

BALAJI INSTITUTE OF I.T AND MANAGEMENT KADAPA

SEMESTER-4

E-BUSINESS

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Units covered: **half of 3rd, 4th & 5th UNITS**

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SYLLABUS

(17E00402) E-BUSINESS

Objective: The course imparts undertaking of the concepts and various application issues of e-business like Internet infrastructure, security over internet, payment systems and various online strategies for e-business.

1. **Introduction to e-business** : Electronic business, Electronic commerce, difference between e-business & e-commerce, electronic commerce models, types of electronic commerce, value chains in electronic commerce, E-commerce in India, internet, web based tools for electronic commerce. Electronic data, Interchange, components of electronic data interchange, electronic data interchange process.
2. **Security threats to e- business:** Security overview, Electronic commerce threats, Encryption, Cryptography, public key and private key Cryptography digital signatures, digital certificates, security protocols over public networks : HTTP, SSL, Firewall as security control, public key infrastructure (PKI) For Security.
3. **Electronic payment system:** Concept of money, electronic payment systems, types of electronic payment systems, smart cards and electronic payment systems, infrastructure issues in EPS, Electronic fund transfer.
4. **E-business applications and strategies** : Business models & revenue models over internet, emerging trends in e- business- governance, digital commerce, mobile commerce, strategies for business over web, internet based business models.
5. **E –business infrastructure and e-marketing:** Hard works system software infrastructure, ISP's, managing e-business applications infrastructure, what is e-marketing, e-marketing planning, tactics, strategies.

Text books:

- Dave chaffey :e-business & e-commerce management- Pearson.
- e- commerce- e-business :Dr.C.S.Rayudu, Himalaya.

References :

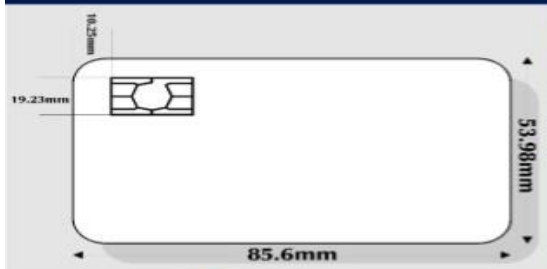
- Whitley, David (2000) ,e-commerce strategy,Technologies and applications.TMH.
- Schneider Gary P.and Perry, James T(1ST edition 2000) Electronic commerce, Thomson Learning.
- Bajaj, Kamlesh K and Nag, Debjani (1st edition 1999) ,e- commerce, The cutting edge of business,TMH Publishing company

UNIT-3

ELECTRONIC PAYMENT SYSTEM

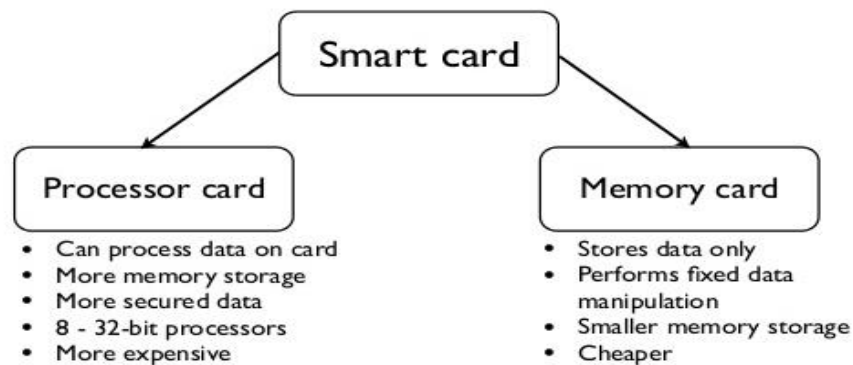
4. SMART CARDS (ELECTRONIC CREDIT CARD)

What is a Smart Card?



A Smart card is a plastic card about the size of a credit card, with an embedded microchip that can be loaded with data, used for telephone calling, cash payments, and other applications, and then periodically refreshed for additional use.

- It is a plastic card embedded with Micro processor that has customers personal information and can be loaded with money to make online transactions and instant payment of bills.
- **Simply, a Smart Card is** pocket-sized card with embedded integrated circuits which can process data.
- The smart card is a plastic card, equal to the size of a credit card, with an embedded micro processor and memory, used for storing information related to banking, medical data etc.,
- It is most convenient device to draw cash from ATM (Automatic Teller Machine).
- Smart Card permits users to access a variety of services.
- A smart card will help to buy stationary, books, groceries, operate bank accounts, make long distance phone calls, payments and get access to the internet.
- A Smart card is a multi-functional Micro – Processor and memory on a Computer chip that is embedded in a card.
- Smart card is literally a **computer in a card.**



- ✚ In advanced countries like France and the US, Smart cards are produced and are in wide use.
- ✚ They have a simple processor and a small memory.
- ✚ Days will come when smart cards will soon be replacing credit cards.
- ✚ Smart card is a mini computer.
- ✚ There is always an interaction between the smart card and other external devices which read the card and enter the data on to it.
- ✚ **So, in future, the users could operate their cards at home and turn their PCs into the automatic teller machine (ATM) to make electronic payments or to draw money from their bank accounts.**
- **Smart cards can be used to**
 1. Blood flow/Heartbeat detection
 2. Contactless finger print
 3. DNA scanner

FEATURES

1. The amount of sales or purchase is stored in the card's memory.
2. A deduction is given from the card holder's credit balance.
3. When a transaction takes place, say a purchase, the information as to the amount of purchase, the name and address of the store and the data is stored in the memory. It requires a device known as the **card reading machine**.
4. The machine is also connected to a home computer, a television set or a printer which displays a full record of all purchases made with the card.

HISTORY

- A smart card as used today was filed by **Jorgen Delhloff** in **1976**.

- In 1977, Michel Ugon from Honeywell Bull invented the first microprocessor Smart Card with two chips, (microprocessor and memory.)
- In 1983, the first Mass use of the cards, as a telephone card for payment in French payphones.

USES OF SMART CARD

1. BANKING & RETAIL (ATM cards, credit cards and debit cards)

- ✓ Smart card used as fuel cards and phone payment cards.
- ✓ Smart cards are used as “electronic wallets” when the chip is loaded with money to pay for small purchases such as groceries, laundry services, cafeteria food and taxi rides.

2) HEALTHCARE

- ✓ In hospitals data rapidly increasing, smart cards assist with maintaining the efficiency of patient care and privacy safeguards.
- ✓ Smart card stores patient’s medical history, instantly access the information and update it if needed and reduce health care fraud.
- ✓ Smart card helps in insurance processing.
- ✓ In addition, smart cards enable compliance with government initiatives, such as organ donation programs.

3) ID VERIFICATION & ACCESS CONTROL

- ✓ Smart cards can be used to verify person’s identity in places like business offices, universities, software companies, Army etc.,
- ✓ For companies with higher security needs, a smart card can be a tamper-proof device to store information, such as a user’s picture or fingerprints.
- ✓ All U.S. government facilities and many corporations have incorporated contactless readers as an access point to their facilities, and some had included a biometric component.

4) MOBILE COMMUNICATIONS

- ✓ Smart cards are used as Subscriber Identity Molecules (SIM) cards in mobile phones.

- ✓ Each SIM card has a unique identifier that manages the rights and privileges of each subscriber and makes easy for identification.

5) COMPUTER & NETWORK SECURITY

- ✓ Microsoft Windows, new versions of Linux and Sun Microsystems have begun using smart cards as a replacement for user names and passwords.
- ✓ Understanding that Public Key Infrastructure (PKI)-enhanced security is needed, a smart card badge is becoming the new standard.
- ✓ Using smart cards, users can be authenticated and authorized to have access to specific information based on preset privileges.

HOW SMART CARD WORKS

A Smart card is connected to the host computer or controller via a card reader which gets information from the smart card and accordingly passes the information to the host computer or controller.



Advantages & Disadvantages of Smart Cards

Advantages: -

2. Flexibility
3. Cost & Availability
4. Security
5. Data Integrity
6. Safety
7. Easy to Use

Disadvantages: -

2. Fees applied with the use of a card
3. It gives liability issues if stolen or lost
4. The accuracy of information is small
5. Lack of technology to support users
6. It is potential for too much data on one card if lost or stolen

4.7 DIFFERENCE BETWEEN CREDIT CARD, DEBIT CARD AND SMART CARD

CREDIT CARD	DEBIT CARD	SMART CARD
A Credit card is basically an electronic card with magnetic data strip or a chip, issued to customers by banks and other credit agencies.	Debit cards are magnetic strip and chip enabled cards, issued to customers by their respective banks	A smart card contains a special embedded microprocessor, which is a computer processor or a microchip
Credit cards are lines of credit when you use a credit card, the issuer puts money toward the transaction. This is a loan you are expected to pay back in full unless you won't to be charged interest.	Any time you use a debit card to buy something, money is deducted from your account with a debit card you can really only spend the money you have available to you.	Smart cards applications benefit consumers where their life and business habits intersect with payment processing technologies
Credit cards in the U.S are not very secure and of themselves many still dated card technology. However consumers are not held liable for this poor security	A PIN makes them secure so long as no one steals the card number and PIN as long as you don't lose the card itself. If the card is stolen, debit cards are very insecure	Smart cards offer more security and confidentiality than any other financial or transaction storage card the market. They are a safe place to store sensitive or personal information
Credit Card not required to be connected to a checking account.	Checking or saving accounts	Smart cards links directly to the Internet
Credit cards are mostly used in online payments, to sell things or the web	Debit cards can be used with a PIN almost everywhere retail stores, gasoline, restaurants and pay phones	Smart cards widely used in telecommunications industry
For the merchant credit	Debit cards are more	The retail industry widely

card transactions result in immediate credit to the merchants bank account	readily accepted by merchants than are checks. Especially in countries where check cashing and check processing are not	uses applications of the smart card more specially to identify and reward customers.
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5. ELECTRONIC PAYMENT SYSTEM: Refer 2nd topic in unit-4

6. INFRASTRUCTURE ISSUES IN EPS (ELECTRONIC PAYMENT SYSTEM)

Electronic payments communication infrastructure includes computer network, Such as the internet and mobile network (mobile data) used for mobile phone.

Infrastructure is necessary for the successful implementation of electronic payments.

- For electronic payments to be successful there is a need to have reliable and cost effective infrastructure that can be accessed to the majority of the population.
- In addition, banking activities and operations need to be automated. A network that links banks and other financial institutions for clearing and payment confirmation is a pre-requisite for electronic payment systems. Mobile network and Internet are readily available in the developed world and users usually do not have problems with communication infrastructure.
- In developing countries, many of the rural areas are unbanked and lack of access to infrastructure that drives electronic payments.
- Some of the debit cards technologies like Automated Teller Machines (ATMs) are still seen by many as unreliable in some areas through fraudulent deductions.
- Telecommunication and electricity are not available throughout the country, which negatively affect the development of e-payments. The development of Information and Communication Technology (ICT) is a major challenge for e-payments development.

6.1 CHALLENGES OF EPS (ELECTRONIC PAYMENT SYSTEM) ARE AS FOLLOWS

- Security
- Infrastructure
- Regulatory
- Legal Issues
- Socio – cultural challenges
- Multi-Currency and Payment Methods
- Card data security
- Fraud and Chargeback

7. ELECTRONIC FUND TRANSFER (EFT)

EFT are electronic transfer of money from one bank account to another, either within a single financial institution or across multiple institutions, via computer based systems, without the direct intervention of bank staff.

EFT is safe, secure, efficient, and less expensive than paper cheques payments & collections. EFT offers several services to consumers as a means of payment.

For example, when we use debit card to make a purchase at a store or online, the transaction is processed using an EFT system. It is just a paper free Banking system. EFT uses computer systems.

