance and Accounting

EDI implementation:

- \* EDI co-ordinator
- \* Business case of EDI
- \* Management commitment
- \* EDI implementation
- \* Training
- \* Trial
- \* Communication with trading partner

VAN: - Value Added Network

VAN is an Organisation that provide many services such as data transmission, EDI translation, storing and forward messaging of transaction data.

MIME: Multipurpose Internet Mail Extension

It means multipurpose INTERNET, MAIL, EXTENSIONS. It offers a way to interchange text in long page languages with the different characters set and multimedia, e-mail among different Computer System.

EDI Standard:

It is the series of uniform message formats used to create computer readable version of traditional paper document

EDI - Legal Security & Privacy issues

Legal & issue - e-Business

Trade and commerce over the internet rise several legal issues.

A. Trade marks

B. Copyright and the internet

International issues:

Today e-business plays globally any person can purchase product from anywhere in the world. In order to service and succeed, an organisation must adapt to environment

International business rises cultural and legal issue. Culture refers to the attitude, beliefs and the values of society

Ethical issue:

It is important to remember as ethical issue one e-commerce transaction are involved ethic mean "a set of principles of right conduct". Unethical issues may be legal or illegal.

## Tax issue:

E-business does not have physical presence and certain goods are not deliver physically. Online seller can easy sell to customers throughout the world from a single physical location. The Profit arising from e-commerce transaction from arises a lot of tax issue.

## Ethical issue:

- \* Ethical practices to be followed in e-commerce.
- \* Privacy must be maintain in collection, storage, information about individuals
- \* The ownership and value of information should be protected and intellectual Property
- \* It is very important for e-business to make sure that the written words and a company or factual
- \* Registering a domain name that is closed to some other corporate identity.

name should be not be adapted

\* Internal advertisement should not be misleading.

\* Security and Privacy concern along with e-business regulatory issues should be keep it mind by e-business Organisation.

Legal issues:-

Trade Mark:-

Trade mark and domain name is the unique name that identifies on internet website. Domain name always have to or more dots separated by dots. The part of the left is the most specific and the part on right is the most general.

Copyright:-

Copyright was developed to protect the creative work of authors. The copyright rest with the author.



The copyright long period one the expression of an idea itself.

### Unit - III

## E-Marketing and E-Advertising

### E-Marketing:

E-Marketing is the process of conducting marketing activities and achieving marketing objectives through the internet and electronic median. It may be economic process that involve the use of computer and internet.

### Advantages of E-Marketing:

- \* Save money and time
- \* Intimate customer relationship
- \* Attract analytical buyers
- \* Remove distance barrier
- \* It offers choice
- \* Easy collection of data

### E-Marketing mix:

The number of customer purchasing goods through internet has increased lot of business Organisation or marketing

- the Product by placing the Product on the website

A successful mix focuses on the target market for which the e-marketing mix is prepared.

1. E-Product or Service

2. E-Price

3. E-Place

4. E-Promotion

E-Advertising:

American Marketing Association defines advertising as "any paid form of non-personal presentation and promotion of idea, goods or services by one who identifies sponsor".

Online display advertising:

The high-profit, high-visibility placements are available throughout amazon.com site including the home page, such page detail pages, product, and

the confirmation Page.

## Format for web advertising:

- \* Banner ad
- \* Coupons
- \* Reward Programms
- \* Paper advertising view
- \* E-mail

## Intelligent agent:

Intelligent agent are software entities that carry out some set of operations on behalf of a ~~user~~ or another program with some degree of independence or autonomy and in so doing employ some knowledge are representation of the user's goals are desires.

## Features of intelligent agent:

- \* Goal oriented
- \* Independent
- \* Intelligent
- \* Reduces net traffic
- \* Multiple task
- \* Advantages for the buyer

## \* Mobility

### Goal Oriented:

Intelligent agent has the ability to accept the users statement of goals and carry out the task delegated to it can move around from one machine to another and act pro-actively in response to the environment.

### Independent:

Intelligent agent function in its own without human intervention and must have the ability to make decision and to action without direct human

### Supervision:

### Intelligent:

Agent are capable of searching information more intelligently. The have intelligence to reason things out & based on the existing knowledge

of its user and environment and on past experience

Reduces net traffic:

Agent can communicate and co-operate with other agent quickly this enables them to perform task such as information quickly and efficiently and reduces network traffic.

