CS E63 E - BUSINESS

UNIT I

Electronic Commerce Environment and Opportunities: Background – The Electronic Commerce Environment – Electronic Marketplace Technologies – Modes of Electronic Commerce: Overview – Electronic Data Interchange – Migration to Open EDI – Electronic Commerce with WWW/Internet – Commerce Net Advocacy – Web Commerce going forward.

UNIT II

Approaches to Safe Electronic Commerce: Overview – Secure Transport Protocols – Secure Transactions – Secure Electronic Payment Protocol(SEPP) – Secure Electronic Transaction (SET)- Certificates for Authentication – Security on Web Servers and Enterprise Networks – Electronic cash and Electronic payment schemes: Internet Monetary payment and security requirements – payment and purchase order process - Online Electronic cash.

UNIT III

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UNIT IV

MasterCard/Visa Secure Electronic Transaction: Introduction – Business Requirements – Concepts – Payment processing – E-mail and secure e-mail technologies for electronic commerce. Introduction – The Mean of Distribution – A model for message handling – Working of Email - MIME: Multipurpose Internet Mail Extensions – S/MIME: Secure Multipurpose Internet Mail Extensions – MOSS: Message Object Security Services.

UNIT V

Internet and Website Establishment: Introduction – Technologies for web servers – Internet tools relevant to Commerce – Internet Applications for Commerce – Internet charges – Internet Access and Architecture – Searching the Internet- Case study.

TEXT BOOK

1. Daniel Minoli and Emma Minoli, —Web Commerce Technology Handbookl, Tata McGraw-Hill, 2005. **REFERENCES**

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- 2. Bruce C. Brown, —How to Use the Internet to Advertise, Promote and Market Your Business or Website with Little or No Moneyl, Atlantic Publishing Company, 2006.

<u>UNIT I</u>

Electronic Commerce Environment and Opportunities: Background – The Electronic Commerce Environment – Electronic Marketplace Technologies – Modes of Electronic Commerce: Overview – Electronic Data Interchange – Migration to Open EDI – Electronic Commerce with WWW/Internet – Commerce Net Advocacy – Web Commerce going forward.

<u>UNIT-I</u>

2 MARKS

1. What is E-Commerce? (Apr 2012)(Apr 2014)

Electronic commerce is the application of communication and information sharing technologies among trading partners to the pursuit of business objectives.

E-Commerce can be defined as a modern business methodology that addresses the needs of organizations, merchants, and consumers to cut costs while improving the quality of goods and services and increasing the speed of service delivery.

2. What is meant by Information superhighway (I-Way)?

Any successful E-commerce application will require the I-Way infrastructure in the same way that regular commerce needs the interstate highway network to carry goods from point to point.

The I-Way is not a U.S phenomenon but a global one, as reflected by its various labels worldwide. The I-Way is quickly acquiring new on-ramps and even small highway systems.

3. Define Electronic Marketers? (Nov 2012)

Electronic marketers are defined as computers that market their products and services to other businesses or consumers through private online networks, commercial on-line services such as Prodigy and America Online (AOL); the internet, CD-ROMs, telecommunications-enhanced CD-ROMs, interactive television and web TV, and floppy disk media.

4. What are the Consumer oriented e-commerce applications?

The wide range of applications for the consumer marketplace can be broadly classified into

- Entertainment: Movies on demand, Video cataloging, interactive ads, multi-user games, on-line discussions.
- Financial services and information: Home banking, financial services, financial news.
- Essential services: Home shopping, electronic catalogs, telemedicine, remote diagnostics.
- Educational and training: Interactive education, video conferencing, on-line databases.

5. What are the building blocks in the infrastructure of e-commerce applications?

None of the applications would be possible without each of the building blocks in the infrastructure which are given as follows:

- Common business services, for facilitating the buying and selling process
- Messaging and information distribution, as a means of sending and retrieving information
- Multimedia content and network publishing, for creating a product and a means to communicate about it.
- The I-Way is the very foundation for providing the highway system along which all E-commerce must travel.

6. Some of the pillars supporting the e-commerce applications?

There are two pillars supporting all E-commerce applications and infrastructure. They are:

Public policy – To govern such issues as Universal access, privacy and information pricing.

Technical standards – To dictate the nature of information publishing, user interfaces, and transport in the interest of compatibility across the entire network.

7.What are the benefits of e-commerce? (Apr 2013)

Electronic Commerce can offer both short term and long-term benefits to the companies.

Not only can it open new markets, enabling you to reach new customers, but it can also make it easier and faster for you to do business with your existing customer base.

It can also reduce the paperwork involved in business-to-business transactions.

8. Explain about multimedia content for e-commerce applications.

Multimedia content can be considered both fuel and traffic for E-commerce applications. The technical definition of Multimedia is the use of digital data in more than one format, such as the combination of text, audio, video and graphics in a computer file/document.

Its purpose is to combine the interactivity of a user-friendly interface with multiple forms of content. The success of E-commerce applications also depends on the variety and innovativeness of multimedia content and packaging.

9. Explain the client-server architecture in e-commerce.

All E-commerce applications follow the client-server model. Clients are the devices plus software that request information from servers. Servers are the computers which server information upon the request by the clients.

Client devices handle the user interface. The server manages application tasks, handles storage and security and provides scalability (ability to add more clients as needed for serving more customers). The client-server architecture links PC's to a storage (or database) server, where most of the computing is done on the client.

The client-server model allows the client to interact with the server through a request-reply sequence governed by a paradigm known as message passing. Commercial users have only recently begun downsizing their applications to run on client-server networks, a trend that E-commerce is expected to accelerate.

10. What are the types of e-commerce?

The following three strategies are the focal points for E-Commerce

Business-to-business E-commerce

- Business-to-consumer E-commerce
- Intra-company E-commerce

11. Explain about Business-to-business E-commerce.

The Internet can connect all businesses to each other, regardless of their location or position in the supply chain. This ability presents a huge threat to traditional intermediaries like wholesalers and brokers. Internet connections facilitate businesses' ability to bargain directly with a range of suppliers thereby eliminating the need for such intermediaries.

12. Explain about Business-to-consumer E-commerce.

One-way marketing. Corporate web sites are still prominent distribution mechanisms for corporate brochures, the push, and one-way marketing strategy.

Purchasing over the Web: Availability of secure web transactions is enabling companies to allow consumers to purchase products directly over the web. Electronic catalogs and virtual malls are becoming commonplace.

13. Explain about Intra-company E-commerce.

Companies are embracing intranets at a phenomenal growth rate because they achieve the following benefits:

Reducing cost - lowers print-intensive production processes, such as employee handbooks, phone books, and policies and procedures

Enhancing communications - effective communication and training of employees using web browsers builds a sense of belonging and community.

Distributing software - upgrades and new software can be directly distributed over the web to employees.

Sharing intellectual property - provides a platform for sharing expertise and ideas as well as creating and updating content - "Knowledge webs". This is common in organizations that value their intellectual capital as their competitive advantage.