7.1 VARIOUS MODES OF EFT IN INDIA

1. **NEFT** – National Electronic Funds Transfer
2. **RTGS** – Real Time Gross Settlement
3. **IMPS** – Immediate Payment Service

1. NEFT – NATIONAL ELECTRONIC FUNDS TRANSFER

- ✚ The national electronic funds transfer is a nationwide money transfer system which allows customers with the facility to electronically transfer funds from their respective bank accounts to any other account of the same bank or other bank network.
- ✚ Before transferring funds via NEFT you have to register the receiver. For this you must possess information such as name of the recipient, recipient's bank name, a valid account number belonging to the receiver and his respective bank's IFSC code.

- ✚ Any sum of money can be transferred using the NEFT system with a maximum capital of Rs. 10, 00, 000.

2. RTGS – REAL TIME GROSS SETTLEMENT

- ✚ It is a real time funds transfer system which facilities to transfer money from one bank to another in real time or on a gross basis. The transaction isn't put us on a waiting list. The transfer of money is cleared out instantly.
- ✚ RTGS payment gateway, maintained by the Reserve Bank of India which makes transactions between different banks electronically.
- ✚ The transferred amount is instantly deducted from the account of one banks and credited to the other bank's account.
- ✚ The minimum value that can be transferred using RTGS is Rs. 2lakhs . However there is no upper cap on the amount that can be transferred.
- ✚ The customer needs to add the receiver and his bank account details prior to transacting money via RTGS.
- ✚ The details required while transferring funds would be the beneficiary's name; his/her account number, receiver's bank address and the IFSC (Indian Financial System Code) of the respective bank.

3. IMPS - IMMEDIATE PAYMENT SERVICE

- ✚ The National Payment Corporation of India (NPCI) introduced a pilot mobile payment project also known as the immediate payment service (IMPS)
- ✚ IMPS offers instant electronic transfer service using mobile phones.
- ✚ The IMPS service also features a secure transfer gateway and an immediate confirmation on fulfilled orders.
- ✚ IMPS are offered on all the cellular devices via mobile banking or through SMS facility.
- ✚ To be able to transfer money via IMPS route you must first register for the immediate payment services with your bank.
- ✚ Thus IMPS enables customers to use mobile instruments as an instant money transfer gateway, facilitating user convenience and saves time and effort involved in other modes of transfer.

7.3 EFT ACT

- The electronic fund transfer act was passed by the U.S. CONGRESS in 1978.

7.4 ADVANTAGES OF EFT

1. Increase efficiency and productivity.
2. Manage cash flow easily
3. Improve safety and control
4. Saves money
5. Less paper works
6. Cheaper
7. Faster
8. Saves time and power
9. Safe & Secure
10. Eliminate the risks associated with lost, stolen or misdirected cheques
11. EFT provides our office with the capacity to,
 - Automate our payments
 - Electronically update our accounts information
 - Streamline our cash flow
 - Reduce administrative cost
 - Eliminate overdue accounts
 - Manage delayed disbursement
 - Get set up and add customers

EFT SAVES OUR TIME AND MONEY

In short we can say that EFT is FAST, SIMPLE, SAFE, and SECURE

7.5 DISADVANTAGES

1. Unreliability of technology-once the bank network is down all transactions cannot be carried out.
2. Loss of human interaction
3. Fraud
4. Hackers may hack your accounts and may steal money.
5. One of the major disadvantages of EFT is RISK OF SECURITY ISSUE.
6. If you entered the target number incorrectly there is no way to reverse the transaction since the bank would process the transaction under the belief that the information you provided is accurate.
7. Once an amount is transferred, there is no chance to reverse a transaction.

7.6 Different names of EFT

✚ In India -EFT

- ✚ In US -Electronic Checks or e-checks
- ✚ In UK -Bank transfer and Bank payment
- ✚ Europe -Giro transfer

7.7 TYPES OF EFT

1. **ATM** (Automated Teller Machine) transfers
2. **Direct deposit:** Payment or withdrawals of money (funds) initiated by the payer through deposit machines.
3. **Direct Debit:** Payments for which a business debits the consumer's bank accounts for payment for goods and services.
4. Transfer initiated by **Telephone**.
5. Transfers resulting from **credit or debit card** transactions, whether or not initiated through a payment terminal.
6. **Wire transfer** via an international banking network such as **SWIFT**
7. **Electronic bill payment** in **online banking**, which may be delivered by EFT.

8. Instant Payment

Common uses of EFT

- Using a credit / debit card (from your account to seller account)
- Online bill payment
- Direct debit (to car, house, companies)
- Direct deposit

7.8 TOOLS OF EFT

- ATM
- Credit & Debit Cards
- Internet
- Mobile Banking

Do one thing at a Time, and while doing it put your whole Soul into it to the exclusion of all else. – Swami Vivekananda

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- Bajaj, Kamlesh K and Nag, Debjani (1st edition 1999) ,e- commerce, The cutting edge of business,TMH Publishing company

UNIT-4

E-BUSINESS APPLICATIONS AND STRATEGIES

1. INTRODUCTION OF E-BUSINESS APPLICATIONS

- **Electronic business** (or) e Business (or) an Internet business, is defined as the application of Information and Communication Technologies (ICT) to business activities.
- **Commerce** refers to the exchange of products and services in a large quantity.
- Electronic commerce is the subset of E-Business, that focuses on the **use** of ICT to enable the external activities and relationships of the business with individuals, groups and other businesses.

1.1 WEB (INTERNET) FOR BUSINESS APPLICATIONS

Web is used for the following

- Attracting new customers through E-marketing & E-advertising
- Improve service efficiency through E-service & E-support functions.
- Enlarge the scope and reach through web by putting products and services on web.
- Used for conducting business through E-commerce

1.2 BENEFITS OF E-BUSINESS

- ✓ Increase Sales
- ✓ Reduce Marketing Cost
- ✓ Low Cost
- ✓ Accessible
- ✓ Communication
- ✓ Case of formation & low investment / work from home
- ✓ Convenience
- ✓ Speed
- ✓ Global reach/Access
- ✓ Paperless Society

1.3 LIMITATIONS OF E-BUSINESS

- ✓ Low personal touch
- ✓ Incompatibility between order taking / giving and order fulfillment speed.
- ✓ Need for technology capability & competence of parties to e-business
- ✓ Increased risk due to Anonymity and non-traceability of parties if COD(Cash On Delivery) by customer not available at particular address

there may be loss to company not able to trace to customer, so to overcome they has to call to customer.

1.4 WHY E-BUSINESS

- ✓ Lack of time at public or consumer
- ✓ Flexibility in timings for payment
- ✓ Easy delivery at door steps
- ✓ Planning for payment
- ✓ Safe transactions

1.5 APPLICATIONS OF E-BUSINESS

1. Internal business systems

- ✓ Customer Relationship Management
- ✓ Enterprise Resource Planning
- ✓ Document Management systems
- ✓ Human Resources Management

2. Enterprise communication and collaboration

- ✓ E-mail
- ✓ Voice mail
- ✓ Web conferencing
- ✓ Business process Management

3. Electronic commerce

- ✓ Internet shop
- ✓ Supply Chain Management
- ✓ Online marketing
- ✓ Offline marketing

- The impact of e-business has already begun to appear in all areas of business ranging from customer service to new product design.

1.6 NEW TYPES OF E-BUSINESS INTERACTION WITH CUSTOMERS

1. E-procurement
2. E-bidding
3. E-communication
4. E-delivery
5. E-trading
6. E-books
7. Online super market
8. news papers

9. E-trading
10. E-advertising
11. E-taxation
12. E-ticking
13. E-banking
14. E-post

1.7 BUSINESS MODELS AND REVENUE MODELS OVER INTERNET

1.7.1 BUSINESS MODELS OVER INTERNET

The internet has given rise to new kinds of business models. They are as follows

1. Social Media Model
2. Affiliate Model
3. Subscription Model
4. Merchant Model
5. Advertising Model

1. SOCIAL MEDIA MODEL:



- ✓ For example, Face book, with over 800 million users, is the most successful social media model. Some other examples are LinkedIn, Twitter, Google plus, and Many more.
- ✓ But how do these companies generate revenue?
- ✓ This social media business model works by offering a **free online service** (in this case the service is social networking) and then selling targeted ads to the users.

- ✓ The users do not pay anything to use the service As face book's homepage, "it's free and it always will be"
- ✓ The reason advertising is effective on social networks is because companies can buy ads on a pay-per-click basis.

2. AFFILIATE MODEL

The affiliate business model is another successful Internet business model in use today.

Here's how it works:

- ✓ A business sets up an "affiliate program" where it offers financial incentives to affiliates (persons) for each visitor or customer brought about by the affiliate's own marketing efforts.
- ✓ Typically the affiliate is given a unique "affiliate link" which is tracked by the business.
- ✓ Every time a sale is made as a result of this process the affiliate receives a percentage of the sale.
- ✓ This Internet business model is well-suited for trusted sites which have large followings.

3. SUBSCRIPTION MODEL

- ✓ In Subscription model , the users have to pay a fee to use that particular service monthly or yearly, like subscription of dish in houses.
- ✓ With over 24 million subscribers, Netflix is one the most successful companies that use the subscription business model.
- ✓ Another way companies profit from a subscription business model is by combining free content with "premium" (i.e., member-only) content.
- ✓ In this premium business model, companies like LinkedIn use this strategy to encourage usership and charge the best users.
- ✓ Most of LinkedIn's 150 million users are basic (free) members.

4. MERCHANT MODEL

- ✓ The merchant business model is one of the most profitable Internet business models. Example: The Amazon
- ✓ The merchant model is a business model that goes back thousands of years.
- ✓ But the Internet has provided a tremendous opportunity for merchants to grow at an almost unbelievable rate.

- ✓ In the merchant model a merchant simply sells the products directly to buyers.
- ✓ It could be clothes, CDs, or cars but the concept is the same.
- ✓ Internet business models that depend on the merchant model may face some challenges like sales tax problems which is burden to the customers.
- ✓ The sales tax is added to services because the government needs the money and merely reduce the growth of strong merchants like Amazon.

5. ADVERTISING MODEL

- ✓ Again we have another old business model that has been applied to the Internet.
- ✓ The advertising business model is an extension of the traditional media broadcast model.
- ✓ Now a days the internet websites like Google, yahoo act as advertising model that has large users.
- ✓ The more people watching the media company (or using their service), the more money they can charge for advertisements.
- ✓ This Internet business model relies on heavy traffic to the website.
- ✓ A company using this model must provide a valuable service that millions of people use on a regular basis (i.e. Google search, Gmail) in order to command high prices from ad space.

1.7.2 REVENUE MODEL OVER INTERNET

- ✚ The model which is used for generating revenues (profits) is called revenue model.
- ✚ This model identifies the revenue source to pursue, what value to offer, how to price the value, and who pays for the value.
- ✚ It is a key component of a company's business model.
- ✚ It primarily identifies what product or service will be created in order to generate revenues and the ways in which the product or service will be sold.
- ✚ By having a clear revenue model, a business can focus on a target audience, fund development plans for a product or service, establish marketing plans, begin a line of credit and raise capital.

CONTENTS

- 1. Production model**
 - a. Manufacturing model**
 - b. Construction model**
- 2. Rental or leasing model**
- 3. Advertising model**
- 4. Sponsored ranking model**
- 5. Commission model**
- 6. E-commerce model**
- 7. Fee-for-service model**
- 8. Licensing model**
 - a. Software licensing model**
 - b. Shareware model**
- 9. Subscription model**

EXPLANATION

1. PRODUCTION MODEL

- ✓ In the production model, the business produces the product or services and sells it to the customers.
- ✓ Example: The Company that produces paper, sells it to either the direct public or to other businesses, who pay for the paper, thus generating revenue for the paper company.

a. MANUFACTURING MODEL

- Manufacturing is the production of merchandise using labour, materials, and equipment, resulting in finished goods.
- Revenue is generated by selling the finished goods.
- They may be sold to other manufacturers for the production of more complex products (such as aircraft, household appliances or automobiles), or sold to wholesalers, who in turn sell them to retailers, who then sell them to end users and consumers.

b. CONSTRUCTION MODEL

- [Construction](#) is the process of constructing a building or infrastructure.

