

UNIT – III

E-COMMERCE SOFTWARE continued....

Topics Covered :

3. Advanced functions of Ecommerce

3.1 Middle ware

3.2 Enterprise Application Integration and Data base

3.3 Web Services

3.4 Integration with ERP System

3.5 Ecommerce software for small and midsize companies

3.5.1 Basic Commerce Service providers

3.5.2 Mall Style commerce Service Providers

3.5.3 Estimated Operating Expenses for a small Web Business

3. Advance Functions of e-commerce software (required for large companies)

3.1 Middle ware

- Large companies usually establish the connection between their ecommerce software and their existing accounting system by using a software called middleware.
- Some companies have their own middleware if they have IT staff otherwise they purchase customized middleware for their business from vendor or consulting firm.
- Major middle vendors include Broad Vision, Digital River and IBM Trivoli Systems.

3.2 Enterprise Application Integration and Databases

- A program that performs a specific functions, such as creating invoices, calculating payroll or processing payments received from customers is called an application program or application software.
- Application server is a computer that takes the request message received by the webserver and runs the application programs that perform some kind of action based on the contents of the requested message.

The action it performs are determined by the rules used in the business called business logic.

Application servers are grouped into two types:

3.2.1 Page based:

- application system return pages generated by scripts that include the rules for presenting data on the webpage with the business logic.
- They work well for small and midsize web.
- Common page based server systems include Java Server Pages(JSP) , Ms Active Server Pages(ASP), Hyper Text Processor(PHP)

3.2.2 Common based application system:

- Separates the presentation logic from the business logic
- Each component of logic is created in its own module
- The most common component–base system in use today are Enterprise Java Beans(EJB), Microsoft Component Object Model(COM), Common Object Request Broker Architecture. (CORBA)
- A **database manager** is a software that stores information in a highly structured way.
- Large information system that store the same data in many different locations are called **distributed information systems** and the database within those systems are called **distributed database system**.

3.3 Web Services

Web services are defined as combination of software tools that let application software in one organisation communicate with other applications over a network by using a specific set of standard protocols known as SOAP, UDDI and WSDL.

Another definition is – Web service is a self-contained modular unit of application logic that provides some business functionality to other applications through Internet connection.

3.3.1 What webservices can do

- offers improved customer service and reduced costs
- provides data feeds between two companies
- companies use web service tool to automate its communications with mortgage application service companies
- they pull information , such as general economic forecasts, financial analysis of specific companies, industry forecasts and financial markets results in continually updated online reports that customers can obtain

3.3.2 How Web Services can work?

We explain with an example of a company that uses purchasing software to help manage the activities

- The software use web service to obtain price information from a variety of vendors
- After purchasing agent reviews the price and delivery information and authorizes the purchases, the software can submit the order and track it until the shipment is received
- On other side of the transaction, the vendor's software can use web services to check the buyer's credit and contract with a freight company to handle the shipment

Three protocols that make Web services work:

3.3.3 SOAP, WSDL and UDDI Specifications:

SOAP – Simple Object Access Protocol is a message-passing protocol that defines how to send marked up data from one software application to another across a network

WSDL –The characteristics of the logic units that make up specific Web Services are described using the Web Services Description Language(WSDL). It allows programs to configure themselves to connect to multiple Web Services

UDDI – The set of protocols that identify locations of Web Services and their associated WSDL description is called the Universal Description, Discovery and Integration (UDDI) specification.

3.4 Integration with ERP Systems

ERP Enterprise Resource Planning software packages are business systems that integrate all facets of a business, including accounting, logistics, manufacturing, marketing, planning, project management and treasury functions.

The major ERP vendors are Baan, Oracle, PeopleSoft and SAP.

The following **figure 1.1** shows a typical architecture for a B2B Web site that connects to several existing information systems, including the ERP system within the company and its trading partner's system through EDI connections.