Testing products - allows experimentation for applications that will be provided to customers on the external web.

14. What are the technologies of e-commerce? (Nov 2012)

While many technologies can fit within the definition of "Electronic commerce," the most important are:

- Electronic data interchange (EDI)
- Bar codes
- Electronic mail
- Internet
- World Wide Web
- Product data exchange
- Electronic forms

15. What is meant by Electronic Data Interchange (EDI)? (Apr 2012)(Apr 2014)

EDI is the computer-to-computer exchange of structured business information in a standard electronic format. Information stored on one computer is translated by software programs into standard EDI format for transmission to one or more trading partners. The trading partners' computers, in turn, translate the information using software programs into a form they can understand.

16. Explain Bar Codes.

Bar codes are used for automatic product identification by a computer. They are a rectangular pattern of lines of varying widths and spaces. Specific characters (e.g. numbers 0-9) are assigned unique patterns, thus creating a "font" which computers can recognize based on light reflected from a laser.

17. What is meant by Electronic Mail?

Messages composed by an individual and sent in digital form to other recipients via the Internet.

18. Explain Internet.

The Internet is a decentralized global network of millions of diverse computers and computer networks. These networks can all "talk" to each other because they have agreed to use a common communications protocol called TCP/IP. The Internet is a tool for communications between people and businesses. The network is growing very, very fast and as more and more people are gaining access to the Internet, it is becoming more and more useful.

19. Explain World Wide Web.

The World Wide Web is a collection of documents written and encoded with the Hypertext Markup Language (HTML).

With the aid of a relatively small piece of software (called a "browser"), a user can ask for these documents and display them on the user's local computer, although the document can be on a computer on a totally different network elsewhere in the world.

The World Wide Web is by far the most heavily used application on the Internet.

20. What is Product Data Exchange?

Product data refers to any data that is needed to describe a product. Sometimes that data is in graphical form, as in the case of pictures, drawings and CAD files. In other cases the data may be character based (numbers and letters), as in the case of specifications, bills of material, manufacturing instructions, engineering change notices and test results.

Product data exchange differs from other types of business communications.

21. What is Electronic Forms?

An electronic form is a technology that combines the familiarity of paper forms with the power of storing information in digital form.

To the user an electronic form is simply a digital analogue of such a paper form, an image, which looks like a form but which appears on a computer screen and is filled out via mouse, and keyboard.

22. What are the functions of EDI?

Some of the functions of EDI are,

- Integration of incoming and outgoing structured data into other applications (e.g., use of customer orders to schedule production)
- Lowers cost when transaction volume is high
- Eases communication with many different trading partners (customers, suppliers, vendors)

23. What are the functions of Bar Code?

Some of the functions of Bar Code are,

Locate and identify material

Integrate location and identification information with other applications and data bases (e.g., bar codes inserted at loading dock can be integrated into an advance ship notice EDI transaction).

24. What are the functions of Electronic Mail?

Some of the functions of Electronic Mail are,

- Free-text queries to individuals or groups
- Share information via simple messages
- Share complex information (via attachments)
- Collaboration across distance (by making it easier to communicate and share information)

25. What are the functions of World Wide Web?

Some of the functions of World Wide Web are,

- Present information about company
- Search for information from a large number of sources
- Electronic commerce -- buy/sell products and services
- Collaboration, information sharing among selected users within or without a company

26. What are the functions of Product Data Exchange?

Some of the functions of Product Data Exchange,

- Accurate product details transmitted to trading partners
- Oversight of trading partners design work
- Collaborative engineering across distance

27. What are the functions of Electronic Forms?

Some of the functions of Electronic Forms are,

Managing processes when human oversight, approvals, or information input needs to be combined with standard elements of information (e.g., catalogue data)

- Tracking progress in a process where many people are involved doing different activities
- Integrating human input data with automated data bases or applications
- Electronic commerce (through integration with the WWW and internal systems)

28. Explain about implementation of e-commerce: a life cycle approach?

Proper implementation requires deliberate attention to seven stages of technology life cycle:

Awareness Training

- Business Analysis
- Requirements Analysis
- Design
- > Implementation
- Integration and Validation
- Maintenance

29. Explain about electronic shopping cart?

An electronic shopping cart works the same way a shopping cart does in the physical world. As you browse through an online store, you can place products in your virtual shopping cart, which keeps track of the products you have placed in it.

When you're ready to leave the store, you click a "check out" link that shows you what you've placed in your virtual shopping cart. You can usually remove items that you're no longer interested in purchasing and then enter your shipping and payment information to process your order.

30. What are the systems of payments in e-commerce? (Apr 2013)

E-commerce is rife with buzzwords and catchphrases. Here are some of the current terms people like to throw around:

- Credit card-based
- Smart cards
- Digital or electronic cash
- Electronic checks
- Electronic wallet

31. Explain CGI script.

Common gateway Interface is a scripting system designed to work with HTTP Web Servers. The scripts, usually written in the Perl coding language, are offer used to exchange data between a Web server and databases.

32. What is Joint Electronic Payments Initiative (JEPI)?

This initiative, led by the World Wide Web Consortium and Commerce Net, is an attempt to standardize payment negotiations. On the buyer's side (the client side), JEPI serves as an interface that enables a Web browser, and wallets, to use a variety of payment protocols.

On the merchant's side(the server side), JEPI acts between the network and transport layers to pass off the incoming transactions to the proper transport and payment protocols.

33. What is Microcash?

Small denomination digital tokens.

34. Explain about Smart cards.

A credit card-sized plastic card with a special type of integrated circuit embedded in it. The integrated circuit holds information in electronic form and controls who uses this information and how.

35. Explain Tokens.

Strings of digits representing a certain amount of currency. The issuing bank validates each token with a digital stamp.

36. What is Value added networks?

Networks that are maintained privately and dedicated to EDI between business partners.

37. What are the environments of e-commerce? (Apr 2015)

- The virtual corporation
- The Electronic Marketers
- The catalyst of electronic and web commerce
- Available communication apparatus

11 MARKS

1. Explain in detail about The Electronic Commerce Environment (Apr 2013) (Nov 2014)(Apr 2015)

- 1. The Virtual Corporation
- 2. The Electronic Marketers
- 3. The catalyst of Electronic and web commerce
- 4. Available communication apparatus
- 5. Application of Electronic / Web commerce
- 6. Benefits of Electronic/ Web commerce
- 7. Elements of a successful electronic marketplace
- 8. Security Issues and approaches related to web commerce
- 9. Size of Electronic Marketplace

• The virtual corporation:

Electronic commerce goes hand in hand with changes that are occurring in corporations. The 1990s have

seen the rise of a new form of industrial organization-the networked firm, sometimes known as the Virtual Organization.

Information Technology (IT) has also undergone a significant change in the past quarter of a century. Electronic Commerce is the essence of the virtual corporation; it allows the organization to leverage information and communication resources with all its constituencies, including employees, customers, hankers, government agencies, suppliers, advertisement agencies, and the public.