- Construction differs from manufacturing , manufacturing typically involves mass production of similar items without a designated purchaser, while construction typically takes place on location for a known client, but may be done speculatively for sale on the real estate market.

2. RENTAL OR LEASING MODEL

- ✓ Renting is an agreement where a payment is made for the temporary use of a good, service or property owned by another.
- ✓ Leasing model means, making an agreement for fixed charges (for monthly or yearly) irrespective of business profits.
- ✓ Things that can be rented or leased include land, buildings, vehicles, tools, equipment, furniture, etc.

3. ADVERTISING MODEL

- ✓ The advertising model is often used by Media businesses platforms where content is provided to the customer as an advertisement.
- ✓ Examples are newspapers and magazines which generate revenue through the various advertisements encountered in their issues.
- ✓ Internet businesses provide services will also have advertising spaces on their platforms.
- ✓ Examples include [Google](#) .
- ✓ Mobile applications also use advertising model to generate revenues.
- ✓ By incorporating some advertisement space, many popular apps such as Twitter and Instagram have strengthened their mobile revenue potential after previously having no real revenue stream.

4. SPONSORED RANKING MODEL

- ✓ The sponsored ranking model is a variant of the Advertising model.
- ✓ The sponsored ranking model is mainly used by search engine platforms like Google and specialized products- and IT-services- platforms where users are offered free search functionality in return for sponsored results in front of other search results.
- ✓ The sponsor is often paying per click, per view.

5. COMMISSION MODEL (REMUNERATION)

- ✓ The commission model is similar to the markup model, it is used as when a business charges a fee for a transaction that it mediates between two parties.
- ✓ Brokerage companies or auction companies often use it as they provide a service as intermediaries and generate revenue through commissions on the sales of either stock or products.

6. E-COMMERCE MODEL

This revenue model is the implementation of revenue models online.

NOTE: Refer Unit-1 E-Commerce models

7. FEE-FOR-SERVICE MODEL

- ✓ In the fee-for-service model, unlike in the subscription model, the business only charges customers for the amount of service or product they use.

8. LICENSING MODEL

- ✓ In licensing model, the business that owns a particular content retains copyright by selling licenses to third parties.
- ✓ Software publishers sell licenses to use their programs rather than direct selling.
- ✓ Media companies also obtain their revenues in this manner, as do patent holders of particular technologies.

a. SOFTWARE LICENSING MODEL

- Rather than selling software, software publishers generally sell the right to use their software through a limited license time to the purchaser.

b. SHAREWARE MODEL

- In the shareware model, users are encouraged to make and share copies of a software product and distribute among themselves by paying limited amount.
- Payment may be left entirely up to the goodwill of the customer.

9. SUBSCRIPTION MODEL

- ✓ In the subscription model, the business provides a product or service to a customer who in return pays a pre-determined fee at contracted periods of time to the business.

- ✓ The customer will be required to pay the fee until the contract with the business is terminated or expires, even if he is not using the product or service but is still adhering to the contract.
- ✓ Possible examples are flat-rate cellular services, magazines and newspapers.

1.7.3 REVENUE STREAMS:

A revenue stream is an amount of money coming into a business from a particular source. A revenue model describes how a business generates revenue streams from its products & services. Advertising is one of the component of the revenue model however, when the business is advertising its own product, this would result as a cost for the business which is the exact opposite of revenue. On the other hand advertising can lead to an increasing sales, thus revenue over a period of time.

1.7.4 REVENUE MODEL V/S BUSINESS MODEL

- ✚ People often confuse "revenue model" and "business model" as being synonymous, or as being two completely different kind of models.
- ✚ A revenue model is part of a business model.
- ✚ A business model shows the framework for an entire business and allows investors and bankers as well as the entrepreneurs themselves to have a quick way of evaluating that business.
- ✚ Business models can be viewed in many different ways, but they are generally composed of the following six elements:
 1. Acquire high value customers
 2. Offer significant value to customers
 3. Deliver products or services with high margins
 4. Provide for customer satisfaction
 5. Maintain market position
 6. Fund the business
- ✚ The revenue model is a key component of the business model as it is an essential factor for delivering products or services with high margins and funding the business.
- ✚ Less than 50% of the investment required to set up a business will be used in revenue-producing areas.

- ✦ It cannot resultantly be viewed as being identical to the business model as it does not influence all the six elements but more should be viewed as an inner component of it.
- ✦ Having a well-structured business model is necessary for the success of any business adding value to a product or service for customers.
- ✦ This will consequently include having a clear and tailored revenue model which will ensure its financial health.
- ✦ It provides the owners of the business with a necessary understanding of cash flows as well as how it will generate revenue and maximize profitability.
- ✦ In addition to the business model, financial targets have to be forecasted when creating an initial [business plan](#) whereby expected revenues and profits will have to be presented and thus calculated through the use of revenue models applied by the business.

2. EMERGING TRENDS IN E-BUSINESS

E-commerce helped to expand industries and telecommunications by enabling small-scale businesses to flourish and spread internationally. This new form of interaction has brought along many new trends, a few of which are given below:

1. DEALS

- ✦ Online deals and coupons were always a trend.
- ✦ Depending on certain seasons, anniversaries or holidays, businesses offer their customers with irresistible deals and coupon codes.
- ✦ Upon making your purchase, these deals will significantly lower the cost of what you desire.

2. INNOVATIONS

- ✦ From being a site that offers only information about hotels, or just offers bookings, these have been consistently transformed and recreated.
- ✦ Jovago.com offers its customers with not only the best deals on hotels and destinations, but also detailed reviews and pictures about them.

3. ONLINE SALES

- ✦ Massive department sales have been transferred online, with exclusive online sales occurring that encourage online shopping.

- ✚ Brands enjoy sample sales, distributing samples to their valued customers!

4. GLOBAL CONSUMPTION

- ✚ Through e-commerce, purchase of foreign goods has become easily accessible.
- ✚ This has resulted in more vendors featuring their products online that facilitates further consumption and sales.

5. VIRTUAL ADVERTISING

- ✚ Since shopping has become readily available online, so has the advertisement of such goods.
- ✚ Visual and video imagery is very popular, featured on television, Internet and spread further through sponsorships.

2.1 IMPORTANT TRENDS

1. Travel was the first to go online

2. Brands are moving to creating their own online stores –Nokiashop, Puma, Reebok, Samsung, VIP, Fast rack, etc

3. Fashion is No.1 Category – Top 3 categories all belong to fashion with 130 online stores [big & small] selling some fashion products. Apart from this 91 stores deal exclusively in fashion

4. Rise of exclusive online labels – Zovi, Shersingh

5. Lingerie is Big – Over 39 stores sell innerwear & lingerie



2.2 E-COMMERCE IS BOOMING IN INDIA:

The Great India E-commerce Bazar

343	Stores Included in this Study The stores we were able to dig out and were actually selling some stuff
59	Stores classified as Multi-Category Stores selling more than one category like Books, Media, Electronics etc.
195	Stores classified as Single Category Stores selling single category like only Fashion, only Electronics, only Books etc.
89	Stores classified as Niche Stores selling a sub set of category. Ex. Travel Books, Novelty Items etc.
26	Brands that have their own online stores Example: Nokia, Puma, Samsung, Rebook. Bata etc.
23	Online stores of offline retail chains Example: TheMobileStore, CromaRetail, Next, Landmark, Crossword etc.
130	Stores selling Clothes and Apparels This is the most popular product category
91	Stores in Fashion Category Example: Myntra, Zovi, Jabong etc.
36	Stores selling Lingerie (and Innerwear) Why should boys have all the fun shopping online!
6	Stores with 'Kart' in their name Who says everyone follows Flipkart
23	Stores with 'Shop' in their name Yeah, it's all in the name
7	Stores selling Grocery Online Guess these stores need to add the feature of real time bargain
14	Stores selling only Books Seems like selling books is not easy after all

3. E-GOVERNANCE

What is e-governance?

E-governance is the application of Information Technology to the processes of government functioning to bring about...

Smart
Moral
Accountable
Responsive
Transparent Governance.



It is the transformation of government to provide Efficient, Convenient & transparent services to the citizens & business through Information & Communication Technologies (I.C.T.)

- The **vision** of National E-Governance plan is to make all government services accessible to all people, through common service delivery outlets, and ensure efficiency, transparency & reliability of such services at affordable cost to realize the basic purpose of e-governance is to simplify the processes for all i.e. government, citizens, businesses etc. at national, state and local levels.

3.1 BENEFITS OF E-GOVERNANCE

1. Reduced corruption
2. High transparency
3. Increased convenience
4. Growth in G.D.P.
5. Reduction in over all cost
6. Direct Participation of constituents
7. Expanded reach of government

The process is extremely complicated which revises the proper arrangement of hardware, software, networking & indeed re-engineering of all the process to facilitate better delivery of services.

3.2 TYPES OF INTERACTION IN E-GOVERNANCE

1. G2G (Government to Government)
2. G2C (Government to Citizen)
3. G2B (Government to Business)
4. G2E (Government to Employees)

EXPLANATION:

1. G2G (Government to Government):

- ✓ When the exchange of information & Services is with in the periphery of the government, is termed as G2G interaction.
- ✓ This can be both horizontal (i.e. among various government entities) and vertical (i.e., Between national, state & local government entities)

2. G2C (Government to Citizen):

- The interact b/w the government & general public is G2C interaction
- It enables citizens to get access to wide variety of public services.

- The citizens have the freedom to share their views and grievances on government policies anytime, anywhere.

3. G2B (Government to Business):

- The interaction between government and Business.
- It aims at eliminating red- tapism (Behavior, practices, or attitudes)
- Saving time cost & establishes transparency in the business environment, while interacting with government.

4. G2E (Government to Employees):

- The interaction between government and employees.
- ICT (Information & Communication Technology) helps in making the interact b/w Govt., & Employees fast & efficient along with raising their level of satisfaction

E-Governance can only be possible if the government ready for it. It is not a one-day task and so, the government has to make plans and implement then before switching to it.

3.3 SOME OF THE MEASURES INCLUDE

1. Investment in Tele communication infrastructure
2. Budget resources
3. Ensure security
4. Monitor assessment
5. Internet connectivity speed
6. Promote awareness among public regarding the important of e-business.
7. Support from all government department.

4. DIGITAL COMMERCE: (D-COMMERCE)

Digital commerce (**D-commerce**) is a type of **e-commerce** used by an organization that delivers and sells products online. **D-commerce** is used by companies that sell news, subscriptions, documents or any form of electronic content, and the digital commerce company collects payments, handles customer refunds and billing and manages other accounting functions for online publisher clients.

- ❖ **E-commerce** involves commercial transactions done over internet. **Ecommerce** is use of electronic transmission medium that caters for buying and selling of products and services.

- ❖ **E-business** is conduct of business processes on the internet.
- ❖ **E-business** is superset of **Ecommerce**.

4.1 DEFINITION OF DIGITAL COMMERCE

Gartner, a leading technology research firm, defines digital commerce as:

“The buying and selling of goods and services using the Internet, mobile networks and commerce infrastructure.”

- ✚ It includes research and marketing activities, that support these transactions, including the people, processes and technologies to execute at all touch points throughout the customer buying journey.”
- ✚ Digital commerce goes well beyond a simple online transaction.
- ✚ It also includes research, development, marketing, servicing, selling and buying products (the entire customer experience) for all devices and platforms including desktops, [mobile/tablets](#), social networks, etc.

HOW E-COMMERCE IS DIFFERENT FROM D-COMMERCE

- ✚ D-Commerce is a type of e-commerce used by an organization that delivers and saves products online.
- ✚ D-Commerce is used by company that sell news, subscriptions, document or any form of electronic content, D-Commerce company collect payment, handle customer refund & building & manages other accounting functions for online publisher clients.
- ✚ Many times D-Commerce is also known as E-commerce. E-Commerce involves commercial transaction done over internet.
- ✚ E-business is the conduct of business process on the internet.