Multiple task:

On intelligent agent can perform multiple task to relieve the human user from monotonous clerical work

Advantages for the buyer:

Intelligent agent can do shopping for a buyer, taking down specification and returning with recommendation of purchases which meet those specification and intelligent agent can be sort by buyers to identify stores, brand, product or service, categories, Product and Services and

Prices etc.

## Mobility:

Intelligent agent engaged in e-commerce travel from computer to computer at was difference system and platform and together information such parameters.

## Protocols:

A Protocol is a collection of rules for formatting, ordering and error checking the data send across a network internet users to main protocols. These are transmission control protocol and internet protocol. These protocols are the rules that govern how data move through the internet and internet connection are established terminated.

## Types of Protocol:

- \* Transmission Control Protocol - TCP
- \* Internet Protocol - IP

### Transmission Control Protocol - TCP:

Transmission Control Protocol of a message into packets before it is transmitted over the internet.

It also control reassembling of packets into original format when they have reached the destination computer.

### Internet Protocol:

It specifies the addressing details of each packet labelling each with the packets origination and destination address. IP is responsible for moving packets of data from node to node.

### Different types of Protocol:

There are different types of Protocol

- \* Hyper text transfer Protocol - HTTP
- \* File transfer Protocol - FTP

## \* Simple Mailing Transfer Protocol - 31/1/19

### Hyper Text Transfer Protocol:

This Protocol is used for sending and receiving web pages

### File Transfer Protocol:

This Protocol is used for transferring any kind of file, line, documents etc

### Simple Mailing Transfer Protocol:

This Protocol is used for transferring mail messages:

## Unit - 11

### Business Models:

Electronic Commerce uses information and communication technologies to carry out business transaction based the Parties or entities involving a construction.

### Classification of e-commerce business model

1. Business - to - Business (B<sup>to</sup>B) (B2B)
2. Business - to - Consumer (B2C)



3. Consumer - two - Business (C2B)
4. Consumer - two - Consumer (C2C)
5. Business - two - employees (B2E)
6. Business - two - Government (B2G)

### 1. Business - two - Business (B2B)

The transaction conducted between one business house with other business units over electronic network are termed as B2B. Business - two - Business electronic commerce enables inter Organisation interaction and transaction.

### B2B Models:

- A. Supplier - Centric model
- B. Intermediary - Centric model
- C. Buyer - Centric model

### A. Supplier - Centric model

In the Supplier centric model, a Supplier set the electronic model and commerce market place various customers/ business houses interact at the Supplier at it is electronic market place. The Supplier is generally

a dominant supplier in the type of Product it supplies

### B. Intermediary - Centric Model:

In intermediary centric electronic commerce in the business to business context. A third party sets up the electronic commerce market place. The third party attracts both the buyer and seller to interact with each other in a market place. The buyer sends request for quotations and seller responds electronically.

### C. Buyer - Centric Model:

In Buyer centric model big business organisation with high volume purchase capacity create an electronic commerce market place. They use a website for purchase and online electronic commerce market place use by the buyer for placing request

for quotations and carrying out the entire purchase process.

### 2. Business - Two - Consumer (B2C)

The transaction between a business house and the consumer over electronic network are termed as B2C. Two or more copies to interact with each other in this types of transaction involved one seller and one consumer.

### 3. Consumer - Two - Business (C2B)

The transaction between the customers and a business units is called C2B. Consumer gain control in C2B transaction. The buyer fixes the price for a goods or services and the website collect the demand and offer to the seller participating in the website price.

### 4. Consumer - Two - Consumer (C2C)

The transaction between the consumer are termed as C2C. Individuals sell and buy items, is termed as C2C.

e-commerce . the electronic commerce activity provide the opportunity for trading product and services to consumer and connected through the internet.

### 5. Business - two - employees <sup>service</sup> (B2E)

The transaction between the business and the employee is called business - two - employee. Searching for a particular type of information from the company may be time consuming for an employee. The employee is a self service capability.

### 6. Business - two - Government (B2G)

The transaction between the business and the government over electronic network are termed as B2G. It involves the use of internet for public Procurement, licensing,

Procedures, government related formalities and filing of tax returns.

Web Concepts:-

Universal Readership Concept:

The W3 Principle of universal readership is that once information is published, it is accessible in any country from type of computer. Any authorized persons needs to use one simple program to access it.

