

# Week 3 Review

- Choosing the right computer hardware requires understanding its relationship to the information system and the needs of the organization
- Managers in any discipline access a vast store of data and information, used as a basis for decision-making

# Week 3 Review

- Regardless of field of study in school, using database systems will likely be a critical part of any job
- Data is one of the most valuable resources that a firm possesses
- Today's decision makers need access to data wherever it resides

# Week 3 Review

- Fast, reliable connections are needed to:
  - exchange messages
  - upload and download data and software
  - route business transactions to processors
  - connect to databases and network services
  - send output to wherever its needed



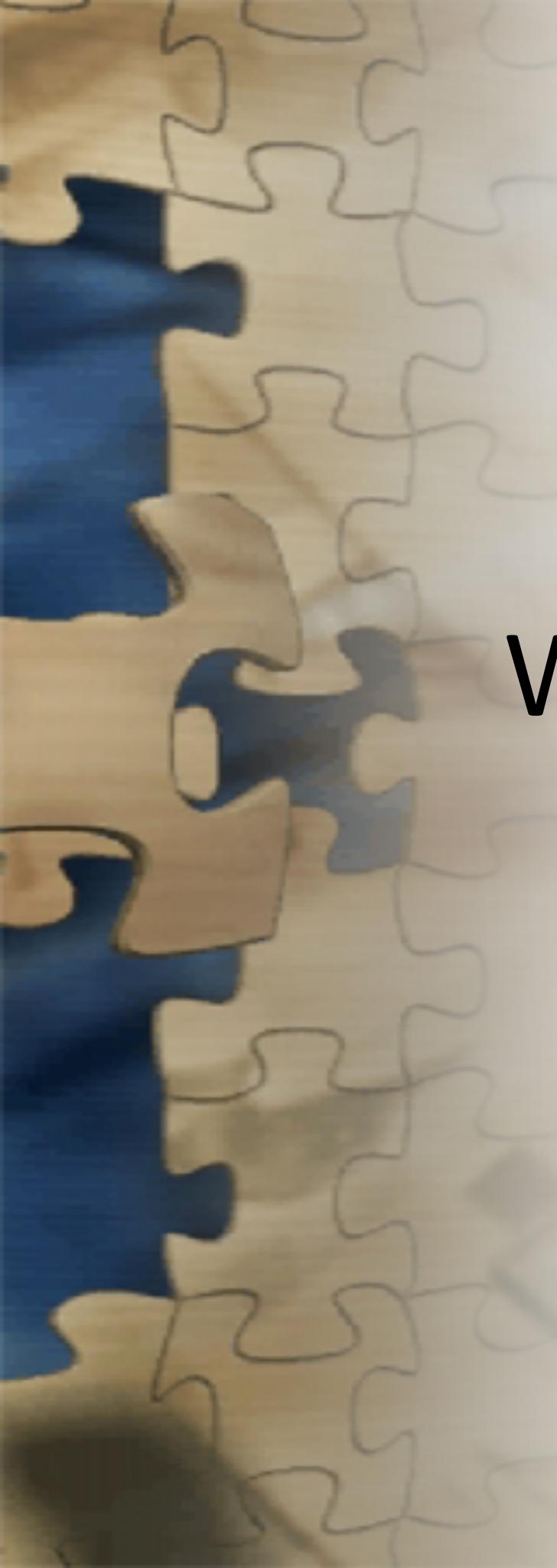
# Management Information System (MINSYST)

Week Four



# Objectives

- Describe the current status of various forms of e-commerce and m-commerce
- Identify the several e-commerce and m-commerce applications
- E-Commerce and M-Commerce Technology Infrastructure



# Why learn about electronic commerce and mobile commerce?



# e-Commerce & m-Commerce

- Electronic and mobile commerce and enterprise systems:
  - Have transformed many areas of our lives and careers
- One fundamental change:
  - The manner in which companies interact with suppliers, customers, government agencies, and other business partners



# Introduction to e-Commerce

- Electronic commerce
  - Conducting business electronically over computer networks
- Business activities that are strong candidates for conversion to e-commerce
  - Paper-based
  - Time-consuming
  - Inconvenient for customers



# Introduction to e-Commerce

- Classified according to the interacting parties:
  - Business-to-business (B2B)
  - Business-to-consumer (B2C)
  - Consumer-to-consumer (C2C)
  - e-Government



# Business-to-Business (B2B)

- *Business-to-business (B2B)*: trading between businesses only
- B2B forms:
  - Advertising
  - Exchanges and Auctions
  - Online Business Alliance

Google search results for "external hard disks". The search bar shows the query. Below it, the "Web" tab is selected, followed by Shopping, Images, News, Videos, More, and Search tools. The results page indicates about 1,980,000 results found in 0.61 seconds.