NOTE: Write about E-commerce Refer from Unit-1

5. MOBILE COMMERCE

INTRODUCTION:

As the number of mobile device users increases rapidly and exceeds that of Personal Computers (PC) users by a large margin, conducting business and services over these mobile devices, also known as mobile commerce. It is becoming very attractive and is expected to drive the future development of electronic commerce. Our world today is so much different from our previous generations. With the invention of the internet, everything is fast and happens online. Long gone are those days when people shop around 3-4 stores with the total distance of a few kilometers deciding which product to buy. These days, all considerations are done online before we made it to the physical store and most of the products are just a few clicks away from us. The terms E-Commerce or

web store have been on the market for a while, but M-Commerce and mobile shopping app etc.,are quite new comers. M-Commerce enables users to access the internet without need to find a place to plug in.

5.1 DEFINITION OF MOBILE COMMERCE:

Mobile Commerce is defined as **“Buying and Selling of goods and services with the use of internet/cellular data via hand held wireless devices such as phones, tablets etc.”**

5.2 HISTORY:

The phrase mobile commerce was originally coined in 1997 by “KEVIN DUFFEY” at the launch of the global mobile commerce forum, which mean “ to delivery of electronic commerce capabilities directly into the consumers hand ,anywhere, via wireless technology.”PDA’S and cellular phones have become so popular that many businesses are beginning to use mobile commerce as a more efficient way to communicate with their customers.

The process of buying & selling of goods & services over internet through handheld wireless devices i.e., mobiles, tablets, is called M-Commerce.

M-Commerce aims to serve all information and material needs of the people in a convenient & essay.

5.3 DIFFERENCES BETWEEN E-COMMERCE AND M-COMMERCE:

	E-COMMERCE	M-COMMERCE
DEFINITION	E-COMMERCE refers to the activities of buying and selling products and services with the use of electronic systems such as the internet.	M-Commerce refers to the process of buying and selling products & services with the use of internet/cellular data via wireless handheld devices.
HISTORY	1970’S	1990’S
DEVICES USED	Computers,laptops	Wireless handheld devices such as cellphone, ipads, and tablets.
CONNECTIVITY	Smaller	Large owing to the bigger number of mobile users.

MOBILITY	LIMITED	Less limited because of lighter weight & smaller size leading to easier to carry.
REACH	Only at the places where the electricity and the internet are available.	Broader due to its portability
USAGE	Difficult because of a more complicated user interface and more functions.	Simple because all function have been simplified.
COST	Less costly as created on the web store plat form and there is a usage of internet.	More costly as mobile app is required and there is a usage of cellular data or internet.

5.4 PRODUCT AND SERVICES AVAILABLE OVER M-COMMERCE

1. Mobile money transfer
2. Mobile ticketing
3. Mobile vouchers, coupons and loyalty cards
4. Content purchase & delivery
5. Location based services
6. Information services
7. Mobile banking
8. Mobile purchase
9. Mobile browsing
10. Auctions
11. Mobile marketing and advertising
12. In – application mobile phone payments.

1. Mobile Money Transfer:

M-PESA, Airtel money, mobile ATM, (in foreign countries) monthly phone bills.

2. Mobile Ticketing:

Tickets can be sent to mobile phones using a variety of technologies.

Example: IRCTC.

3. Mobile Vochers, Coupons and Loyalty Cards:

- ✓ Mobile ticketing technology can also be used for the distribution of vouchers, coupons & loyalty cards.
- ✓ These are virtual tokens that are sent to the mobile phone.
- ✓ The customers represent virtual tokens at POS (POINT OF SALE) receives discounts.

4. Content Purchase and Delivery:

- ✓ Sale of ring tones, wallpapers, games for mobile phones.
- ✓ The convergence of mobile phones, portable audio player, and video players into a single device is increasing the purchase and delivery of full-length music tracks and video.
- ✓ The download speeds available with 4G networks make it possible to buy a movie on a mobile device in a couple of seconds.

5. Location Based Services:

- ✓ Local discount offers
- ✓ Local weather
- ✓ Tracking & monitoring of people

6. Information Services:

News, Stock quotes, Sports scores, financial records, Traffic reporting, Emergency alerts, etc.

7. Mobile Banking:

WWW make transactions, such as purchasing stocks remitting money.

8. Mobile Purchase:

Catalog merchants (customers select the products from printed catalogs in the store and fill out an order)

9. Mobile Browsing:

WWW (World Wide Web) browser on a mobile device customers can shop online without having to be at their Personal Computer(PC).

10. Auctions:

Over the past three years, mobile reverse auction solutions have grown in popularity. One -time purchase, however reverse auctions offer a high return for the mobile vendor as they require the consumer to make multiple transactions over a long period of time.

11. Mobile Marketing and Advertising:

The consumer gets a marketing message or discount coupon and within a few seconds, make a decision to buy and go on to complete the sale.

Example: mom buy baby products online.

No need to search websites.

12. In-Application Mobile Phone Payments:

Payments can be made directly inside of an application running on a popular smart phone operating system such as Google android.

Payment Methods:

Credit & debit cards, contactless payments, micro payments, store-value cards etc.

6. STRATEGIES FOR BUSINESS OVER WEB

6.1 E-BUSINESS STRATEGY: A plan of action designed to achieve a long-term or overall aim.

- Strategy provide Direction
- It acts like a guideline
- It set allocations of Resources

6.2 HOW TO DEVELOP E-BUSINESS STRATEGY:

1. Clearly define the problem/establish a hypothesis
2. Analyze and map your existing processes
3. Identify potential e-business solutions to improve your processes.
4. Calculate costs and benefits of each solution
5. Choose appropriate Solutions and develop an implementation plan.

6.3 RESOURCES FOR IMPLEMENTATION OF E-BUSINESS

- 1) Well designed model
 - 2) Adequate computer Hardware (Computer, network & required no. of connections for employees.
 - 3) Technically qualified & responsive workforce (person who have knowledge of network how to response to problem arises when we are doing e-business)
- If yours is a profit company, your goal is to make money.
 - The ultra-competitive nature of today economy, however is forcing business to refocus money making strategies to the digital sphere in order to attract more customers & continually grow their businesses.
 - The advantages of moving your business to the web is endless.
 - Fortunately, there are several resources there that can help you to start and guide you in the right direction.

6.4 DIFFERENT STRATEGIES FOR BUSINESS OVER WEB

1. **Create and grow an E-Commerce website**
2. **Use content marketing to solve problems for your target market.**
3. **Develop systems for digital marketing**
4. **Create useful videos**
5. **Build a social media presence**

1. CREATE AND GROW AN E-COMMERCE WEBSITE

- Most businesses have a website for marketing purposes; many have yet to make a move to create an e-commerce site that allows them to sell their products online.
- There is a tremendous amount of growth opportunity with e-commerce.
- The opportunity to reach many consumers is possible through e-commerce website.
- Fortunately, with today's technology, starting and growing an e-commerce website is as easy as ever.
- Easy to create websites make the process of developing a website s simple.
- They have guides and resources that allow even novice internet users to easily create a professional looking website that can generate profits for their business.

2. USE CONTENT MARKETING (digital marketing)

- One of the most popular ways for businesses to earn customers online is by utilizing content marketing to solve problems for their target market.
- If you are unfamiliar with content marketing, it can be described simply as a digital marketing strategy that involves creating and sharing online content.
- If you view yourself as an authority in your industry and understand the problems that your target customers face, this can be a huge opportunity to develop your brand & earn customers.
- Content Marketing can be done in different ways.
- Some companies have created blogs while others have focused on creating informational products such as e-books, white papers, how to add tutorial videos and intensive guides.

3. DEVELOP SYSTEMS FOR DIGITAL MARKETING

- From email and content marketing to social media, there are several different types of digital marketing strategies for businesses.
- Developing a system for your digital marketing strategies allows you to continually improve your strategies and creates consistency in handling marketing.
- This is essential to earn trust in customers as they are able to see that you are consistently able to provide them with quality content.

4. CREATE USEFUL VIDEOS

- Creating videos has also become a popular strategy for online marketers.
- According to video Brewery, 90% of online shoppers find that video is helpful in making their purchasing decisions.
- While this is a fairly new concept for many business owners, it is an tremendous opportunity to get ahead of the competition, especially if you are competing locally.
- Videos can be created for several purposes.
- While some businesses will use tutorial and how –to-videos in their content marketing strategy
- Showing your product in use allows customers the chance to picture themselves using that product, therefore increasing their willingness to buy.
- Even if you have no idea how to create online videos, there is an abundance of information online that can help you with the process.
- Online services like flixbpress also make it easy for you to create several different types of video even if you are unsure of how to get started.

5. BUILD A SOCIAL MEDIA PRESENCE

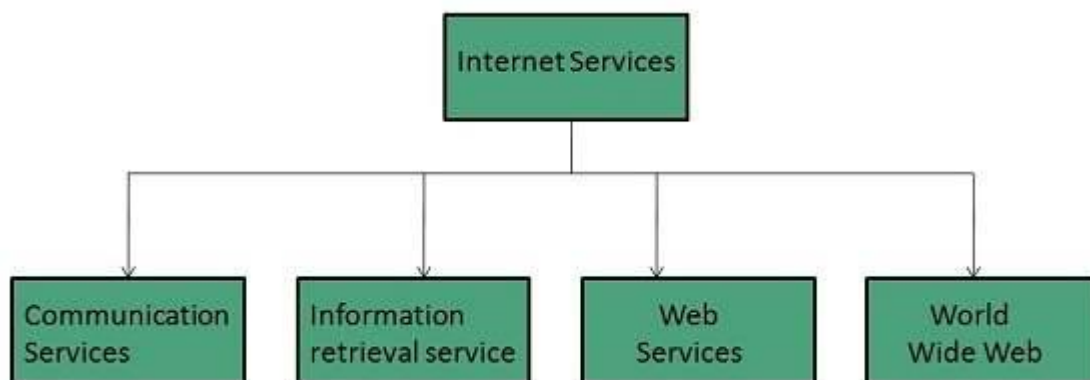
- The impact of a social media presence on earning customers online has been debated since platforms like facebook, whatsapp, Twitter become household names on the web.
- Creating a social media presence can be a difficult task, and it requires consistency & a plan to experience success.
- Entrepreneur provides a lot of good information about choosing the right platform for your business and once again, there is plenty of information online about how to continually increase your social media following.

7. INTERNET BASED BUSINESS MODELS

1. Services
2. Physical Products
3. Information products
4. Affiliate Income
5. Software Products
6. Membership

1. SERVICES:

INTERNET SERVICES allows us to access huge amount of information such as text, graphics, sound and software over the internet. Following diagram shows the four different categories of Internet Services.



1. COMMUNICATION SERVICES

There are various Communication Services available that offer exchange of information with individuals or groups. The following table gives a brief introduction to these services:

S.N.	Service Description
1	Electronic Mail Used to send electronic message over the internet.
2	Telnet Used to log on to a remote computer that is attached to internet.

3	Newsgroup Offers a forum for people to discuss topics of common interests.
4	Internet Relay Chat (IRC) Allows the people from all over the world to communicate in real time.
5	Mailing Lists Used to organize group of internet users to share common information through e-mail.
6	Internet Telephony (VoIP) Allows the internet users to talk across internet to any PC equipped to receive the call.
7	Instant Messaging Offers real time chat between individuals and group of people. Eg. Yahoo messenger, MSN messenger.

2. INFORMATION RETRIEVAL SERVICES

There exist several Information retrieval services offering easy access to information present on the internet. The following table gives a brief introduction to these services:

S.N.	Service Description
1	File Transfer Protocol (FTP) Enable the users to transfer files.
2	Archie It is updated database of public FTP sites and their content. It helps to search a file by its name.