Successful companies for turn-of -the-century environments

• Organizational structures of the past: Vertical corporations where every function was performed in-house.

- Organizational structures of late 1080s: horizontally integrated enterprises where core competencies were performed in-house and the rest were outsourced.
- Organizational structures of late 1990s: Corporations are moving toward being fully integrated and virtual.
- Aim at making all business functions world-class in order to enhance value (includes leveraging the world-class capabilities of strategic partners).
- Access to all the world's best of breeds, skills, knowledge, and resources.
- Use combination of in sourcing and outsourcing to create best-of-breed, end-to-end solutions.
- Overcome distance and time barriers.
- The future is a network-centric model, where the corporation is the network paradigm is supreme: as more intelligent functions are embedded in the network, the network is becoming the computer, and the corporation is becoming the network.
- Connectivity and bandwidth are becoming cheaper and easy to secure.

Network may be comprised of:

- 1. A traditional enterprise network(the physical foundation of the corporation's intra company communication facilities);
- 2. An intranet(an overlay on the enterprise network which is a way to build uniform application, clients, and servers having the look and feel of internet applications);
- 3. The internet, the inter enterprise network par excellence.
- 4. Other intercompany specialized networks(e.g., the NYCL banking network)- these are sometimes called as Extranets; and
- 5. International extensions.

It would be desirable if this fundamental, company-distinguishing synthesis of communication facilities-what can be called an Omninet- would also carry voice, video, image, and other media in addition to the traditional data objects.

What makes a virtual corporation successful is the scope, reach, compatibility, and transparency of the corporation's networking infrastructure. Networking and networking management are the critical enablers of e-commerce.

• The electronic marketers:

Electronic marketers are defined as computers that market their products and services to other businesses or consumers through private online networks, commercial on-line services such as Prodigy and America Online (AOL); the internet, CD-ROMs, telecommunications-enhanced CD-ROMs, interactive television and web TV, and floppy disk media.

Electronic commerce frees retailers and consumers from many store constraints. It changes the dynamic in terms of cost, reach, options, or speed. The cost of establishing, a transactional web site ranges from \$3 to \$25 million. The reach of the former is global, while the latter is local.

A web site can deliver products quickly (e.g., a software release) or in a few days (e.g., overnight mail); a retail store can supply products within a few hours (including the time to travel to the store and back) or within a few days (if the item has to be ordered).

• The catalyst of electronic and Web commerce:

The internet is an aggregation of networks connecting computer which is seen as one network by the user. It is the case where the whole is greater than the sum of the parts. There has really been no break-throughs in the internet of late. It relies on many protocols that are more than a decade old (some of the protocols are five years old).

What is new is the ability for the ensemble of the customer's browsers, local networks, backbone networks, and Web servers to internetwork harmoniously. This enables information (data, graphics, and video)

to flow freely and easily, at the click of a mouse. The WWW is one of the more well known applications of the internet to appear of late. Some of the key findings of recent surveys are as follows:

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17 percent (37 million) of total persons aged 16 and above in the United States and Canada have access to the internet.

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11 percent (24 million) of total persons aged 16 and above in the United States and Canada have used the internet in the past three months.

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Approximately 8 percent (18 million) of total persons aged 16 and above in the United States and Canada have used the WWW in the past three months.

Internet users average 5 hours and 28 minutes per week on the Internet.

Males represent 66 percent of Internet users and account for 77 percent of Internet usage.

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On average, WWW user are upscale (25 percent have income over \$80,000/year), professional (%0 percent are professional or managerial), and educated (64 percent have at least college degrees).

Approximately 14 percent(2.5 million)of WWW users have purchased products or services over the Internet

More than 80,000 companies were using the Internet for distribution of critical company information, such as press releases.

• Available communication apparatus

Electronic commerce clearly depends on the availability of reliable, inexpensive, and ubiquitous connectivity. There are five relevant elements:

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- 1. Organizations own enterprise networks which house appropriate information, usually beyond the organization's firewall apparatuses.
- The public-switched telephone network. This is generally constituted of Local Exchange Carriers (LECs) and Competitive LEC (CLECs) at the local level and a multitude of Interexchange Carriers (IXCs) at the national backbone level.
- 3. The internet. As describes, this consists of ISPs and NSPs and provides a large enterprise infrastructure.
- On-line networks such as America Online, which utilize their own communication and information (storage) facilities. They can be accessed by dial-up or private lines and now have access to the Internet.
- 5. Specializes industry networks, such as those to support EDI. Internet traffic routing rules are, generally, as follows:
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If a user tries to reach a resource located on the same ISP's network to which the user is connected, the traffic is examined by the ISP router which in turn forwards it to the destination (this applies to both backbone providers and regional's).

If a user tries to reach a resource not located on the same ISP's network to which the user is connected, the traffic is examined by the ISP/NSP router, which in turn finds the nearest point at which it can hand off data to an exchange point (e.g., MAE-East). The traffic is then transferred to the appropriated target network.

Backbone ISPs, that is, NSPs, do not want to incur the cost of carrying traffic destined for another provider's network. So, they hand off the traffic to the nearest exchange point, destination network, or intermediate transit provider.

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Application of electronic/Web commerce

Electronic commerce combines the advantages of computer-based processing (speed, reliability, and relatively high volumes of data) with the advantages of people based insight.

Currently, there are three tires in the electronic market-place, offering opportunities for companies of all sizes:

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Tier 1. Electronic classified advertisements, which identify the item (or service) for sale, the price, and information necessary for contacting the seller. Electronic classifieds are analogous to print classifieds and are retrieved by the potential buyer.

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Tier 2. Includes the characteristics of the first tier, but adds decision-support materials to the information available which help the user reach a purchase decision. Such marketplaces may include such information as product reviews from an industry magazine.

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Tier 3. Includes the features of the first two tiers, but adds the ability to electronically match appropriate buyers and sellers. These electronic marketplaces may provide confirmation of a completed transaction through, such as that used to trade foreign exchange or software-based intelligent agents, are examples of technologies that can automatically match buyers and sellers.

Electronic funds transfer:

Extending and completing the procurement process by providing buyers with the ability to rapidly and cost-

effectively make payments to sellers and shippers with less financial risk and fewer errors, while reducing paper-handling and storage requirements and banking networks.

Enterprise Integration:

Extending integration throughout a company, including other trading partners. Business process reengineering can be employed to improve communication within a company or by outsourcing to other companies and using electronic commerce like tools to manage the relationship. The result is the virtual corporation.

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Computer-supported collaborative work:

Expanding collaborative activities, such as supporting joint development of requirements, maintenance documents, and so forth, within or across companies. The intent is to remove the barriers that inhibit creative interactions among people. Teaming may take place at either the company or individual level, creating a just-in-time virtual resource for delivery of the right human and business resources for a job.