**Shop External Hard Disks - lazada.com.ph**  
**Ad external-hdd.lazada.com.ph/**

Keep Your Data Secure & Accessible.  
 Buyer's Protection · Quick, Reliable Delivery  
 The best price for consumers – Tech in...

[Printers, Ink, Scanners](#)  
[Wifi, Network Components](#)

**External Hard Disks - Buy 5**  
[www.snapdeal.com/products/computer-accessories/external-hard-drives](http://www.snapdeal.com/products/computer-accessories/external-hard-drives)  
 Buy External Hard Disks @ best price online from Snapdeal. Buy external hard drives from Seagate, Transcend, WD Elements 1TB USB 3.0 ... - Seagate

**External Hard Disk & Memory**  
[www.amazon.in/Hard-disks/b?ie=UTF8&node=32805001](http://www.amazon.in/Hard-disks/b?ie=UTF8&node=32805001)  
 Results 1 - 24 of 328 - Buy External Hard Drives at Best Prices in India at Amazon.in. Buy Portable...

**External Hard Drives: Amazon**  
[www.amazon.com/b?node=32805001](http://www.amazon.com/b?node=32805001) Data Storage  
 Results 1 - 24 of 17049 - Seagate Expansion Drive 2TB 3.0 ... WD My Passport Ultra 2 TB Portable...

**Buy External Hard Disks Online**  
[www.shopclues.com/mobile-laptop-accessories/external-hard-disks](http://www.shopclues.com/mobile-laptop-accessories/external-hard-disks)  
 Open # on this page in a new tab

# B2B: Advertising

**YAHOO!**

[Search Web](#)

[My Yahoo](#) [Sign In](#) [Mail](#)

**Trending Now**

1 <a href="#">Anna Duggar</a>	6 <a href="#">Nicole Kidman</a>
2 <a href="#">Ellen DeGeneres</a>	7 <a href="#">Ivanka Trump</a>
3 <a href="#">Michelle Duggar</a>	8 <a href="#">Grey's Anatomy</a>
4 <a href="#">Carrie Fisher</a>	9 <a href="#">Women's leggings</a>
5 <a href="#">Kellie Pickler</a>	10 <a href="#">Janet Jackson</a>

**Live concert Aer » Tomorrow**

**TripAdvisor's best restaurants in America**

The top spot is a French eatery in a warehouse that requires male guests to wear jackets, even for lunch. [\\$185 6-course dinner »](#)

21 - 25 of 50

[Best American restaurants](#) [How Kershaw ended misery](#) [Mike's tweets draw outrage](#) [GOP eyes Clinton advantage](#) [Sad findings in autopsy](#)

[All Stories](#) [News](#) [Entertainment](#) [Sports](#) [Business](#) [More](#)

**Michael Weatherly Signs With WME**

NCIS ' Michael Weatherly had been a rarity – a TV star with a role on a hugely popular series who had no agency representation. Now the long-time free agent has signed with WME. He will continue to be managed by Anonymous Deadline

**Facebook® Account Sign Up. Join for Free Today!**

[Create a Facebook Page](#)

**VICTORINOX SWISS ARMY**

**DISCOVER NOW**

**Only on Yahoo**

# B2B: Exchanges and Auctions

- Act as online marketplaces
  - *Exchange*: extranet for organizations that offer for sale and bid on products and services of a particular type
  - *Auction*: sells a great variety of items

User   
Password



English

[Home](#) [About Pefa](#) [Auctions](#) [Expected supplies](#) [Market statistics](#) [Services](#) [Demo](#) [News](#) [Helpdesk](#) [Contact](#)

[Home](#)

[About Pefa](#)

[Auctions](#)

[Expected supplies](#)

[Market statistics](#)

[Services](#)

[Demo](#)

[News](#)

[Helpdesk](#)

[Contact](#)

Noordzee Garnalen  
gepeld 15.25/kg ex  
BTW  
[<klik voor info>](#)

**NU OOK  
KWEEKVIS!**



**nofa.com**

## Purchase your fish direct from auctions throughout Europe

Welcome to pefa.com. Pefa is Europe's largest marketplace for fresh fish. Using our Internet sales system, buyers can purchase fish directly from 13 member auctions in Sweden, Denmark, the Netherlands, Belgium and Italy. Below you'll find a overview of the main average prices for today.