3	<p>Gopher Used to search, retrieve, and display documents on remote sites.</p>
4	<p>Very Easy Rodent Oriented Netwide Index to Computer Achieved (VERONICA) VERONICA is gopher based resource. It allows access to the information resource stored on gopher's servers.</p>

3. WEB SERVICES

Web services allow exchange of information between applications on the web. Using web services, applications can easily interact with each other.

The web services are offered using concept of **Utility Computing**.

4. World Wide Web (WWW)

WWW is also known as W3. It offers a way to access documents spread over the several servers over the internet. These documents may contain texts, graphics, audio, video, hyperlinks. The hyperlinks allow the users to navigate between the documents.

Video Conferencing

Video conferencing or Video teleconferencing is a method of communicating by two-way video and audio transmission with help of telecommunication technologies.

Modes of Video Conferencing

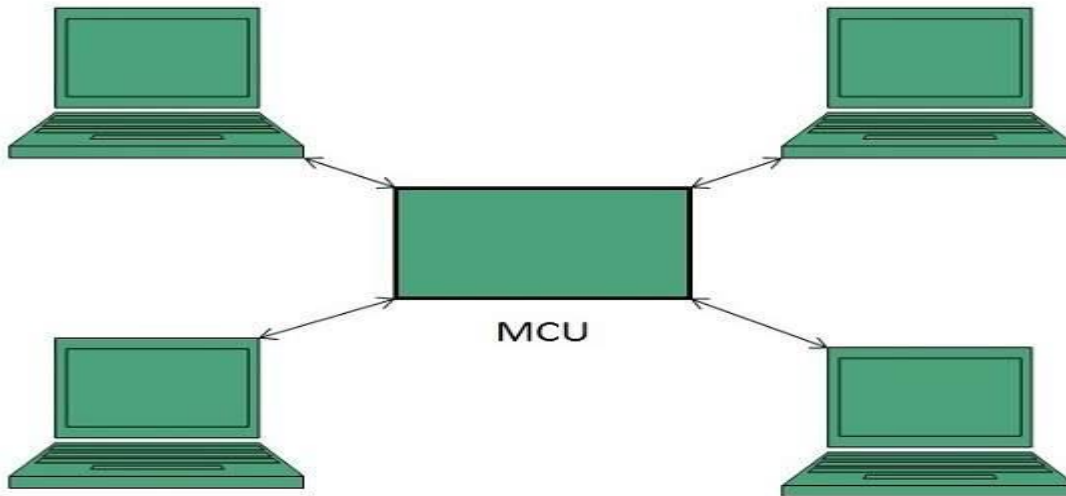
POINT-TO-POINT

This mode of conferencing connects two locations only.



MULTI-POINT

This mode of conferencing connects more than two locations through **Multi-point Control Unit (MCU)**.



- ✓ Services refer to solving the problems of web customer.
- ✓ Fastest way to get started online
- ✓ Represents time for money exchange
- ✓ You don't need a big list to get clients

2. PHYSICAL PRODUCTS:

- ✓ You can tap into a network of buyers through sites like eBay.
- ✓ You can create your own products or have some one else drop-ship them for you.

3. INFORMATION PRODUCTS:

- ✓ Excellent way to leverage your time & help many people by creating your product once.
- ✓ Very low cost to create & deliver high return on time investment.
- ✓ Anyone can turn their expertise, into an information product

4. AFFILIATE INCOME:

- ✓ You get a percentage of a sale for connecting the buyer & the seller.
- ✓ Can be as little as a few cents or as much as thousands of dollars.
- ✓ It helps to build your community, but it can be great way to get started too.

5. SOFTWARE PRODUCTS:

- ✓ Whether you program it yourself or hire some one to develop software, it can be sold many times.

- ✓ Software can be iphone/ipad apps, desktop applications, software as a service.

6. MEMBERSHIP:

- ✓ Recurring payments for access to new materials, software coaching etc.
- ✓ Can also be a yearly membership for access to deals or members only privileges.

Believe in yourself and the world will be at your feet. – Swami Vivekananda



SEMESTER-4

(17E00402) E-BUSINESS

Objective: The course imparts undertaking of the concepts and various application issues of e-business like Internet infrastructure, security over internet, payment systems and various online strategies for e-business.

1. **Introduction to e-business** : Electronic business, Electronic commerce, difference between e-business & e-commerce, electronic commerce models, types of electronic commerce, value chains in electronic commerce, E-commerce in India, internet, web based tools for electronic commerce. Electronic data, Interchange, components of electronic data interchange, electronic data interchange process.
2. **Security threats to e-business**: Security overview, Electronic commerce threats, Encryption, Cryptography, public key and private key Cryptography digital signatures, digital certificates, security protocols over public networks : HTTP, SSL, Firewall as security control, public key infrastructure (PKI) For Security.
3. **Electronic payment system**: Concept of money, electronic payment systems, types of electronic payment systems, smart cards and electronic payment systems, infrastructure issues in EPS, Electronic fund transfer.
4. **E-business applications and strategies**: Business models & revenue models over internet, emerging trends in e-business-governance, digital commerce, mobile commerce, strategies for business over web, internet based business models.
5. **E-business infrastructure and e-marketing**: Hard works system software infrastructure, ISP's, managing e-business applications infrastructure, what is e-marketing, e-marketing planning, tactics, strategies.

Text books:

- Dave Chaffey: e-business & e-commerce management- Pearson.
- e-commerce- e-business: Dr.C.S.Rayudu, Himalaya.

References:

- Whitley, David (2000) ,e-commerce strategy ,Technologies and applications.TMH.
- Schneider Gary P. and Perry, James T(1ST edition 2000) Electronic commerce, Thomson Learning.
- Bajaj, Kamlesh K and Nag, Debjani (1st edition 1999) ,e-commerce, The cutting edge of business, TMH Publishing company

UNIT-5

E-BUSINESS INFRASTRUCTURE AND E-MARKETING

1. HARDWARE AND SOFTWARE SYSTEM INFRASTRUCTURE

Infrastructure refers to the combination of hardware and software applications used to deliver services to workers, partners and customer within the e-business.

1.1 INFRASTRUCTURE FOR E-BUSINESS:

E-business infrastructure: The architecture of hardware, software, content and data used to deliver e-business services to employees, customers and partners.

- ✚ Finally, infrastructure can also be considered to include the methods for publishing data and documents accessed through e-business applications.
- ✚ It is also important that the e-business infrastructure and the process of reviewing new technology investments should be flexible enough to support changes required by the business.

1.2 DIFFERENT COMPONENTS OF E-BUSINESS ARCHITECTURE

Figure-3.1 summarizes the different components of e-business architecture which are related to each other. The different components can be conceived as different layers with defined interfaces between each layer. The different layers can best be understood in relation to a typical task performed by a user of an e-business system. For example, an employee who needs to book a holiday will access a specific human resources application or program that has been created to enable the holiday to be booked (Level I in Figure 3.1).

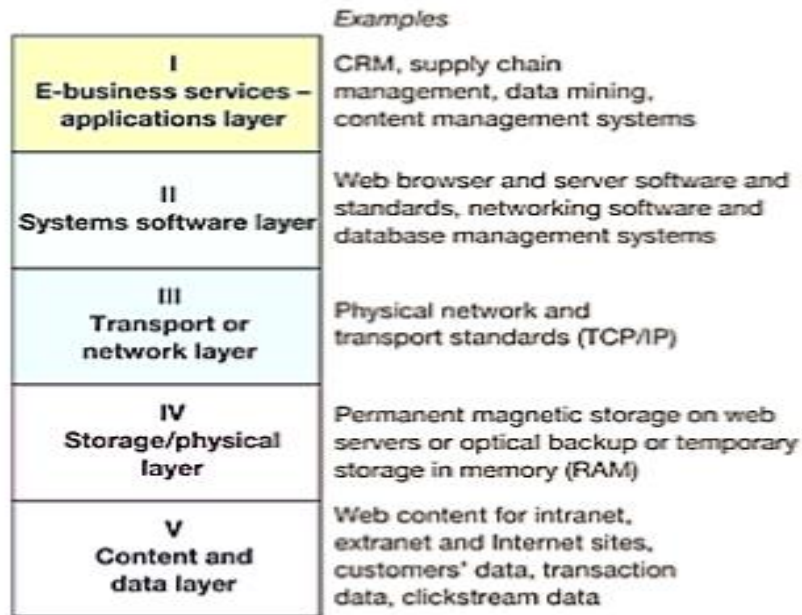


Figure 3.1

A five-layer model of e-business infrastructure

- ✚ This application will enable a holiday request to be entered and will forward the application to their manager and human resources department for approval.
- ✚ To access the application, the employee will use a web browser such as Microsoft Internet Explorer, Mozilla Firefox or Google Chrome using an operating system such as Microsoft Windows XP or Apple OS X (Level II in Figure 3.1).
- ✚ This systems software will then request transfer of the information about the holiday request across a network or transport layer (Level III in Figure 3.1).
- ✚ The information will then be stored in computer memory (RAM) or in long-term magnetic storage on a web server (Level IV in Figure 3.1).
- ✚ The information itself which makes up the web pages or content viewed by the employee and the data about their holiday request are shown as a separate layer (Level V in Figure 3.1), although it could be argued that this is the first or second level in e-business architecture.

1.2.1 ALTERNATE FIVE-LEVEL INFRASTRUCTURE MODEL

Kampas (2000) describes an alternative five-level infrastructure model referred as 'the information system function chain':

1. **Storage/physical:** Memory and disk hardware components (equivalent to Level IV in Figure 3.1).
2. **Processing:** Computation and logic provided by the processor (processing occurs at Levels I and II in Figure 3.1).
3. **Infrastructure:** This refers to the human and external interfaces and also the network, referred to as `extra structure. (This is Level III in Figure 3.1, although the human or external interfaces are not shown there.)
4. **Application/content:** This is the data processed by the application into information. (This is Level V in Figure 3.1.)
5. **Intelligence:** Additional computer-based logic that transforms information to knowledge.

1.3 ELEMENTS OF E-BUSINESS INFRASTRUCTURE

Infrastructure capability has key elements, such as:

1. **Portability:** Can this component be run on a different hardware?
2. **Interoperability:** Does this component work with other hardware and/or software?
3. **Scalability:** Can this component handle increasing work load such as more users or run time?
4. **Maintainability:** How often does this component require service? How often does it break? Once broken, how easy is it to fix ?
5. **Security:** What are the assets we are trying to protect? Who are we trying to protect them from? How can they be compromised? What is the maximum possible loss? How can we mitigate this risk? Etc.

Consequently, infrastructure decisions try to “optimize” capability by balancing the trade-offs associated with these elements.

❖ The infrastructure of business should consists of the following:

- ✓ Have web enabled applications for order entry, inventory, financials etc.
- ✓ Ease of use; operate on different browsers and versions, security settings etc.

- ✓ Scale from the smallest to largest customer.
- ✓ Provide and Integrate workflow with the applications.

This affected the entire infrastructure, from hardware to software. We were in the business of providing competent technology to our clients. We would be wasting precious money, time and energy building a capability in applications development. We could not possibly get all processes automated in a reasonable amount of time; we had to buy off-the shelf applications and components.

1.4 HARDWARE

- We need to balance the capability, price, availability of hardware devices within the cost of operations. We decided to buy and co-locate our hardware at a hosting company.
- This gave us the benefit of getting the hardware of our choice and 24x7 monitoring of devices at a variable cost.

1.5 SOFTWARE

- We had to balance a database (software) that could scale from the smallest to the largest at a reasonable price.
- The other factors which influenced our decision were: Component interoperability, compatibility with Internet Explorer (70% market share), ease of development, availability of talent, future support and growth etc.
- Microsoft Visual Studio toolset met all these needs.

1.6 SUMMARY

A good infrastructure is critical to the success of an e-Business. Infrastructure must be viewed as part of the overall picture, not a standalone component. It must be tightly coupled with all other components such as strategy, processes and organization. However, infrastructure decisions are sometimes taken in isolation.

That results in technology for technology's sake. Business requirements should drive infrastructure selection. A complete and thorough analysis that weighs in key factors such as portability, scalability, existing skills, future direction and cost should result in an effective infrastructure that is the best one for that situation.