Hyper text Publishing concept:

All online information can be accessed and retrieved in a consistent and simple way to access information. The ability to address many type of data includes text files, images, sound files, animation sequences.

Client - server concept:

This permits the web to grow easily without any centralized control. Any person

Can Publish any person can read and download it. A client browser is required Publishing information.

### Network:

It is a group of interconnected computers and associated Peripheral devices connected by a communication channel which is capable of sharing the resources and information among the users.

### Local Area Network (LAN):

It is a computer network that spans a relatively small area such as an office complex or a bank build

### Metropolitan Area Network (MAN):

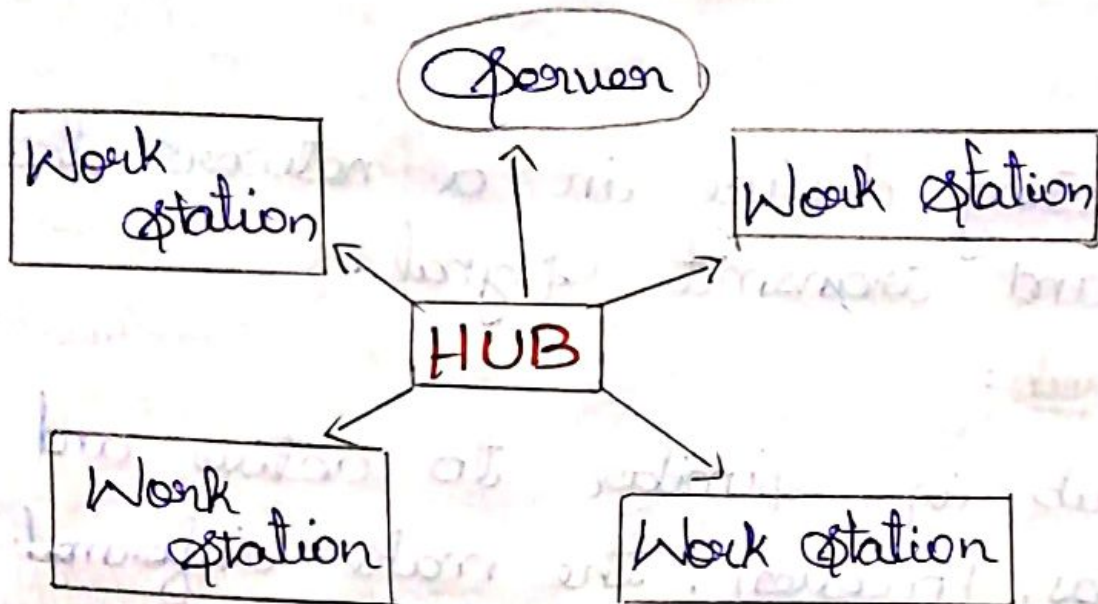
This network covers a large geographic area limited within a city or a town.

### Wide Area Network (WAN):

It covers the maximum geographic area spread over cities, states or countries.

## HUB :

A HUB is similar to an extension board use for more than one connection to an electronic point. The hub has to connect various workstation with the server.



Hub is a device to centralised network traffic through a signal point connection.

## Types of Hub:

1. Passive hub
2. Active hub
3. Intelligent hub

## Passive hub:

A Passive hub is a central connecting device that joint cables from several work

Station in a topology. It does not provide any regeneration of the signal. Regeneration is the process by which the signal or given more power to travel further.

### Active hub:

A connecting device in a network that regenerate and transmit signal.

### Intelligent hub:

This hub is similar to active and passive hubs. However, they make informed selection and perform some network management operation. They are loaded to use protocols such as simple network management protocols - ~~SNMP~~ <sup>SNMP</sup> to communicate with various network devices.

### Classification of network:

Computer network aim at data communication. Data can be in various form like text, picture or sound data communication is required between two computer based closely like in office or different location.



That cover a large geographic area.

### Classified networks:

- \* Local Area Network - LAN
- \* Metropolitan Area Network - MAN
- \* Wide Area Network - WAN

### Digital design in library:

A digital library is an information structure. It stores information and provide organisation and employees access to a amount of internal information and multimedia format. The digital design and document of business data.

### E. Auctions:

Auction on the internet started in 1995. There are online auction where items are sold over the internet. There are similar to offline auctions, except that these are done on a computer. Host right on the internet act like a broker. It offers services for sellers to put these goods for sale and allowing buyers to bid on these items.