This gives corporations the opportunity to increase changes of success, to share economic successes

More broadly, and to give the customers a mix of capabilities more exactly meeting their requirements.

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Government regulatory data interchanges:

Collecting data from various communities to enable the government to carry out its mandated responsibilities.

BENEFITS OF ELECTRONIC / WEB COMMERCE (2. Explain in detail about Benefits of electronic/web commerce. (Apr 2013))

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Reduced costs to buyers from increased competition in procurement, as more suppliers are able to complete in an electronically open marketplace.

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Reduced costs to suppliers by electronically accessing on-line databases of bid opportunities, by one-line abilities to submit bids, and by one-line review of awards.

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Reduced errors, time, and overhead costs in information processing by elimination requirements for reentering data.

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Reduced inventories, as the demand for goods and services are electronically linked through just-intime-inventory and integrated manufacturing techniques.

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Increased access to real-time inventory information, faster fulfillment of orders, and lower costs due to the elimination of paperwork.

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Reduced time to complete business transaction, specifically reduced time from delivery to payment.

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Reduced overhead costs through uniformity, automation, and integration of management processes while enable flatter, wider, and more efficient processes.

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Better quality of goods as specifications are standardized and competition increases; also, better variety through expanded markets and the ability to produced customized goods.

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Creation of new markets, especially geographically remote markets, as the playing field becomes more even between companies of different sizes and locations.

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Faster time to market as business processes are linked, elimination time delays between steps and the engineering of each sub process within the whole process.

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New business opportunities, Businesses and entrepreneurs are continuously on the look-out for new and innovative ideas as viable commercial ventures; electronic commerce provides such opportunities.

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Optimization of resource selection as businesses build cooperative teams to better tailor capabilities, to work opportunities to increase chances of success more broadly, and to give the customer a mix of capabilities more precisely meeting the customer's requirements.

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Increased access to a client base, Identifying and location new clients and new markets is not a trivial task since it involves analysis, product marketing, and consumer-based testing.

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Improved product analysis as businesses are able to perform product analyses and comparisons and report their findings on the Internet and on-line.

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Improved market analysis. The large and increasing base of Internet users can be targeted for the distribution of surveys for an analysis of the marketability of a new product or service idea. Surveys can reach many people with minimal effort on the part of the surveyors. Once a product is already marketed, businesses can examine the level of customer's satisfaction.

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Wider access to assistance and to advice from experts and peers. Users can utilize the Internet to obtain expert adv ice and get help.

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Rapid information access. Accessing information on-line and over the Internet is faster (on most occasions) than transmissions via fax or transfers via courier services. Businesses can access information from countries around the world and make interactive connections to remote computer systems.

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Rapid interpersonal communications. Contacting other individuals through e-mail provides a new method of business communication. E-mail has both the speed of telephone conversations and the semi=permanence of regular mail. E-mail can be sent form nearly anywhere there is an Internet service or (dial-up) access. Businesspersons or travelers on the go can keep in touch with the office or site.

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Wide-scale information dissemination. One can place documents on servers on the Internet and make them accessible to millions of users. Creating Web documents and Web sites improves the availability of the documents to a client base larger than the circulation of many major newspapers.

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Cost-effective document transfer, transferring on-line documents over the Internet takes a short period of time, particularly if they are text-based (rather than multimedia-based); this can save money on regular

mail or courier services. Most, if not all, Internet access providers do not charge by the raw number of bytes transferred across their links, unlike other commercial information services.

ELEMENTS OF SUCCESSFUL ELECTRONIC MARKETPLACE (**3**.Explain in detail about Element of a successful electronic marketplace (Nov 2012))

The capabilities required for Internet/Web commerce are as follows:

Enable buyers to inquire about products, review product and service information, place orders, authorize payment, and receive both goods and services on-line.

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Enable sellers to advertise products, receive orders, collect payments, deliver goods electronically, and provide ongoing customer support.

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Enable financial organizations to serve as intermediaries that accept payment authorization, make payment to sellers, and notify buyers that transactions are complete.

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Enable sellers to notify logistics organization electronically as to where and when to deliver physical goods/merchandise.

The following qualities characterize, in the view of industry experts, successful marketplaces.

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Utilizes an existing customer base. Magazine and newspaper publishers are example of electronic marketers that have capitalized on the relationships that exist with their customer bases (readers and print advertisers) to build loyalty and add value to their traditional products through electronic products.

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Makes an existing marketplace more effective. Consumers tend to be time deprived, the electronic marketplaces must be convenient, ordering must be fast, and delivery of the purchase must take place within 24 to 48 hours. Budget cuts and emphasis on the bottom line mean that business-to-business electronic marketplace must offer streamlined processes that eliminate paperwork and time-consuming telephone calls and voice messages.

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Brings together communities. The service must bring together buyers and sellers that are physically separated or scattered.

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Is easily accessible, has wide distribution. The electronic marketplace should encompass a number of formats to maximize effectiveness- Internet, interactive TV, online PC service, CD-ROMs, screen phones and kiosks.

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Offers decision-support information. Customers are comfortable with the manual way they currently shop. Electronic marketplaces must supply customers with reasons to use them, including cost-effectiveness, time savings, and faster delivery. Extensive information about products should be available on-line.

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Ability to close the sale. Customers need to be able to buy the advertised product through the electronic medium. In the view of some, if they have to walk to the telephone of fax an order form, the chance to create a successful transactional marketplace could be diminished.

Size of the electronic marketplace: Market groups have estimated that the actual revenue generated from electronic transactions of tangible goods was \$360 million in 1994 and \$540 million in 1996.

Revenue was generated from several potential media-business on-line, consumer on-line, internet, CD-

ROM, kiosks, screen phone, and interactive television.

Business on-line, which includes such services as Data Transmission Network(DTN) services and

Auto info, represented the largest percentage of electronic transactions at press time.

SECURITY ISSUES & APPROACHES RETALED TO WEB COMMERCE(4.Explain in detail about Security issues and approaches related to web commerce (Nov 2012))

Many of the concerns about electronic commerce developments, particularly over open networks (e.g., the Internet), deal with the risks of possible fraud, security infractions, counterfeiting, and with consumer privacy issues.

Issues relate to:

- (1) Secure payments via electronic cash (e-cash);
- (2) Confidentiality (encryption) and authentication of financial transactions; and
- (3) General confidentiality in the transfer of any document.

The good news is that the technology to solve these problems is well developed and well understood. Many financial and technology companies are working to develop encryption software for the Internet.

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Encryption refers to the encoding of data so that it can only be decoded by the intended recipient who knows the key (code). Much of the software is based on RSA Data Security's public-key encryption, which uses a matched pair of encryption keys.

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Each key performs a one-way transformation of data—what on encrypts, only the other can decrypt. Encryption frustrates disclosure of information while in transfer. Strong host security for resident files is most critical when one understands how breaches usually occur.

