

E-Commerce Applications Development

Week 2

Traditional commerce vs Electronic commerce

- Some business processes use traditional commerce activities very effectively and technology can not improve them.

For example: customers might be reluctant to buy items that have an important element of condition such as high fashion clothing, one can not feel the fabric online and there are many colour variations that are hard to distinguish on computers.

Similarly in case of purchasing expensive jewellery, which requires close inspection.

Traditional commerce vs Electronic commerce

➤ Role of Merchandising:

Retail merchants have years of traditional commerce experience in creating store environments that help convince customers to buy. This combination of store design, layout and product display knowledge is called **merchandising**.

Many salespeople have developed skills that allow them to identify customer needs and find products or services that meet those needs.

Traditional commerce vs Electronic commerce

The skills of merchandising and personal selling can be difficult to practice remotely.

However, companies must be able to transfer their merchandising skills to the Web for their websites to be successful.

Some products are easier to sell on internet than others because the merchandising skills related to those products are easier to transfer to the web.

Traditional commerce vs Electronic commerce

➤ Product suitability for traditional or electronic commerce:

Some products such as books or DVDs are good candidates for electronic commerce because customers do not need to experience the physical characteristics of the particular item before they buy it.

Customers are usually willing to order a title without examining the specific copy they will receive.

➤ Selling of Commodity items:

One business process that is especially well suited to electronic commerce is the selling of commodity items. A **commodity item** is a product or service that is hard to distinguish from the same products or services provided by other sellers; its features have become standardized and well known.

Traditional commerce vs Electronic commerce

The only difference a buyer perceives when shopping for commodity item is its **price**. Gasoline, office supplies, soap, and computers are all examples of commodity products or services, as are the books, e-books and DVDs sold by Amazon.com.

Not all commodity items are good candidates for electronic commerce. They must have an attractive shipping profile to be sold online. A product's **shipping profile** is the collection of attributes that affect how easily that product can be packaged and delivered.

Products that are consistent in size, shape, and weight can make warehousing and shipping much simpler and less costly.

Traditional commerce vs Electronic commerce

Commodity items that have an attractive shipping profile include books, clothing, shoes, kitchen accessories, and many other small household items.

A product that has a strong brand reputation (such as a Sony television) is easier to sell on the Web than an unbranded item, because the brand's reputation reduces the buyer's concerns about quality when buying that item sight unseen.

Expensive jewelry has a high value-to-weight ratio, but many people are reluctant to buy it without examining it in person. Other items that are well suited to electronic commerce are those that appeal to small, but geographically dispersed, groups of customers. Collectible comic books are an example of this kind of product.

Traditional commerce vs Electronic commerce

Traditional commerce, rather than electronic commerce, can be a better way to sell items that rely on personal selling skills. For example, sales of commercial real estate involve large amounts of money and a high degree of interpersonal trust. Even if commercial real estate is listed online, it will usually require personal contact to negotiate the deal.

➤ Combination of traditional and electronic commerce:

This strategy works best when the business process includes both commodity and personal inspection elements. For example, most people find information on the Web about new and used automobiles and do considerable research on specific makes and models before they visit a dealership to buy.