2. ISP (Internet Service Provider)/IAP (Internet Access Provider)

An Internet service provider (ISP) is a company that provides Internet access to customers. Data may be transmitted using several technologies, including dial-up, DSL, cable modem, wireless or dedicated high-speed interconnects. Typically, ISPs also provide their customers with the ability to communicate with one another by providing Internet email accounts, telephone and television service. The services and service combinations may be unique to each ISP.

2.1 OVERVIEW

Internet service providers (ISPs), first began in late 1980s and early 1990s. ISPs connect customers to customers of other service providers through networks. Often, internet service providers are companies that provide telecommunication services including data communication access and telephone connection. The majority of telephone companies now function as internet access providers. ISPs may be commercial, non-profit, privately owned or community owned.

2.2 TYPES OF ISPs

- 1. ACCESS ISPs:** Employ a variety of technologies to facilitate internet connection to customers. These technologies may include broadband or dialup. The broadband connection comprises of cable fiber optic service (FiOS), DSL (Digital subscriber line) and satellite. A number of access providers also provide emails.
- 2. MAILBOX ISPs:** Offer email (mailbox) hosting services and email servers to send, receive and store email. Many mailbox ISPs are also access providers.
- 3. HOSTING ISPs:** Offer File Transfer Protocol (FTP), web hosting services, virtual machines clouds and physical servers.
- 4. TRANSIT ISPs:** Provide large amounts of bandwidth needed to connect hosting ISPs.
- 5. VIRTUAL ISPs (VISP):** Purchase services from other ISPs to allow customers to internet access.

6. FREE ISPs (FREE NETS): Provide free service and often display advertisements while users are connected.

EXAMPLES OF ISPs

- MTN
- Airtel
- UTL
- Infocom
- Smile
- Roke telecom Etc

2.3 FACTORS TO CONSIDER WHILE CHOOSING ISP

- Bandwidth (speed)
- Cost (setup and service fee)
- Availability (reach)
- Reliability (down time)
- Convenience (mobility) etc.,

2.4 SERVICES OF ISPs

- Internet access
- Domain name registration
- Domain hosting
- Dial-up access
- Leased line access

2.5 TYPES OF LINK TO ISP

1. WIRELESS

Radio frequency bands are used in place of telephone or cable networks. One of the greatest advantages of wireless internet connections is it can be accessed from any location within networks coverage. Wireless connections are made possible through the use of a **modem** which picks up internet signals and sends them to other devices.

2. MOBILE PHONES

Many cell phone and smart phone providers offer voice plans with internet access. Mobile internet connections provide good speeds and allow you to access the internet.

3. HOTSPOTS

Hotspots are sites that offer internet access over a wireless local area network (WLAN) by way of a router that then connects to an internet service provider. Hotspots utilize WI-FI technology which allows electronic devices to connect to the internet or exchange data wirelessly through radio waves

4. BROADBAND

This high-speed internet connection is provided through either cable or telephone companies. Broadband internet uses multiple data channels to send large quantities of information. The term broadband is shorthand for broad bandwidth. Broadband internet connections such as DSL (digital subscriber line) and cable are considered high-bandwidth connections.

5. SATELLITE

In certain areas where broadband connection is not yet offered, a satellite internet option may be available. Similar to wireless access, satellite connection utilizes a modem.

2.6 EQUIPMENT FOR CONNECTING TO ISP

- Mobile phone
- Modem
- Satellite receiver
- Telephone line (land line)
- Fiber optics link



3. MANAGING E-BUSINESS APPLICATIONS INFRASTRUCTURE

E-BUSINESS INFRASTRUCTURE: The architecture of hardware, software, content and data used to deliver e-business services to employees, customers and partners.

3.1 INTRODUCTION

Defining an adequate e-business infrastructure is important to all companies. E-business infrastructure refers to the combination of hardware such as servers and client PCs in an organization, the network used to link hardware and the software applications used to deliver services to workers within the e-business and also to its partners and customers. Infrastructure also includes the **architecture of the networks, hardware and software** and where it is located. Finally, infrastructure can also be considered to include the **data and documents** accessed through e-business applications.

It is also important that the e-business infrastructure and other new technology investments should be **flexible** enough to support changes required by the business to compete effectively. For example, for the media there are many new technologies being developed which were described from 2005 onwards as web 2.0 and IPTV (television delivered over the broadband internet).

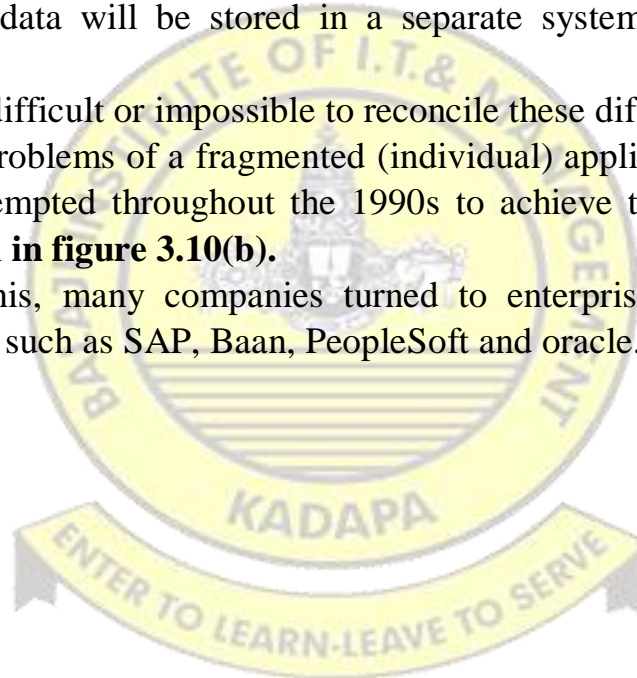
3.2 MANAGING E-BUSINESS APPLICATIONS INFRASTRUCTURE:

Management of e-business applications infrastructure concerns delivering the right applications to all users of e-business services.

- ✚ The issue involved, concern of IS (Information System) manager to deliver access to integrated applications and data that are available across the whole company.
- ✚ Traditionally businesses have developed applications silos (a part of a company that does not communicate with, understand, or work well with other parts) of information as depicted in figure 3.10 a. This shows that these silos may develop at three different levels.
 1. There may be different technology architectures used in different functional areas.
 2. There will also be different applications and separate databases in different areas and

3. Processes or activities followed in the different functional areas may also be different.

- ✚ These application silos are a result of decentralization or poorly controlled investment in information systems with different departmental managers selecting different systems from different vendors.
- ✚ This will effect more cost more to purchase applications from separate vendors, and also it will be more costly to support and upgrade.
- ✚ Problems can also occur at tactical and strategic levels.
- ✚ For example, if a company is trying to analyze the financial contribution of customers, perhaps to calculate lifetime values, some information about customer purchases may be stored in a marketing information system, while the payments data will be stored in a separate system within the finance department.
- ✚ It may prove difficult or impossible to reconcile these different data sets.
- ✚ To avoid the problems of a fragmented (individual) application infrastructure, companies attempted throughout the 1990s to achieve the **more integrated** position shown in **figure 3.10(b)**.
- ✚ To achieve this, many companies turned to enterprise resource planning (ERP) vendors such as SAP, Baan, PeopleSoft and oracle.



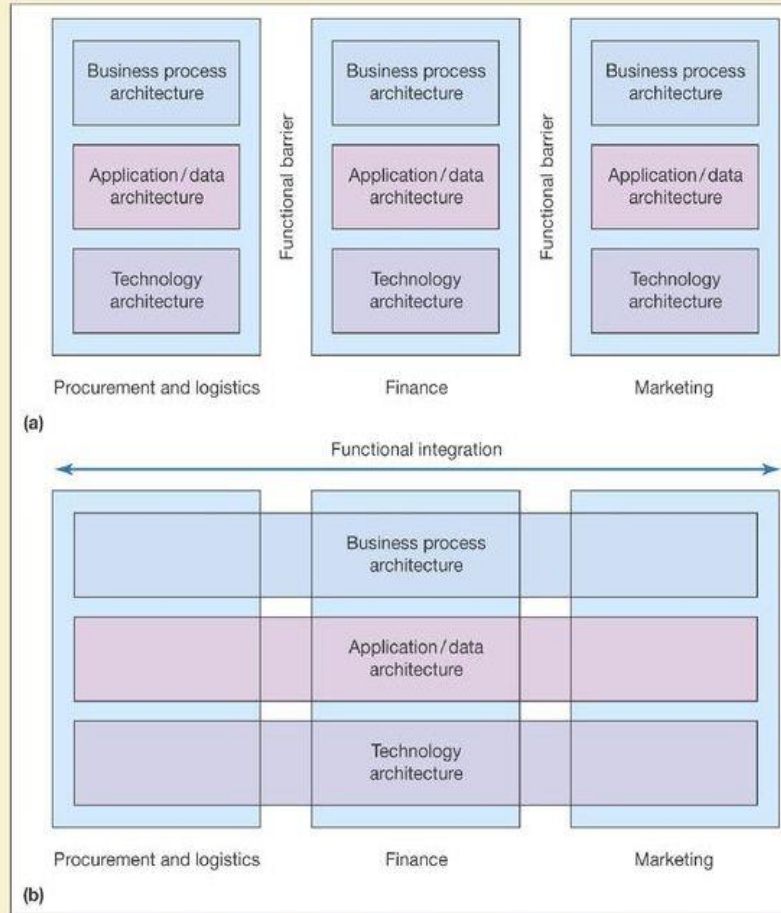


Figure 3.10 (a) Fragmented applications infrastructure, (b) integrated applications infrastructure

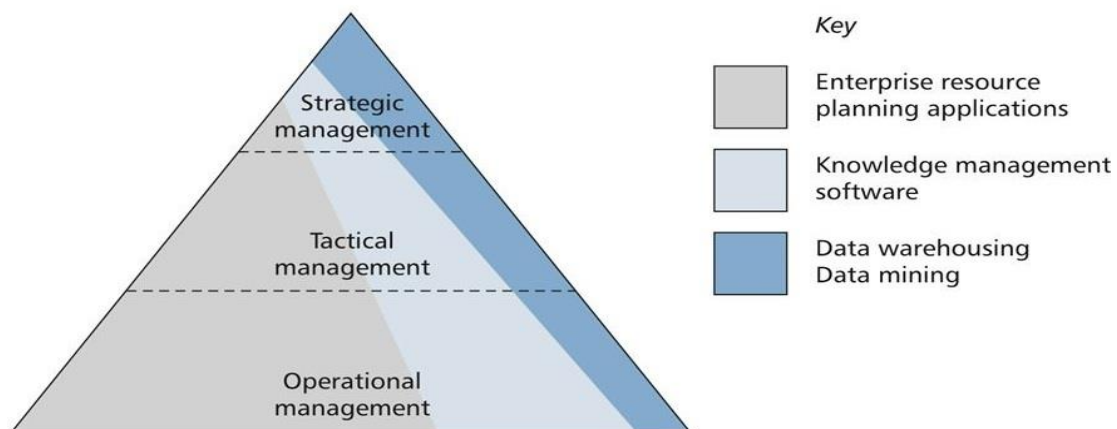
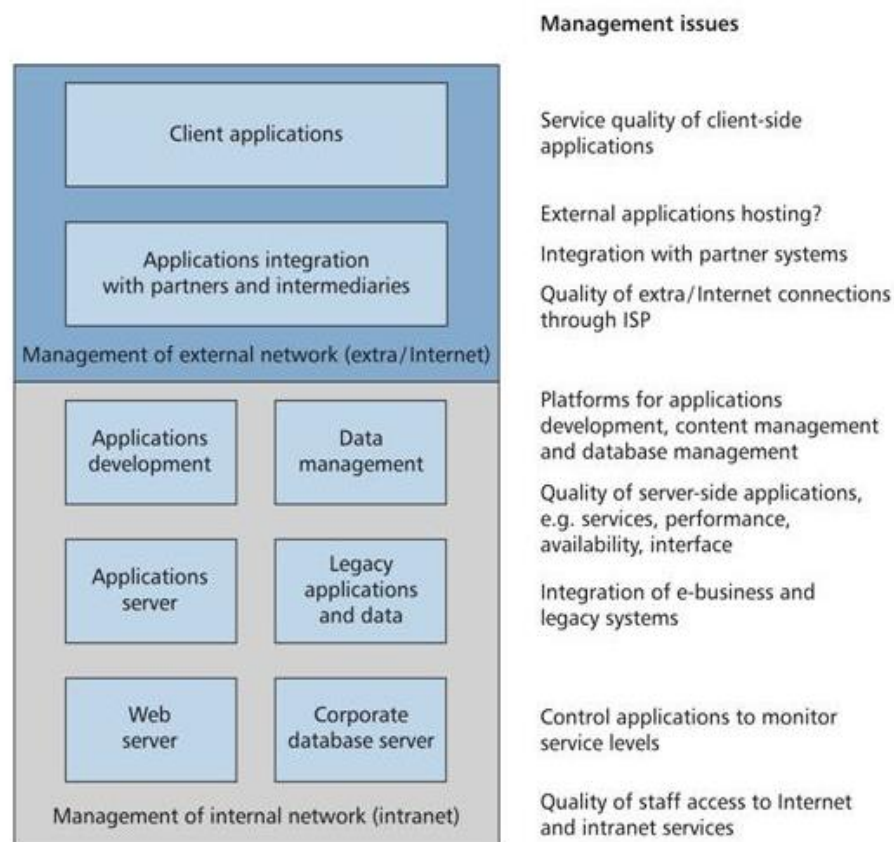