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Secure payments. E-cash can be thought of as the minting of electronic money or tokens. In electronic cash schemes, buyers and sellers trade electronic value tokens which are issued or backed by some third party, be it an establishes bank or a new (Internet-based) institution.

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The effects of a system failure in an electronic cash scheme are much harder to anticipate; system failure could also occur through many means, not the least of which is insufficient funds (or paper money) to back up the new electronic money.

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Secure transactions. Agreements on standard Internet payment systems were getting closer at press time. During 1996, IBM/MasterCard and Microsoft/Visa respectively, agreed on a single industry standard for conducting credit card transactions over the Internet. The agreement was aimed at removing what had been the major obstacle in the emergence of large-scale electronic commerce applications for the Web.

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Such agreement resolves a long-standing struggle on standardized security technology. The issue has been which technology to use Microsoft's Secure Transaction Technology (STT) or IBM's SEPP; the breakthrough came when the four companies agreed to use SET (Secure Electronic Transfer); based on earlier SEPP work.

SEPP is a protocol originally developed by MasterCard; IBM, Netscape, GTE and Cyber Cash have also signed on to further develop the protocol specification.

The development of electronic commerce is at a critical juncture at this time for the following reasons:

- Consumer demand for secure access to electronic shopping and other service is high.
- Merchants seek simple, cost-effective methods for conducting electronic transactions.
 - Financial institutions look for a level playing field for software suppliers to ensure quality products at competitive prices.
 - Payment card brands must be able to differentiate electronic commerce transactions without significant

impact to the existing infrastructure.

The solutions for achieving secure, cost-effective on-line transactions that will satisfy market demand is

the development of a single, open industry specification.

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Message transfer confidentiality and authentication. Two different protocols have been developed for enhanced Web security: Secure Hyper Text Transfer Protocol (S-HTTP) and the Secure Sockets Layer (SSL).

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Besides confidentiality there are also issues of authentication: not only could a buyer masquerade for another buyer (in order to steal the payment instrument), but a fake Web-site merchant could put up a fraudulent storefront to steal payments (but never skip any goods).

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Companies such as VeriSign provide an authentication function by acting as a certificate authority. They provide two types of certificates: ID Class 1 and ID Class 2.

**

S-HTTP is an extension of HTTP that provides a variety of security enhancements for the Web. Message protection is provided three ways: signature, authentication and encryption.

*

S-HTTP is flexible in that it allows each application to configure the level of security required. A transmission from client-to-server or server-to-client can be signed, encrypted, both or neither.

*

A secure HTTP message consists of a request or status line followed by a series of headers followed by an encapsulated content. Once the content has been decoded. it should either be

another S-HTTP message, and HTTP message ,or simple data.

*

Secure sockets layer(SSL) is a transport layer security technique that can be applied to HTTP as well as to other TCP/IP-based protocols. The SSL protocol is designed to provided privacy between two communicating applications, for example, a client and a server.SSL provides authentication, encryption, and data verification.

*

The SSL protocol is actually composed of two protocols. Layered on top of some reliable transport protocol, is the SSL record protocol. the SSL record protocol is used for encapsulation of all transmitted and received data, including the SSL handshake protocol, which is used to establish security parameters.

The advantage of the SSL protocol is that it is application-protocol-independent. A higher-level

application protocol (for example HTTP, FTP, and Telnet) can run transparently on top of the SSL protocol.

The SSL protocol can negotiate an encryption algorithm and session key, as well as authenticate a server before the application protocol transmits or receives its first byte of data. all of the application protocol data is transmitted encrypted, ensuring Privacy.

S-HTTP is an more flexible than SSL in that an application can configure the level of security it needs.

SIZE OF ELECTRONIC MARKETPLACE

Business online which includes such services as Data transmission Network (DTN) services and Auto Info, represented the largest percentage of electronic transactions at press time. Business on line services are proprietary or closed networks that connect manufacturers, suppliers, wholesalers and retailers.

Consumer online, which includes CompuServe's Electronic mall and other services delivered through proprietary (non Internet) networks.

Internet is just beginning to generate transactional revenue as of press time.

5.Explain in detail about Electronic Marketplace Technologies (Nov 2012)

- 1. Electronic Data Interchange
- 2. On-line Networks and services
- 3. The Internet: Web commerce
- 4. CD-ROM and Hybrids
- 5. Screen Phones
- 6. Kiosks
- 7. Interactive Television and Video Dial tone
- 8. Web TV
- 9. Interactive Banking

• Electronic Data Interchange

*

EDI is the exchange of well-defined business transactions in a computer-process able format.EDI provides a collection of standard message formats to exchange data between organizations computers

via any electronic service.

*

In 1979, the American National standard Institute (ANSI) chartered the aggregated standards committee X12, electronic data interchange to develop uniform national standards for electronic interchange of business transactions.

• On-line Networks and services

**

On-line services provide access to information, entertainment, communications and transaction services. In general, this term refers to networks by companies such as America Online, Compu Serve and Prodigy.

*

The Public switched telephone network (PSTN) is the typical distribution system, cable networks, satellite, wireless networks and the unused, portion of FM Radio and broadcast TV signals may also be used. It also includes other specialized (Commercial) Networks.

• CD-ROM and Hybrids

*

The Multimedia and storage capabilities of CD-ROMs and the growth in the penetration of CD-ROM drives in both business and home PCs are the reasons why business-to-business and consumer marketers sought to use the CD-ROM as a marketing vehicle in the recent past.

*

CD-ROMs can store large amounts (650 MB or More) of data, in text and/or graphical form. In addition, the CD-ROM provides the ability to add sound, photos and full-motion video to a marketing interaction beyond what is offered by the On-line medium over the telecommunication links.

*

Because of their Cost-effectiveness, CD-ROM catalogue, with the products of either one or more multiple marketers, have become popular.

• The INTERNET: Web Commerce

The Internet is quickly becoming a popular commercial domain for business marketers, driven by

the advent of low-cost commercial point – and- click internet software and WWW browsers.

*

The Fastest growing part of the internet at this time is the WWW. The web's ease of access, as well as its multimedia capabilities and downloadable applications (e.g. with Java), enable marketers to create compiling and enticing advertising and marketing environments.

*

The Internet offers an extensive and demographically attractive potential audience, especially for business-to-business marketers.

ϖ Screen phones

Screen phones are similar to regular phones but have advanced features, such as credit card readers, small screens and keypads that can be used for variety of interactive, transactional and informative services.

Typical services include home banking, home shopping and electronic white Pages.

This technology is used more commonly in Europe, where consumers can get up-to-date information on many things from a list of specialty restaurants to train information.

The screen-phone's primary advantage for electronic commerce is that it is based on a device that consumers are familiar with and are comfortable using.

ω KIOSKS

Kiosks are displays used to provide merchandise information in a remote location, such as a retail store or shopping mall.

Kiosks employ a variety of technologies to deliver multimedia marketing information.