Traditional commerce vs Electronic commerce

**Well Suited to
Electronic Commerce**

**Suited to a Combination of
Electronic and Traditional
Commerce Strategies**

**Well Suited to
Traditional Commerce**

Sale/purchase of books
and CDs

Sale/purchase of
automobiles

Sale/purchase of impulse
items for immediate use

Sale/purchase of goods
that have strong brand
reputations

Banking and financial
services

Sale/purchase of used,
unbranded goods

Online delivery of software and
digital content, such as music
and movies

Roommate-matching
services

Sale/purchase of travel
services

Sale/purchase of
residential real estate

Online shipment tracking

Sale/purchase of high-
value jewelry and antiques

Sale/purchase of
investment and insurance
products

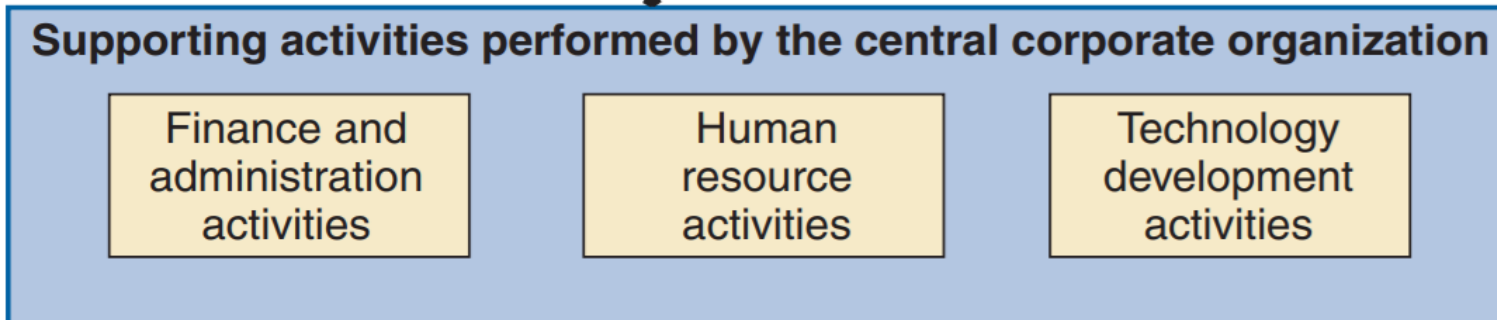
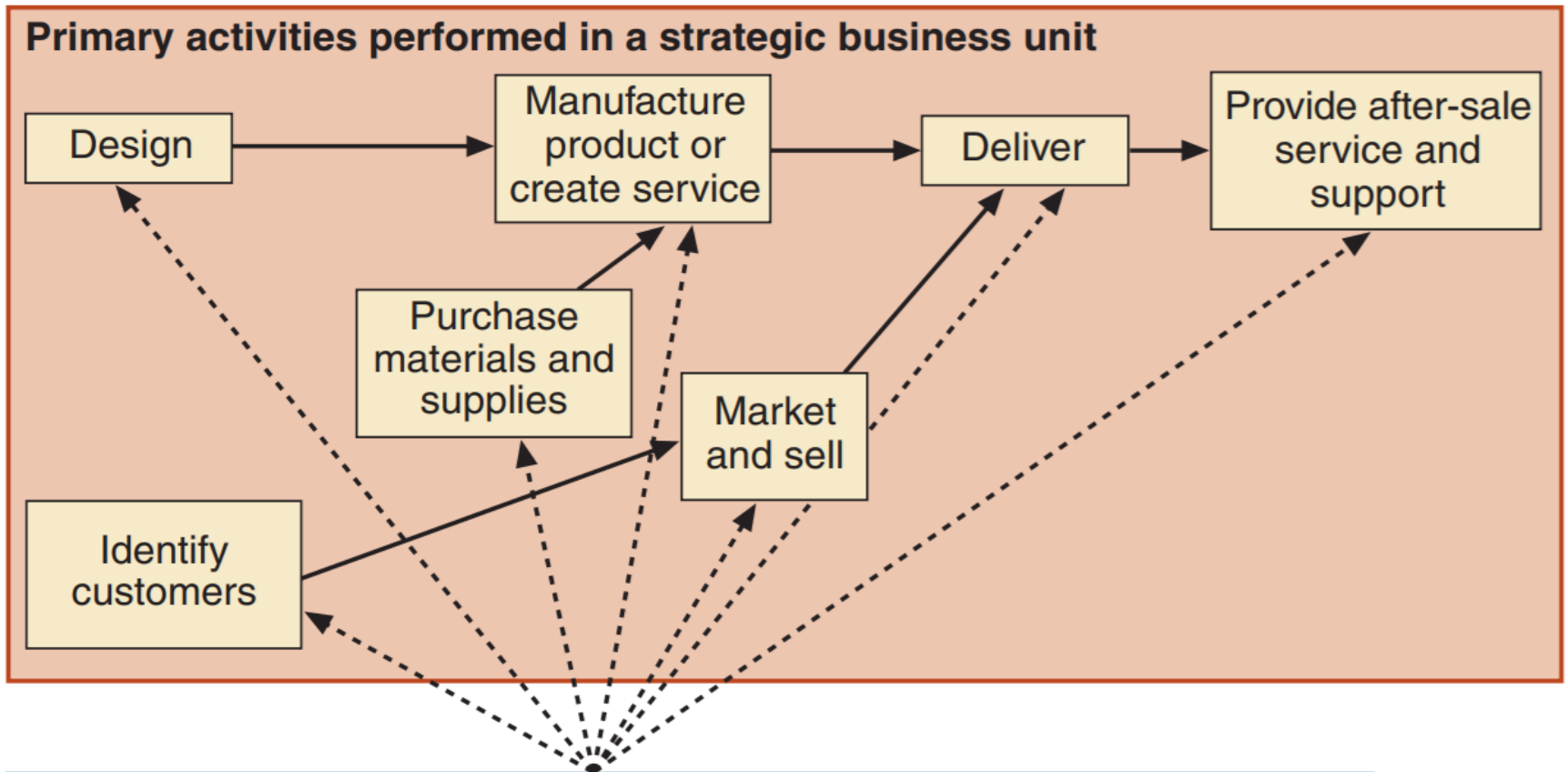
Primary activities in Ecommerce

Internet technologies can be used to improve a wide range of business processes. One way to focus on specific business processes as candidates for Ecommerce is to break the business down into a series of value-adding activities that combine to generate profits and meet other goals of the firm.

- Business unit value chains:

A **value chain** is a way of organizing the activities that each strategic business unit undertakes to design, produce, promote, market, deliver, and support the products or services it sells. These value chain activities will occur in some form in any strategic business unit.