Figure 3.16 Differing use of applications at levels of management within companies

- ✦ The approach of integrating different applications through ERP is entirely consistent with the principal of e-business, since e-business applications must facilitate the integration of the whole supply chain and value chain.
- ✦ It is noteworthy that many of the ERP vendors such as SAP have repositioned themselves as suppliers of e-business solutions.
- ✦ The difficulty for managing e-business infrastructures is that there is not, and probably never can be, a single solution of components from a single supplier.

Elements of e-business infrastructure requiring management



3.17 Elements of e-business infrastructure that require management

- ✦ To gain competitive edge, companies need to turn to solutions from innovators. for example, support new channels such as WAP or provide knowledge management solutions or sales management solutions.

- ✦ If this is not available from their favored current supplier, do they wait until these components become available or do they attempt to integrate new software into the application?
- ✦ Thus managers are faced with a precarious balancing act between standardization or core product and integrating innovative systems where applicable.
- ✦ ERP systems were originally focused on achieving integration at the operational level of an organization. Solutions for other applications such as business intelligence in the form of data warehousing and data mining tended to focus on tactical decision making based on accessing the operational data from within ERP systems.
- ✦ Knowledge management software also tends to cut across different levels of management.

4. What is Electronic-Marketing?

E-marketing (Electronic marketing) also called internet marketing, web marketing, online marketing, Digital marketing.

DEFINITION:

- E-marketing is a process of marketing a product or service using the internet.

What is E-Marketing ?

– Alternative definition:

E-marketing is the result of information technology applied to traditional marketing.

– E-marketing affects traditional marketing in two ways:

- Increases efficiency in traditional marketing functions,
- The technology of e-marketing transforms many marketing strategies.

⇒ **Results:** new business models that add customer value and/or increase company profitability.

05/02/15



- E-marketing not only includes marketing on the internet but also includes marketing done via e-mail & wireless media, social media, websites etc.,
- It includes a range of technologies to help connect business to their customers.



<u>Traditional</u>	<u>Digital</u>
<p>Includes...</p> <ul style="list-style-type: none"> • Print media (newspaper and magazine ads, newsletters, brochures and other printed material) • Broadcast media (such as TV and radio ads) • Direct mail (including fliers, post cards, catalogs) • Telemarketing 	<p>Includes marketing efforts anchored on electronic devices such as--</p> <ul style="list-style-type: none"> • Websites • Social networking sites • Content marketing • Banner ads • Google ads • Video marketing
<ul style="list-style-type: none"> • Proven techniques with high success rate • Long-standing initiatives that the public already understands • Metrics for measuring success 	<ul style="list-style-type: none"> • Cost-efficient methods of marketing • Unprecedented audience reach • Allows direct response from intended audience

4.1 MERITS OF E-MARKETING:

1. Cost effective & faster
2. Global boundary independent
3. Increased customer out reach
4. Brand awareness
5. Increased ROI(Return On Investment)

1. Cost effective & faster:

- E-marketing utilizes the most inexpensive channels of promotional companies such as social media (facebook, instagram, YouTube etc.,) Even though creating website & e-mail marketing, again both of which are absolutely inexpensive as compared to the traditional marketing.
- Also these channels help reach out to the end customer at a much faster rate than traditional marketing.

2. Global boundary independent:

Since the internet is available globally and these days even easily & freely accessible, the scope of e-marketing has also widened along with it. So, E-marketing carried out without any limitations on the geophysical boundary.

3. Increased customer outreach:

With the help of digital medium, it has become very easier to reach out to a wider target audience in a very shorter span of time.

4. Brand awareness:

E-marketing also helps your business to be recognized to worldwide with the help of its easier promotional strategies & creating brand awareness is comparatively much easier than traditional marketing concepts.

5. Increased ROI (Return On Investment)

- E-marketing helps in harnessing best strategies in order to generate the maximum ROI from your business
- It is possible because of its low investments & wider outreach to the target audience.

However big or small the business is, e-marketing can help it grow and make more profits with a rather less investment as compared to the traditional concepts of marketing. Online marketing is basically related with e-commerce websites like Amazon, flip kart etc., We can also include e-advertising in e-marketing.

4.2 WEB PRESENCE GOALS:

1. Attracting visitors to websites
2. Make site interesting enough so, visitor stay and explore
3. Convincing visitors to follow site link
4. Creating an impression with desired image
5. Building a trusting relationship with visitors
6. Reinforcing positive images that the visitor might already have
7. Encouraging visitors to return to site
8. Uniqueness of web features
9. Meeting with needs of web-visitors.

4.3 WHAT IS ONLINE MARKETING?

- Online marketing is the marketing of products or services over the internet & it ties together creative and technical aspects of the internet, including design, development, advertising and sale.
- Online marketing is used by companies selling goods & services directly to consumers as well as those who operate on a business to business model.

4.3.1 TYPES OF ONLINE MARKETING:



1. E-MAIL MARKETING:

- E-mail marketing is promoting products through the use of e-mail.
- There are two main ingredients to an effective email marketing campaign.
- They are to build a large list of people you can email and to write great emails.
- The emails should be packed with free value and they should move people to buy what you are trying to sell.

2. BLOGGING:

A blog is a discussion or informational website published on the World Wide Web consisting of discrete, often informal diary-style text entries.

- Yet another but important and crucial marketing trend that has brought a huge aberration in our society.
- Blogger was launched in 1999 by three friends. Blogging as an passionate marketing tool has really blossomed in the last some years.
- Businesses, companies and even superstar now use blogging systems for huge promotion.

3. PPC (PAY PER CLICK) MARKETING:

- You have to pay for PPC ads.

- You target certain words and then when those words are searched for on a search engine such as Google your ad will appear.
- But you do have to pay every time your ad is clicked on.
- You need to make sure you do your homework and find out how to effectively use PPC.
- Otherwise you can easily lose a lot of money in a short amount of time.

4. SOCIAL MEDIA MARKETING:

- Social media marketing is very popular right now and it's only getting more popular.
- You can tap into that popularity by using social media to sell your products.
- Just make sure you don't SPAM people .In fact, you shouldn't use any social media to directly sell anything.
- Just use social media to direct people to other sites where you can then hit them with a sales pitch.

5. DIGITAL MARKETING:

- With regards to the internet, this is the promoting of brands using all forms of online digital advertising channels to reach consumers.
- This includes video channels, internet, radio, mobile phones, display or banner ads, digital outdoors and any other form of digital media.

6. VIRAL MARKETING: (WORD OF MOUTH)

- Marketing techniques that use social network to produce an increase in brand awareness or achieve other marketing objectives (such as product sales) through self-replicating viral processes.
- It can be word-of-mouth delivered or enhanced by the network effects of the internet. Viral promotions may take the form of video clips, interactive flash games, e-books, images, or even text messages.



AIDA MODEL: (Awareness Interest Desire Action)

- 1. Awareness:** Initial point where your brand and/or business is recognized and acknowledged.
- 2. Interest:** Generating thoughts and discussion about your brand.
- 3. Desire:** Communicate your messages through the use of social media and email marketing.
- 4. Action:** The stage where -the conversion is complete, and back to the “interest” stage to retain them. Your website is responsible for this stage.

5. E-MARKETING PLANNING:

Seven step E-marketing plan:

Outline:

A seven step E- marketing plan

- 1. Situation analysis**
- 2. E-marketing strategic planning**
- 3. Objectives**
- 4. E-marketing strategy**
- 5. Implementation plan**
- 6. Budget**
- 7. Evaluation plan**

STEP-1: SITUATION ANALYSIS:-It involves the analysis of current situations through different techniques.

As marketing environment is ever changing, Environment analysis is very important that reveals

- **STRENGTH**
- **WEAKNESS**
- **OPPORTUNITY**
- **THREATS**

FACEBOOK SWOT

Strengths	Weaknesses
<ol style="list-style-type: none"> 1. Integration with websites and applications 2. More than a billion active monthly users 3. Excellent users experience 4. Understanding of user's needs and behavior 	<ol style="list-style-type: none"> 1. Weak CTR of advertisements 2. Social network lacks of some features 3. One source of revenues – advertisements on Facebook 4. Attitude towards users' privacy 5. Lack of website customization 6. Weak protection of users' information
Opportunities	Threats
<ol style="list-style-type: none"> 1. Increasing number of people using Facebook through mobile devices 2. Expansion to China 3. Diversify sources of revenue 4. Open Facebook marketplace 	<ol style="list-style-type: none"> 1. Increasing number of mobile internet users 2. Users using ad-block extensions 3. Slow growth rate of online advertising 4. Identity thefts 5. Weak business model

STEP-2 E-MARKETING STRATEGIC PLANNING:

Strategic planning: Determining the fit between company's objectives, resources and skills with changing marketing opportunities.

SEGMENTATION & TARGETING:

- For segmentation & Targeting Marketers conduct market opportunity analysis (MOA).
- MOA include :
 1. Demand Analysis: - For Identifying segments
 2. Supply Analysis: - For forecasting segments profitability.
 3. Find competitive advantage and then target the segment.



Exhibit 3 - 1 Formulating E-Marketing Strategy in Two Tiers

FACEBOOK TARGET MARKET:-

1. AGE: - A study done by ping dam showed that 65% of users on face book are 35 or older.

The average age is just over 40 with the largest group aged 45 to 54 only 14% of face book users are under the age of 24.

2. GENDER AND EDUCATION:- 60% of face book users are female and 40% are male. Also, 57% have completed some sort of college education; 24% completed either a bachelors or graduate degree. A new research survey found that 63% of male were activity on face book; 70% of female internet users actively use face book.

3. LOCATION: - Face book has a social presence in 137 countries-and it beats out all other social networks in 127 of those countries. Us has the most presence on face book. Taiwan has a larger % of the population on face book (56%).

DIFFERENTIATION & POSITIONING STRATEGY:-

How it will differentiate its products/ service in a way that provide benefit to both company and customers.

Based on the differentiation strategy company position itself that what will be the desired image for the brand.

e.g. F.B desired image was to retain its position in the market and achieve Competitive advantage over the competitors.



STEP-3 OBJECTIVES

Objective e-marketing are formulated which includes

- Task (what is to be accomplished),
- Measurable quantity (how much),
- Time frame (by when).