Most kiosks allow the consumers to order product directly from the unit by using a magnetic credit card reader, touch screen, or keypad Kiosks' primary advantages are their large storage capacity and multimedia capabilities, including full-motion video, sound, graphics and text. However, kiosks have

not proven to be an Effective medium to support transaction-based interactions. It seems that consumers are not comfortable with the technology or the process of buying merchandise through a kiosk.

ϖ -Interactive television and video dial tone

The television is a ubiquitous electronic home appliance, interactive television, When Available, enables consumers to view advertising about specific products and place orders through the television screen using a remote control and a special set-top box attached to the Cable television line in to the home

There has been interest in bringing this technology to the market in recent years. The key Reason interactive television has generated interest among marketers, technology developers, Cable TV, and telephone companies is that it has a vast potential audience

ω Web TV

A new technology, called Web TV by some and interacting by others, was seeing Deployment at press time. This approach is yet another vehicle for electronic commerce. Web TV illustrates the fusion or convergence of technologies, eliminating previous lines of demarcation.

Inter casting is a technology developed by Intel that intertwines WWW pages with TV Broad casts With it, video producers can backup their real-time broad casts with all the resources of the internet.

For example, a sports fan could call up batting averages to a window on the screen of a base Ball game; news programs could provide background analysis for those who want to go beyond A 2 to 3 minute story; advertisers could offer viewers the opportunity to purchase their products or obtain more information about them.

It can be considered a new medium; however, it is expected to complement rather than supplant existing media. It is being positioned as a medium that combines the digital power of the PC, the global interactivity of the internet, and the rich programming of television.

ϖ Interactive banking

Many banks are offering another form of electronic commerce known as interactive banking. This generally refers to methods that allow their customers to conduct some of their bank business over the phone or with a PC. Using a Touch-Tone telephone, customers can check their account balance, pay bills, order statements and so forth.

PC finance software such as Intuit's Quicken also refers the links to blanks that can accomplish the same tasks. Home banking has been offered for over a decade with mixed results. Besides technology shock for the average user, users have had to contend with banking fees. The near-term future of home banking is unclear at this time.

At the other end of the spectrum, banks without branches are now becoming available on the internet. For example: Atlanta Internet Bank (AIB) offers interest-bearing checking, direct deposit, and Electronic bill payment over the web. The bank uses applications behind the web server to hook into existing legacy systems to support the traditional banking functions.

The bank opened for business in late 1996 and had 200 initial customers. In general, however, most banks have been slow to offer all the elements of virtual banking, in part because few development tools exist.

To facilitate banks move toward web-based transaction processing and integration with personal finance management applications, portable toolkit-based CGI- like application must be developed by software houses to facilitate interworking with current software applications.

6.Explain in detail about Modes of Electronic Commerce. (Nov 2012) What is electronic commerce?

*

Commerce is the interchange of goods or services, especially on a large scale. In the past, trading typically took place face-to-face between parties. Over the centuries and decades, trading has continued to become more sophisticated. At this time, a large percentage of transactions are no larger done face to face, but are conducted over a telephone or via mail, with the exchange of new plastic money.



The major difference between the way in which electronic commerce has been conducted until now and

the way it is now proposed to operate relates to a paradigm shift: moving from Using a closed private network, in which two parties have previously established some type of agreement, to utilizing an open public network such as open public network such as the internet, without any prior knowledge of the buyer.

*

In effect, that is how regular commerce takes place: anyone can walk into any store and buy something without having to be previously known by the store personnel. The internet and the Ancillary e-commerce software allow transactions between parties that do not previously know each other.

Some open issues

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Although there are traditional concerns about credit fraud and bank embezzlement, the potential for high-volume fraud and automated fraud is greater in e-commerce with the introduction of public network computerized transactions.

*

In addition, protecting intellectual property rights becomes a problem when digital duplication is easy and fast, leading to the proliferation of pirated copies. Therefore, methods to ensure that cardholder's payments are safely made, that Merchants information is retained as confidential and that banks maintain a high degree of security over protected funds are issues that must be addressed and solved.

7.Explain in detail about Electronic Data Interchange. (Apr 2013) (Apr 2012)(Apr 2014)

- 1. EDI
- 2. EDI's Benefits
- 3. Status

- 4. System Approach
- 5. Communication Approach

* EDI is defined as the inter organization exchange of document in standardized Electronic form directly between computer applications.

*

Examples of typical business documents include purchase orders, invoices, and Material releases. In basic terms, EDI can be thought of as the replacement of paper- Based purchase orders with electronic equivalents.

**

EDI's goal is to enable easy and inexpensive communication of structured Information throughout the corporate community.EDI can facilitate integration among Dispersed organizations.

**

Another of EDI's goals is to reduce the amount of data capture, and transcription: This results in a decreased incidence of errors, reduced time spent on exception handling, And fewer data-caused delays in the business and process.

*

Benefits can be secured in inventory management, transport and distribution, Administration and cash management.

The key aspect of EDI are as follows

*

The utilization of an electronic transmission medium(normally a VAN) Rather than the transfer of physical storage media such as paper, magnetic Tapes, and disks

*

Use of structured, formatted messages based upon agreed standards(such That message can be translated, interpreted and checked for compliance with an explicit set of rules)

*

*

Relatively fast delivery of electronic documents from sender to receiver (generally implying a receipt within hours or minutes)

Direct communication between applications(rather than just between Systems)

EDI's benefits

*

Businesses can secure many benefits when utilizing EDI. However, investment will be necessary in order to achieve lower costs and planning and control is needed to ensure that the savings actually realized. Monetary savings are obtained by Automating existing business procedures.

**

The major benefit is the elimination of rekeying the data. With EDI, business Document transmit automatically from the sender's business application to the receiver's Application.

*

The receiver need not reenter the information from a paper form; keypunching Errors are avoided and the accuracy of the data increases.

STATUS

*

In recent years, the technologies underlying EDI have matured and the economics Of EDI application have improved to the point that an increasing number of Organizations are seeing opportunities for cost savings, improved service, and Competitive advantage. EDI has been growing in the recent past, although the penetration is still low.

SYSTEM APPROACH

*

There are a number of ways in which computers can be set up to support EDI. A Single dedicated PC can be used as the company's link to the outside world. Alternatively, a group of computers which also support other desktop function can be utilized to dial up to the outside world via individual modems or modem pool.

*

A more elaborate setup uses a server to act as the interface between the outside World and(set of) computers that process the business applications. The link to the EDI network can then be either dial-up or could have a dedicated link into the network's local hub point.

*

The option selected usually depends on the scaled of EDI uses and its importance to the organization's operation. Types of software packages that would make up an EDI terminal on a PC include the following:

- Application software
- Message translator
- Routing manager
- Communication handler
- *

Using a PC with a dial-up modem is an easy way to start using EDI. Software is available that provides all the necessary EDI functions, such as the communications protocol and the EDI message translator. The function of the routing manager may be included in the software so that communication links are established automatically whenever a data exchange is required.