## Unit - IV

### E-Governance:

E-Governance means electronic governance. E-Governance involves the use of information and communication technology. To improve the functioning and the internal working of the government. The purpose of E-governance is to provide public service in an efficient and cost-effective method. It also aims at delivering information.

### E-Governance model:

\* G to B

\* G to C

\* G to G

### G to B:

The transaction between the government and the business over electronic network are termed as B to G. For example, when Asian Paints submits the tax return to the income tax department through internet. Then, it is G to B e-commerce.

## G to C:

The transaction between the government and citizens over electronic network are termed as G to C. For example, when a person applies for passport through the website then it is G to C e-commerce.

## G to G:

The transaction between the government departments over electronic network are termed as G to G. For example, when a communication take place between state headquarters and various district quarters through internet then it is G to C e-commerce.

## Online railway reservation system:

One of the successful e-governance initiatives online railway reservation system. The government of India set up community information center that provide the internet access over a LAN to allocate information of data.

## E-Security:

E-Commerce Security deals with the Protection of a e-commerce assets such as computers and networks from unauthorised access use alteration or destruction.

## Security Threats:

- \* Virus
- \* Worm
- \* Spy
- \* Back door
- \* Hacking

### Virus:

It is a Program that independently attaches itself to a lawful program. It infect other Programs it causes damage when the host Program is activated.

### Worm:

It is a computer Program that can run independently. It can multiply itself on the computer that has been affected. Worms spread quickly through the internet.

## Spam:

Spamming is the sending of an unsolicited e-mail. It is also a major source of cyber attack. There are some estimates according to which 10% of all e-mails are spam. Spam is considered as nuisance mail.

## Back doors:

It is a security threat. It allows anyone with the knowledge of the system password to cause damage by deleting or stealing the data.

## Hacking:

Externally accessible system targets on hacking. Hackers generally target on the internet and break computer and network security.

## E-security Protection:

- \* Fire walls
- \* Antivirus
- \* Intrusion Detection System
- \* Detection Systems

## Firewalls:

Protect the networks from attack through the internet. The most important aspect of a firewall is that it protect at the entry point of the networked system. Firewalls can filter incoming and outgoing traffic from the internet.

## Antivirus:

Software can help to protect the computers from threat. The antivirus software can scan the computer and identify if there are viruses.

## Instruction Detection System:

Instruction detection system inspect all inbound and outbound network activity and IDS evaluate a suspected instruction. It act as an alarm on IDS, watches for attack that originate from within a system.

## Dimension of e-commerce security:

\* Confidentiality

## Integrity

- \* Availability
- \* Privacy
- \* Non-repudiation
- \* Authenticity

## Confidentiality:

It allows only authorised parties to receive and read protected information.

Information should be protected unauthorised internal users and external hackers, during transmission on communication networks.

## Integrity:

It ensures data remains the same when it travels from the sender to the receiver and that it is not altered or modified by anyone. Therefore one information is retrieved by the receiver.

## Availability:

It ensure data all deliver on time and there are not removed anyone.

## Privacy:

Privacy deal with the protection of

individual rights to non-disposer with it helps the individual to exercise control over the data.

### Non-repudiation:

It deals with the prevention against anyone party from deny, on a agreement after it have been entered. After sending or authorising a message the sender should not deny.

### Authenticity:

It ensures that the data is received from the correct data source when information is retrieved or received. It should be possible to verify whether it has been sent by the originator.

### Encryption:

Encryption ensuring the security of electronic data is a serious business. The transmission of purchase information credit card numbers and other transaction information must use secure to give



Consumer and merchant the confidence the need to business over the internet.

### Meaning:

Encryption means in Greek words Cryptography "secret writing" which the science communication over untrusted communication channels. Encryption is a cryptography techniques that encodes data so it cannot be read without a key.

### Process of Encryption.

- \* Encryption is a way to transform a message so that only the sender and can read, see or understand it.
- \* The mechanism is based on the use of mathematical procedures to data.
- \* The formula or convert the intended data, the credit card number, Social Security number, medical record etc.

### E-business:

E-business is a very broad concept that involve a business organisation to use electronic median to carry out all

Specialised overall business ~~any~~ activity in e-business. E-business and computing technologies are used to enhance once business information.

### Need for e-business:

The rapid changes in telecommunication and computing technologies evident the internet world wide web have lead to a whole new range of business application, process and structure.