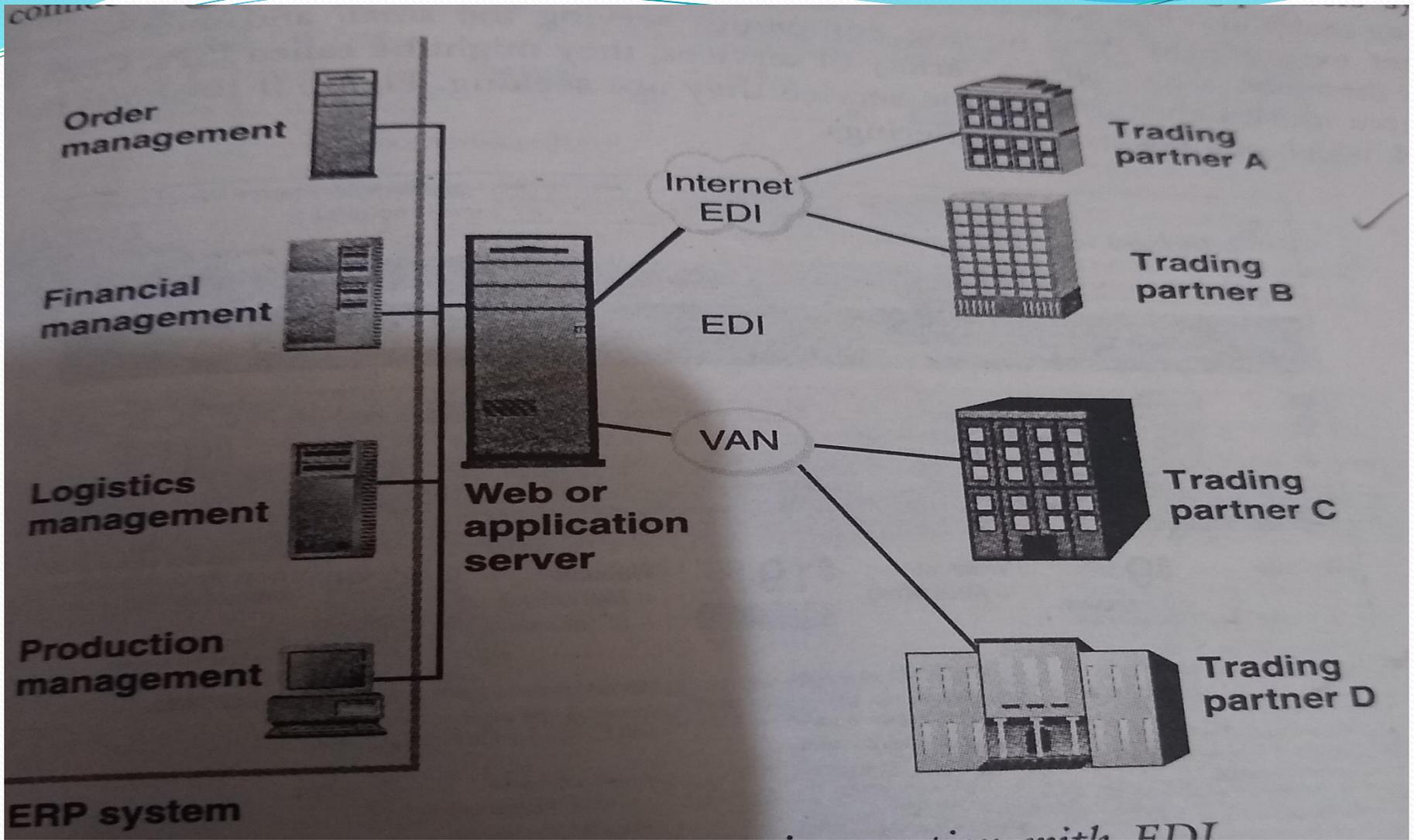


Fig 1.1 ERP System Integration with EDI

3.5 E-Commerce software for small and midsize companies

In most cases these companies create web site that stands alone in its business activities and does not need to be coordinated completely with the business's other activities.

3.5.1 Basic Commerce Service Providers

- CSPs offer free or low-cost electronic commerce software for building e-commerce sites that are then kept on the CSPs servers.
- These services are designed for small online business selling only a few items and having relatively low transaction volumes.
- Value web operating since 1996 is an example of CSP, ProHosting.com and Interland are other examples of web hosting companies.

3.5.2 Mall-Style Commerce Service Providers

- Mall-style CSPs provide small businesses with an Internet Connection, Web Site creation tools
- Web hosts in this group charge a monthly fee or charge one-time setup fees
- These web hosts also provide high-quality tools, storefront templates, an easy-to-use interface, and quick web page-generation capabilities and page maintenance
- They provide shopping cart software or the ability to use another vendor's shopping cart software.

- They furnish customer payment processing so that customers can choose to purchase their goods and services with a credit card or other form of payment
- They process the acceptance and authorization of credit cards on behalf of the merchant
- They provide higher-quality web store building and maintenance tools than basic CSPs
- One CSP that offers mall-style commerce services is eBay Stores

3.5.3 Estimated Operating Expenses for a Small Web Business

- This gives estimate of the expenses that a small business owner might incur to put a store on the web
- Depending on which hosting service and ecommerce software options are chosen, the actual costs could be somewhat lower or considerably higher
- Set up and Web site maintenance costs include equipment, communications, physical locations and staff
- A server must be housed in a room that is both secure and convenient to communications access, The cost to secure a room, properly air-conditioned it, and install a chemical fire extinguishing system are additional expenses



-----**THE END**-----

With this we complete all the topics of Ecommerce Subject

Thank You