COMMUNICATION APPROACH

*

Although dial-up is an entry-level mode approach to using this technology, sophisticated applications of EDI require a more elaborate communication infrastructure. But even beyond that, the VAN networks used by companied in a conventional EDI Environment are limited in functionality and scope. There are only a small number of companies one can reach and interact with.

*

The Internet has had a high growth rare, averaging more than 12 percent every two months in the recent past; the VAN market has been growing at an annual rate of 12 percent per year.

8.Explain in detail about Migration to Open EDI.

*

It appears that the Internet and the transition to what is called by some Open EDI will change the economics of EDI by reducing setup and rollout costs.

*

To the extent that interoperability of networks increases the usability of EDI by making more potential trading partners available and accelerates the number of companies engaging in electronic commerce, it will directly stimulate the growth of EDI.

- 1. Approach
- 2. Benefits
- 3. Mechanics
- 4. Challenges
- 5. Examples

APPROACH

The development of Open EDI enables several types of rollout strategies. Generally, users can be classified into two groups. The first group is composed of users individuals or companies) who are not currently EDI users.

*

The second group is composed of companies currently using EDI, generally through the services of either private networks or VAN's. This presents three migration paths to users:

- A nonuser becoming a private network/VAN user. This is the most common migration when companies are considering additional use of EDI. Up to this time, this migration path has been the only route open to users.
- A current EDI user who wishes to make a transition to Open EDI.
- A non-EDI user who can make a direct transition to Open EDI. The factor driving migration is as follows:
- The cost of using EDI service
- The demands of customers
- The opening up of market opportunities

* Migration from non-EDI to EDI operation is generally driven by the demands of dominant organizations.

*

For example, subcontractors to major industrial establishments using EDI are at times forced to adopt the technology in order to continue doing business.

BENEFITS

*

There are a number of benefits to supporting EDI on the Internet. The key benefit relates to the cost of transferring EDI messages on the Internet compared to transferring these messages on VAN.

*

Internet access providers charge an average of about \$30.00 per month for a SLIPP/PPP (Serial Line Internet Protocol/Point-to-Point Protocol) account that gives users an access number and unlimited (or at least a large number of) hours of Internet connect time.

*

If a business needs higher throughput because it is sending large volumes of EDI data, then it can secure a dedicated 56-kpbs frame-relay connection to the Internet for about \$450.00 per month.

*

However, the introduction of Web technology to replace low-end EDI translators will greatly speed the introduction of small companies to electronic commerce.

MECHANICS

*

Companies can send EDI transactions across the Internet in two ways. The first way is via the File Transfer Protocol (FTP) and the second is via e-mail. Most Internet EDI implementations use e-mail because it is relatively more secure and requires less administration.

*

FTP requires the user to administer a login ID and password for each trading partner. The trading partners must also agree on directory names and files names before they can exchange EDI data via FTP. The overhead associated with FTP becomes significant when large numbers of trading partners are involved.

*

With Internet e-mail, the sender and receiver do not log in to each other's computers. For some applications,

FTP is a better choice than e-mail because some e-mail systems cannot handle large messages; however,

most EDI business documents are much less than 500 KB.

**

Another issue of using e-mail for EDI data concerns e-mail sent via the Simple Mail Transfer Protocol (SMTP). SMTP software can corrupt EDI data within an e-mail message since it treats the EDI data as printable text.

*

EDI line-termination characters may be corrupted (if the line-termination character is a nonprintable character) and spaces may be added to or deleted from the EDI data.

*

Multipurpose Internet Mail Extension (MIME) can solve this problem because it supports no text data by encoding it as text.

CHALLENGES

*

There are several factors that may be keeping business form making the decision to send their EDI information over the Internet. There is the perception that the Internet is not secure enough for EDI applications.

*

To address this issue, EDI users can utilize encryption and digital signatures to ensure secure EDI transmission across the Internet.

The use of EDI technologies over the Internet with the following goals:

•

Define an architecture that links buyers, sellers, and service providers through the Internet as well as proprietary networks.

Develop a set of electronic commerce services for use in the commercial and government sector.

• Enable the expansion of EDI technologies in ways that make it economical and practical for all type of organizations and individuals to use the EDI-based services.

EXAMPLES:

The cost of emerging EDI with in – house databases & paying for private value added networks, which ensure some level of secure transmission, has kept small businesses from using EDI.

9.Explain in detail about Electronic Commerce with WWW/Internet (Apr 2012)(Apr 2014)(Apr 2015)

*

An evolving electronic commerce opportunity is WWW-based buying and selling through the Internet or through a VAN that provides gateways to the Internet. Web based electronic commerce includes the following:

- Business-to-business
- Business-to-consumer
- Consumer-to-consumer
- Revenue opportunities for Web commerce include:

- Technical and consulting services
- Merchandising products/information
- Transport services
- Directory services
- Content creation
- Subscriptions
- Access services
- Advertising services
- Hosting of web sites
- *

The web has the potential to seamlessly merge marketing and transaction mechanisms, to provide business with increased abilities to influence purchasing and facilities electronic commerce.

*

Many corporations are using the internet for improved communication among employees and between employees and customers, suppliers and distribution channel partners

INTERNET/WEB STATISTICS

*

The first commerce Net/Nielsen internet demographics survey was conducted in august 1995. The following statistics were measured among the person 16 years and older in United States and Canada,

- 16 percent as access to internet
- [•] 10 percent had used the internet in last three months
- About 8 percent as used the World Wide Web (www) in the last 3 months.

* This research was a milestone in the measurement of the Internet and the World Wide Web usage.

*

The following are some key statistics from the recon tact survey conducted in march/April 1996.for person 16 years or older in the United States and Canada

•

24 percent had access to the internet. This is a 50 percent growth in access to the internet from august 1995 to march1996.

17 percent has used the internet in last 6 months. Only 10%percent as used the internet in 3 months prior to august 1995. Of all persons using the internet in the 6 months between august 1995 and march 1996,55 percent had not used in three months prior to august 1995.

13% have used www in the last 6 months. Only 8% had used the www in the 3 months prior to august 1995.

INTERNET AND WWW TOOLS

**

The internet is simply a network; that is a set of interconnected routers. It is a set of local, long-haul, and international links. Organizations that connect their servers to the internet and allow users to access them provide the content. Some companies specialize in content delivery.

*

The key internet application of interest to electronic commerce is electronic mail, news group, FTP archives, telnet, WAIS, gopher, WWW and agents. These tools provide the building blocks for organizations.

*

Electronic mail: the least expensive and still the most predominant of the internet information access mechanisms is e-mail. E-mail services allow companies to make information available to a large universe of recipients.

*

*

Internet e-mail uses a number of internet protocols, including SMTP (RFC 8222), MIME (RFC 1767), and Post Office Protocol (POP).

Newsgroup: newsgroup is discussion forums where articles get posted as topic and replies get posted to

create a thread (a thread is the series of responses to a message in a news group).