E-business is essential for existing business organisation and for the new entrance.

E-business provide cost and transaction efficiency and help business organisation to enjoy economical

Today, Companies online Present along with the physical presence is required for business organisation

### Factors increasing the need for e-business:

Cost reduction

Customer Satisfaction

Information

Transaction efficiency

Access to Global market

Equilibrium Price:

The Price which will come to prevail in the online market is one at which quantity demanded is equal to a quantity supplied. The Price at which quantity demanded equals quantity supplied is called equilibrium Price in online market.

# Unit - v

## Issues

### Introduction:

The term environment refers to the forces and factors that can control and influence on the functioning of an organisation. Some of the issue and challenges which on e-business. It would faced <sup>international</sup> information business environment are legal, tax issue.

### Types of issues:

- \* International issues
- \* Ethical issues
- \* Legal issues
- \* Tax issues

### International issues:

E-business take place globally any person can purchase product from any where in the world. In order to survive and succeed an organisation must adapt

to its environment. International business  
rises cultural and legal issues.

### Ethical issues:

It is important to remember few ethical issues when e-commerce transaction are involved. Ethics means "a set of Principles of right conduct" on a ethical issues may be legal or illegal.

### Legal issues:

Trade and Commerce over the internet rise several legal issues which are discussed below.

- \* Trademarks and Domain names
- \* Copyright and the internet
- \* Service Provider liability
- \* Online contract

### Tax issues:

E-business does not have a Physical Presence and certain goods are not deliver Physically on online seller can easily sell to customers throughout \$

the world from a single physical location. The Purchaser of the consumer to stay in a different state or a country. The Profit arising from e-commerce transaction raises a lot of tax issue.

## Cyber crimes and cyber law:

### Cyber crimes:

Cyber crime is using computers and network for criminal activities. Computer can be used for committing a crime in anyone of the following ways.

- \* As a tool
- \* As a target
- \* Both as a tool and a target.

### A list of cyber crime:

1. Hacking of computers systems and network
2. Cyber crimes involving Production and Distribution,

↳ Material including crimes

3. Financial crimes such as phishing

of money from banks, credit cards and money laundering.

4. Online gambling

5. Intellectual Property crimes such as gift of computer source code, software piracy, copyright, trademark etc.

6. Harassment such as cyber stalking, cyber defamation and abusing mails

7. Cyber fraud such as documents including currency and any other documents

8. Launching of viruses, worms, and programs

9. Cyber attacks and cyber terrorism

10. Consumer harassment and Consumer Protection.

Cyber Crimes that generally occur within Organisation

1. E-mail abuse

2. Spam mail

3. Cyber defamation

4. Gift of source code

Exchange of business secret & documents

**Creative Content** - Creating quality content is the best way to not only rank for keywords but also create positive user experiences. It will also go a long way with ensuring you are educating customers and being an authority in your niche will lead to boosts in sales.

**Guest Posting** - Guest Posting isn't dead - only the g "spammy" distant cousin is. This is still one of the best ways to get a good contextual link.

**Link Building** - Building relevant links from resources, pages, and directories makes for a nice, diverse link profile that google doesn't find apprehensive.

2. **Add some twist with e-mail marketing:**

E-mail is one of the best ways to communicate with customers. According to recent research and surveys:

E-mail has an ROI of around 4,300%  
(According to the Direct Marketing Association)



80% of people say they receive marketing messages alongside their personal emails on a daily basis.

70% of people make use of coupons or discounts they learn about from email.

60% of people say that receiving special offers is the top reason they subscribe to an email list from a business.

### 3. Take a long turn with PPC

If you want to drive and the targeted traffic to your online stores, at a faster pace than google adwords is a fantastic way to do it. But it creates wonders only when this tool is used properly.

### 4. A Lane to Social Media

Create Profiles on Facebook, Twitter, Google+ and other social media Platforms. By creating profiles on such profiles you can communicate effectively with your customers and also can build brand awareness efficiently.

5. Some more turns to reach your destination:

**Video marketing:**

Marketing through video is a hit formula in today's business world. Many businesses are making dollar plus business using facebook video and youtube video.

**Affiliate Marketing:**

It certainly gives you profit, but necessary is you must follow your niche to go that extra mile.

**Forums and Q&A Sites:**

Search social forums and give solution to the people for which they are looking for related to your business.