Primary activities in Ecommerce



Primary activities in Ecommerce

Each strategic business unit conducts the following primary activities:

- Design: activities that take a product from concept to manufacturing, including concept research, engineering, and test marketing.
- Identify customers: activities that help the firm find new customers and new ways to serve existing customers, including market research and customer satisfaction surveys.
- Purchase materials and supplies: procurement activities, including vendor selection, vendor qualification, negotiating long term supply contracts, and monitoring quality and timeliness of delivery.
- Manufacture product or create service: activities that transform materials and labor into finished products, including fabricating, assembling, finishing, testing, and packaging.

Primary activities in Ecommerce

- Market and sell: activities that give buyers a way to purchase and that provide inducements for them to do so, including advertising, promoting, managing salespeople, pricing, and identifying and monitoring sales and distribution channels.
- Deliver: activities that store, distribute, and ship the final product or provide the service, including warehousing, handling materials, consolidating freight, selecting shippers, and monitoring timeliness of delivery.
- Provide after-sales service and support: activities that promote a continuing relationship with the customer, including installing, testing, maintaining, repairing, fulfilling warranties, and replacing parts.

Supporting activities in Ecommerce

There are some supporting activities that assist primary activities in proper functioning:

- Finance and administration activities: providing the firm's basic infrastructure, including accounting, paying bills, borrowing funds, reporting to government regulators, and ensuring compliance with relevant laws.
- Human resource activities: coordinating the management of employees, including recruiting, hiring, training, compensation, and managing benefits.
- Technology development activities: improving the product or service that the firm is selling and that helps improve the business processes in every primary activity, including basic research, applied research and development, process improvement studies, and field tests of maintenance procedures.

Supporting activities in Ecommerce

The value chain concept is a useful way to think about business strategy in general. When firms are considering electronic commerce, the value chain can be an excellent way to organize the examination of business processes within their business units and in other parts of the product's life cycle.

Using the value chain reinforces the idea that electronic commerce should be a business solution, not a technology implemented for its own sake.

Internet and World Wide Web

A **computer network** is any technology that allows people to connect computers to each other. Networks of computers and the Internet that connects them to each other form the basic technological structure that underlies virtually all electronic commerce.

The part of the Internet known as the **World Wide Web (WWW)**, or, more simply, the **Web**, is a subset of the computers on the Internet that are connected to one another in a specific way that makes them and their contents easily accessible to each other.

The most important thing about the Web is that it includes an easy-to-use standard interface. This interface makes it possible for people who are not computer experts to use the Web to access a variety of Internet resources.

Internet and World Wide Web

- Internet of Things:

The most common perception of the Internet is that it connects computers to one another and, by doing so, connects the users of those computers to each other. In recent years, devices other than computers have been connected to the Internet, such as mobile phones and tablet devices.

The subset of Internet that includes computers and sensors connected to each other for communication and automatic transaction processing is often called the **Internet of Things**.

These devices such as optical scanners, sensors that detect changes in temperature, light, moisture, or the existence of vibration or movement, can be connected to the Internet and used by computers to manage automatically environmental conditions (such as heating and cooling or lighting levels) or security procedures. These interconnected devices can be located in houses, offices, factories and so on.

Internet and World Wide Web

- Computers can also be connected to each other using the Internet to conduct business transactions without human intervention.

For example, a computer that monitors inventory levels using sensors connected to it over the Internet can use its Internet connection to place inventory orders with a vendor's computer automatically.

Internet and World Wide Web

- Web Page Request and Delivery:

The Web is software that runs on computers that are connected to each other through the Internet. **Web client computers** run software called **Web client software** or **Web browser software**.

Widely used Web browser software includes Google Chrome, Microsoft Internet Explorer, Apple Safari, and Mozilla Firefox.

Web browser software sends requests for Web page files to other computers, which are called Web servers. A Web server computer runs software called **Web server software**.

Web server software receives requests from many different Web clients and responds by sending files back to those Web client computers. Each Web client computer's Web client software renders those files into a Web page.

Internet and World Wide Web

- Development of Hypertext:

The set of rules for delivering Web page files over the Internet is in a protocol called the **Hypertext Transfer Protocol (HTTP)**, which was developed by Tim Berners-Lee in 1991.

A hypertext server is a computer that stores files written in **Hypertext Markup Language (HTML)**, the language used for the creation of Web pages.

The hypertext server is connected through the Internet to other computers that can connect to the hypertext server and read those HTML files. HTML includes tags that indicate which text is part of a header element, which text is part of a paragraph element. One important type of tag is the hypertext link tag.

A **hypertext link**, or **hyperlink**, points to another location in the same or another HTML document.

Internet and World Wide Web

- World Wide Web:

Tim Berners-Lee called his system of hyperlinked HTML documents the World Wide Web.

- Hypertext Markup Language:

Web pages can include many elements, such as graphics, photographs, sound clips, and even small programs that run in the Web browser.

Each of these elements is stored on the Web server as a separate file.

The most important parts of a Web page, however, are the structure of the page and the text that makes up the main part of the page.

The page structure and text are stored in a text file that is formatted, or marked up, using a text markup language.

A **text markup language** specifies a set of tags that are inserted into the text. These **markup tags**, or **tags**, provide formatting instructions that Web client software can understand.