*

Articles can be posted to multiple newsgroups. A newsgroup can be established as moderated or readonly. Articles can be posted via e-mail, although many browsers now incorporate into their software abilities to view newsgroup.

**

File transfer protocol: FTP is the way most internet users get files from other internet host (servers). FTP allows a user to log on a remote host (server), but restricts the user to a limited set of commands. Next to e-mail, FTP is the most commonly used internet service

*

Telnet:telnet is a utility that allows users to log in to a remote system just as though they were logging in to a local system. Once logged in .the users have the same access to system as though they logged in form a terminal attached directly to the system. This method requires computer skills.

*

WAIS: while the www is a user friendly interface for the browsing data, it has somewhat limited search capabilities. WAIS allows users to search for specific data they are interested in.

*

Gopher: gopher is one of the information search and retrieval tools that preceded the widespread use of www. Gophers use is now only common integrated with the more sophisticated browser interfaces.

*

Gopher is a simple tool and relatively easily implemented, but is an important capability it can be described as a document delivery tool; in fact, Gopher can deliver documents, list of documents and indexes.

**

Gopher can offer not only textual information, but also organized browsing list of resources on the internet. Gopher transparently links groups of file server, each with their own accumulation of files and folders.

*

WORLD WIDE WEB: The www is the newest and the most user friendly information's service on the internet. WWW as a ability to incorporate FTP, WAIS, Gopher, e-mail and FTP applications through one user interface.

**

Before WWW application was available (they started to appear in the early 1990's) a user could need an

FTP client to connect to an FTP archive, a WAIS client to search a WAIS server, and a Gopher client to get

to a Gopher server.

**

A web server provides access to all of these service to enable, among other things web based commerce. Website is referred to buy their uniform resources Locator (URL) addresses which specify an information object on the Internet such as an HTTP link or an FTP archive.

*

All URLs indicate the type of object, a colon, then the address of the object, and any further information required. WWW documents are expressed in Hyper Text Markup Language (HTML). Web serves transfer HTML documents to each other through the Hyper Text Transfer Protocol (HTTP).

*

Agent. Agents are becoming a useful tool for businesses and customers. An agent is a software program that is designed to automatically perform specific tasks. A customer's agent could search Web stores for the lowest price on a specific product (e.g., a book or a music CD) or check to see if certain URLs have been updated.

*

A business might use an agent to look for competitors on the Internet. Agents are useful tools because they free organizations from laborious activities, like searching the Internet. They have the potential to revolutionize the way that customer and businesses gather information.

Bargain Finder (http://bf.cstar.ac.co/bf/) is an example of an agent that searches compact disc stores on the Internet. The user enters the name of an album and Bargain Finder searches for the best price available. This agent is limited in features, but it can be useful for a customer that wants a product at the lowest price possible.

10.Explain CommerceNet Advocacy.

COMMERCENET ADVOCACY

CommerceNet is the leading industry consortium, dedicated to accelerating the growth of Internet Commerce and creating business opportunities for members.



Overview

CommerceNet sees itself as serving as the prototype for an open twenty-first-century Internet-based organization. CommerceNet and its members are developing elements of the infrastructure model for the future support of Web commerce. This is achieved through development, implementation, and expansion of the technical and institutional protocols required to impart electronic commerce to all worldwide markets. Launched in Silicon Valley in 1994, CommerceNet has grown to over 200 member companies and organizations worldwide. CommerceNet pioneered Web commerce by legitimizing the Internet as a place for business, developing key elements of the infrastructure such as security and payment, and fielding pilot demonstrations. Table 2.8 depicts the organization's activities and goals.

CommerceNet is a not-for-profit market and business development organization, with the mission of accelerating the growth of Internet commerce and creating business opportunities for its members. The organization focuses on precompetitive global and industrywide issues, so that members can benefit from economies of scale and avoid competing on an ineffective basis. The organization approaches issues from a multidisciplinary perspective encompassing technology, business processes, and regulatory policies. CommerceNet operates as a virtual organization, relying heavily on the expertise and resources of its members as well as other industry associations.⁴⁰

Members of CommerceNet include leading U.S. computer companies, VANs, Telcos, on-line services, money center banks, and credit card processors. During 1996, in partnership with Nielsen, Commerce-Net produced the first definitive survey documenting the explosive growth of the Internet marketplace; the recontact follow-up Nielsen/ CommerceNet survey became available August 1996 (this study was quoted earlier). CommerceNet was involved, directly or indirectly, in the formation of many promising Internet startups, including Cyber.

ommerceNet Activities and Goals

Promoting a legal and regulatory environment that fosters global

11.Explain Web commerce Going Forward WEB COMMERCE GOING FORWARD

*

Web commerce on the Internet will no doubt be growing at a rapid pace over the next few years. Businesses that pursue Web commerce at this formative time place themselves in a position to benefit in the near future: at the same time, there are some risks.

*

Transaction security is one open issue. Businesses will need to use encryption and digital signature techniques to ensure that proprietary customer information is protected.

**

Open EDI provides a loss-expensive alternative to electronic commerce than traditional EDI systems based on proprietary protocols and closed user groups.

PONDICHERRY UNIVERSITY QUESTIONS 2 MARKS

- 1. Define Electronic Marketers (Nov 2012) (Ref.Qn.No.3)
- 2. What are the technologies of e-commerce? (Nov 2012) (Ref.Qn.No.14)
- 3. Define the term E-Commerce.(Apr 2012)(Apr 2014)(Nov 2014) (Ref.Qn.No.1)
- 4. What is an EDI? (Apr 2012)(Apr 2014) (Apr 2015)(Ref.Qn.No.15)
- 5. Name any four e-payment provider (Apr 2013) (Ref.Qn.No.30)
- 6. What are the features of e-commerce? (Apr 2013) (Ref.Qn.No.7)
- 7. What are the environments of e-commerce? (Apr 2015) (Ref.Qn.No.38, Ref Pg.no.10)

11 MARKS

- 1. Briefly explain the Electronic Marketplace Technologies. (Nov 2012) (Ref.Qn.No.5)
- 2. Explain some open issues related to E-Commerce. (Nov 2012) (Ref.Qn.No.4 & 6)
- 3. Discuss the various activities and goals of Commerce Net. (Nov 2012) (Ref.Qn.No.3)
- 4. Discuss the applications of web and Electronic commerce. (Apr 2012) (Ref.Qn.No.9)
- 5. Explain the basics of EDI. (Apr 2012)(Nov 2014) (Ref.Qn.No.7)
- 6. Discuss in detail about EDI. (Apr 2013)(Apr 2014) (Ref.Qn.No.7)

- 7. Explore the basic concepts of e-commerce in detail. (Apr 2013) (Ref.Qn.No.1)
- Explain in detail about Electronic Commerce with WWW/Internet (Apr 2012)(Apr 2014)(Apr 2015) (Ref.Qn.No.9)

9.Explain the E-Commerce Environment.(Apr 2013)(Nov 2014)(Apr 2015) (Ref.Qn.No.1)