**Related Approach:**

Approach a store in a related market. This will help you faster your business as well as relations.

# Privacy

Privacy is not just about a hiding things. It is about self-possession, autonomy and integrity but this right of Privacy does not mean that is the right of people to close the doors, and pull down the windows shades because they want to engage in some sort of illegal activity.

It is the right of people to control what details about their stay inside their own houses and what look to the outside.

## Fraud: (Application)

Application fraud is one specific version what is broadly referred to as "identified gift" as the name implies. It is important involves a criminal using someone's name and a credit card application fill without permission.

## The important e-commerce metrics:

### \* Sales conversion rate:

Most analytics tools will tell us the conversion rate but we can find it manually by dividing the number of people who bought a product by the total number of visitors.

### \* Email opt-ins:

Ideally, we want to get as many people on our e-mail list as possible, even if they don't buy your products. So it's important to track our total opt-ins and our opt-ins by source. That is, <sup>we</sup> want to know the individual opt-in rates of every form on our website.

### 3. Customer lifetime value:

There are actually three ways to calculate customer lifetime value. They might be a bit confusing, so try this calculator first.

There are lots of ways to increase our customer lifetime value, but they boil down to increasing our average order value and building long term relationships with our customers so they become repeat buyers.

#### 4. Customer acquisition cost:

In order to make money, our customer acquisition cost needs to be less than our customer lifetime value. Ideally, our acquisition cost should be less than our average order value so as we make money off every new customer.

#### 5. Revenue by traffic source:

In our post on traffic quality, we talked about how all traffic isn't equal. Some traffic sources send visitors who are more likely to stop spending cash on sources that don't work well or don't work at all, and invest that money in sources that do work.

#### 6. Average order value:

Average order value is quite simply the average value of each purchase. To discover ours, divide the total value of all sales by the number of carts.

#### 7. Shopping cart abandonment rate:

This metric is the percentage of shoppers who add items to their shopping cart, but then leave our store without making a purchase.

### 3. Net Promoter Score:

Net Promoter Score is a simple survey that measures our customer's satisfaction with our brand and products. It asks two questions:

1. How likely are we to recommend us to a friend?
2. Can you tell us why we responded with that number?

### Warranties:

At its most basic a warranty is a promise you make about a particular item such as how long it will last or what condition it will be in when you receive it. Warranties fall into 2 categories:

1. Express warranty
2. Implied warranty

#### 1. Express warranty

Express warranties are used all over the world to promise how goods will perform and the condition in an express warranty. The customer that you repair

or replace the item with break in the one year of sale or might guarantee.

## 2. Implied warranties

The warranty of merchantability and the warranty of "fitness for purpose" (which promises that the goods do what you set the would do) This implied warranties.

## New Product ~~low~~ launches:

Retailer add new products frequently for the most part this product may be as simple adding a new line of to the womens section on the sight are putting a new brace in the automatic category but there are new products and even product category and matrix a merge a significance amount of online marketing and even for online merchandise.

## Consumer Protection:

### Definition:

In regulatory that provide for it developed countries with free market economics. Consumer protection is a group of law and organisation designed to rights of consumer

as well as fair competition and accurate information in the market

### Advantages:

Unlike other retailers:

Co-operative

consumers are saved from alteration of goods and services

Consumers are the owner and manager such stores, requirements of the majority of the consumer.

Co-operative societies are important from democratic business and enterprises because of its defused ownership in consumer protection

### Contract law:

It is the body of law that relate to ~~make~~ making and enforcing agreements.

A contract is a agreement that a party <sup>can</sup> term to a court to enforce. Contract law is a area of law that governs making



Contract, carrying out and fashioning a name and when there is a breach

### Definition:

Contract or agreement between various parties are framed and validated by the Indian contract act 1872. defines as under sec 2(n) as an agreement.

### Types of contract law

Valid contract law

Void contract law

Voidable contract law

### E-Commerce, Privacy:

The frequent headlines on security breaches and inappropriate data use by major companies have consumers more. The Privacy Protection posting or privacy policy statement you are e-commerce right

### E-Commerce highway robbery:

E-commerce is the buying and selling of goods & services of the transmitting

of fund and data. Electronic ~~can~~ network  
important of the internet

\* Robbery committed on near or on  
Public highway usually against traveller

\* Excessive Profit or advantage varies  
from a business transaction