Most e-marketing plans aim to accomplish multiple objectives such as:

- Increase market share,
- Increase sales revenue,
- Reduce costs,
- Improve databases,
- Achieve customer relationship management goals,
- Improve supply chain management.

STEP-4 E-MARKETING STRATEGY

Based on the objectives Marketers craft strategies regarding the 4ps:

- Offer (product)
- Value (price)
- Distribution (place)
- Communication (promotion)

STEP -5 IMPLEMENTATION PLAN

How to accomplish the objectives through effective tactics Before check the right marketing organization is in place

e.g. F.B before offering advertisement services checked

- ✓ Staff
- ✓ Department structure
- ✓ Application Service providers and
- ✓ Other outside firms

Right combination will help the marketers to implement & meet the objectives.

STEP-6 BUDGET

Identify the forecasted returns from investment and match with the forecasting cost. Following costs need to be forecast:

- ✓ Technology cost
- ✓ Site design cost
- ✓ Salaries
- ✓ Other site development expenses
- ✓ Miscellaneous

STEP-7 EVALUATION PLAN

Once the plan is implemented it is then evaluated Evaluation techniques:

- ROI
- Web analytical tools

E.g. Face book page

6. TACTICS

(An action or strategy carefully planned to achieve a specific goal)

Marketing tactics to implement strategies and objectives are traditionally based around the **elements of the marketing mix**. One approach is to use customer-driven tactics that affect both the design & services provided by an e-commerce site. A further approach to structure e-marketing tactics is that of Customer Relationship Management (CRM).

- The marketing-mix-the 4p's of **Product, Price, Place and Promotion** originally proposed by Jerome McCarthy (1960) price is used as an essential part of implementing marketing strategy by many practitioners.
- The 4p's have been extended to the 7ps by including three further elements that better reflect service delivery **people, process, and physical evidence**.

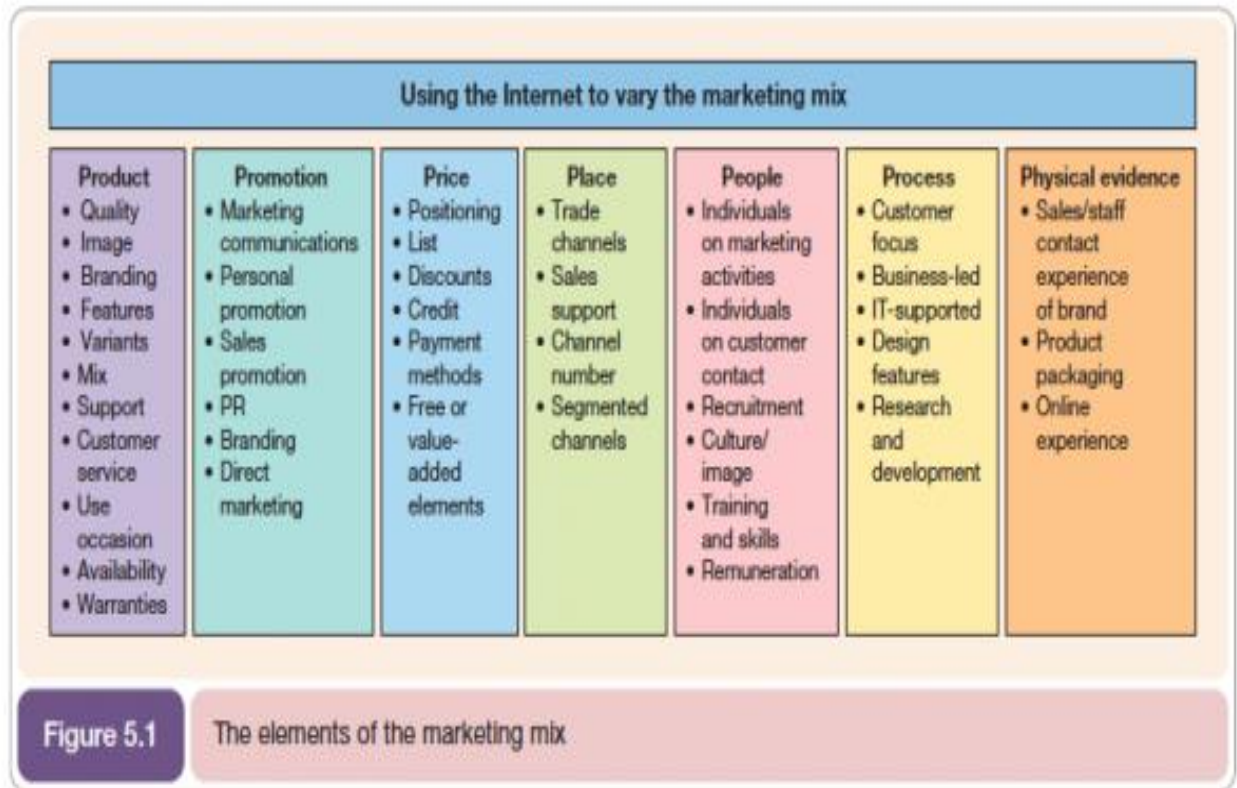
- E-commerce provides new opportunities for the marketer to vary the marketing mix, so it is worthwhile outlining these.
- However, it should be noted that many marketers now consider it as only one tool for developing tactics and other approaches such as branding or CRM perspective can be used to develop tactics, particularly for marketing communications.

MARKETING MIX: - According to NEIL H.BORDEN the marketing mix is the **set of marketing tools** the firm uses **to pursue its marketing objectives** in the target market.

The 7ps of Marketing:-



The 7ps are a set of recognized marketing tactics, which you can use in any combination to satisfy customers in your target market. The 7ps are controllable, but subject to your internal and external marketing environments. Combining these different marketing tactics to meet your customers needs and wants is known as using a tactical marketing mix.



1. Product

Product refers to what you are selling, including all of the features, advantages and benefits that your customers can enjoy from buying your goods or services. When marketing your product, you need to think about the key features and benefits of customers want or need, including (but not limited to) styling, quality, repairs, and accessories. You can use [research and development](#) to inform the development of new products in your business.

2. Price

This refers to your pricing strategy for your products and services and how it will affect your customers. You should identify how much your customers are prepared to pay, how much mark-up you need to cater for overheads, your profit margins and payment methods, and other costs. To attract customers and retain [your competitive advantage](#), you may also wish to consider the possibility of discounts and seasonal pricing.

3. Promotion

These are the promotional activities you use to make your customers aware of your products and services, including advertising, sales tactics, promotions and direct marketing. Generally these are referred to as marketing tactics.

4. Place

Place is where your products and services are seen, made, sold or distributed. Access for customers to your products is key and it is important to ensure that customers can find you.

You can set yourself apart from your competition through the [design of your retail space](#) and by using effective [visual merchandising techniques](#). If you are not a retail business, place is still an important part of your marketing. Your customers may need a quick delivery turnaround, or want to buy locally manufactured products.

If you are starting a new business, [finding the right business location](#) will be a key marketing tactic.

5. People

People refer to the staff and salespeople who work for your business, including yourself.

When you provide excellent [customer service](#), you create a positive experience for your customers, and in doing so [market your brand](#) to them. In turn, existing customers may spread the word about your excellent service and you can win referrals. Give your business a competitive advantage by [recruiting the right people](#), [training your staff](#) to develop their skills, and retaining good staff.

6. Process

Process refers to the processes involved in delivering your products and services to the customer. It is also about being 'easy to do business with'.

Having good process in place ensures that you:

- repeatedly deliver the same standard of service to your customers
- Save time and money by increasing efficiency.

7. Physical evidence

Physical evidence refers to everything your customers see when interacting with your business. This includes:

- The physical environment where you provide the product or service
- The layout or interior design
- Your packaging
- Your branding.

Physical evidence can also refer to your staff and how they dress and act.

Consider how your store's [layout, fixtures and signage](#) can build your brand and increase your sales.

7. MARKETING STRATEGY

STRATEGY: - A Strategy is a plan of action to achieve long term goals or aim of an organization.

1. **Market Scope strategy**
2. **Market Entry Strategy**
3. **Product Strategy**
4. **Promotion Strategy**
5. **Distribution Strategy**
6. **Pricing Strategy**

1. MARKET SCOPE STRATEGY

- a. **Single market strategy:** Concentration of efforts in a single segment
- b. **Multi market strategy:** Serving several distinct markets
- c. **Total market strategy:** Serving the entire spectrum of the market by selling differentiated products to different segments in the market.

2. MARKET ENTRY STRATEGY

This strategy decides how a company enters in a particular market full with consumers.

- a. **First in strategy:** Entering the market before all others
- b. **Early entry strategy:** Entering the market in quick succession after the leader
- c. **Laggard entry strategy:** Entering the market toward the tail end of growth phase or during maturity phase.

3. PRODUCT STRATEGY

Product is main part in any organization.

- a. **Product positioning strategy:** - positioning the product in the mind of a customer stand out of the crowd.
- b. **Product re-positioning strategy:** - After positioning the product, you have to review whether it is working or not & take the corrective steps to newly or re-positioning the product in the mind of the customer.

- c. **Product scope strategy:** - If deals with the marketing mix of the company.
- d. **Product design strategy:** - If deals with the degree of strategy dilation of c product.
- e. **New product strategy:** - In this strategy company brings the new version of its previous products.

4. **PROMOTION STRATEGY :-**

- Promotion strategy tells how you will communicate your marketing message to prospective customers.
- In your marketing plan, provide a complete outline of your promotion strategy, including a detailed description of your target customer, your market area, your marketing message, the creative approach you will use to convey your message & advance your brand image, the media channels you will employ to reach prospective customers and the budget you have allocated to get the job done.

5. **DISTRIBUTION STRATEGY :-**

- This strategy includes the results of your assessment in the company description portion of your business plan.
- In your marketing plan-and briefly in the marketing strategy section of your business plan-described how distribution supports your marketing goals & objectives.

Distributor Strategy Checklist

- a. Will you introduce new distribution or delivery systems-such as home delivery, subscription deliver, free deliver to volume customers, free shipping or guaranteed returns with online purchases, and son –to increase sales, serve customers, or gain advantage over competitors.
- b. Can you sales by adding new distribution channels, such as online sales, distributor relationship, or new retail outlets.
- c. Would your business benefit from business partnerships that allow you to achieve off-premise sales outlets in other retail setting.
- d. Other distribution strategy considerations.

6. PRICING STRATEGY

One of the decisions most crucial to business success. Pricing strategy refers to method companies use to price their products or services. Almost all companies, large or small, base the price of their products and services on production, labor and advertising expenses and then add on a certain percentage so they can make a profit. There are several different pricing strategies, such as penetration pricing, price skimming, discount pricing, product life cycle pricing and even competitive pricing.

A GOOD LEADER TAKES A LITTLE MORE THAN HIS SHARE OF THE BLAME, A LITTLE THAN HIS SHARE OF HIS CREDIT



UNIT-1

1. Bring out the differences between a traditional market and e-markets.
2. What is e-business and e-commerce and explain the difference between e-business and e-commerce?
3. Discuss various e-commerce models.
4. Explain electronic data interchange and electronic data interchange process.

UNIT-2

1. Explain the brief
 - a. HTTP
 - b. SSL
 - c. Fire wall
 - d. PKI
2. Discuss
 - a. encryption
 - b. cryptography (public key and private key with suitable figures)
3. Explain digital signatures and digital certificates.

UNIT-3

1. What is EPS? What are the types of EPS?
2. SMART cards
3. Explain briefly electronic fund transfer (EFT)

UNIT-4

1. Discuss business model and revenue models over internet?
2. What are the emerging trends in e-business?
3. Explain in brief
 - a. e-governance
 - b. digital commerce
 - c. mobile commerce

UNIT-5

1. What are e-marketing, e-marketing planning, tactics and strategies?
2. Explain the concept of e-business infrastructure (hardware and software infrastructure)
3. ISP.

THE BEST PREPARATION FOR TOMORROW IS DOING YOUR BEST TODAY