Dynamic Prices	Size	Weight	TH	HV	IJ	SC	CA	Total
Cod	500	17,426	1.41	1.22				1.24
Cod	200	6,085		3.28				3.28
Plaice	200	11,937	1.24	1.39				1.26
Plaice	203	10,368			1.29			1.29
Cod	100	3,322		3.41				3.41
Cod	400	4,766	1.95	1.94				1.94
Plaice	300	5,527	1.44	1.38				1.42
Plaice	100	6,099	1.17	1.14				1.16
Plaice	103	4,389			1.24			1.24
Plaice	303	3,539			1.34			1.34
Cod	300	1,044		3.38				3.38
Cod - Roe	000	647		4.00				4.00
Cod	151	722		3.48				3.48
Atlantic Catfish	000	300			7.79	7.99		7.89
Plaice	400	1,539	1.43	1.38				1.42
Doversole	434	197				10.86		10.86
Doversole	222	101				10.00		10.00



Auction clock

News overview

today on pefa.com



# B2B: Online Business Alliances

- Collaboration between businesses in establishing a Web site
  - Create buying power
  - Create a single place for customers
  - Set the prices of purchased products and services

[Homes](#) [Rentals](#) [Mortgage Rates](#) [Professionals](#) [Local Info](#) [more ▾](#)

## Find Homes

 Address or Neighborhood or City or ZIP**GO**

For Sale, Zestimate® Home Values, Rentals

### Los Angeles Homes For Sale

**[16642 Addison St](#)**

3 beds, 1,065 sqft, 1.0 baths

**For Sale:** \$527,900**[11473 Sunshine Ter](#)**

3 beds, 1,420 sqft, 2.0 baths

**For Sale:** \$629,900**[5267 Allott Ave](#)**

4 beds, 2,243 sqft, 3.0 baths

**For Sale:** \$749,950[› Los Angeles Homes For Sale](#)

## Find Mortgage Rates

 California**GO**

Low Rates, Trusted Lenders, Anonymous

### Zillow Mortgage Marketplace

*Instant answers on the go!*

## Zillow Mortgage Marketplace Apps

Mortgage decisions made easy

[iPhone »](#)[Android »](#)[Zillow Mobile](#)

Download the #1 Real Estate app



# Business-to-Consumer (B2C)

- *Business-to-consumer (B2C)*: trading directly with the consumers
  - Eliminates middlemen
  - Squeezes cost and inefficiencies
- *Web-influenced sales*: sales in local stores that are stimulated through online marketing



## B2C Forms

- E-Tailing
- Auctions and Reverse Auctions
- Content Providers
- Bill Presentment and Payment
- Extra-Organizational Workforce
- M-Commerce
- Virtual Worlds

## B2C: E-Tailing

- Online retailing to consumers
  - Continues to grow throughout the world
  - Sites combine user-friendly Web pages, DBMS, transaction software
  - Important element: selection

**FIGURE 8.4**  
Web-shopping benefits

Benefit	Because shoppers can...
Convenience	Shop from anywhere at any time of the day.
Time-saver	Visit numerous online stores in a few minutes; it would take hours to do so at shopping malls.
Wide selection	Choose from a selection of products that no shopping mall can offer.
Search mechanism	Find who sells a specific item within seconds by using search engines.
Comparative shopping	Quickly compare quality and price across multiple sellers.
Product reviews	Read product reviews by independent experts and other shoppers, often on the same Web page that describes the item.

# B2C: Auction and Reverse Auction

- Sites serve as a hub for consumers to buy and sell
  - *Reverse auction*: customers name their own price for desired goods and services

All Categories  Advanced

- All Categories >
- Fashion >
- Motors >
- Electronics >
- Collectibles & Art >
- Home, Outdoors & Decor >
- Entertainment >
- Deals & Gifts >
- Tickets >
- Classifieds

## eBay Buyer Protection

COVERS YOUR

# PURCHASE PR ORIGINAL SHI

IT'S FREE

[learn more >](#)


### Welcome to eBay

Whether you're new to eBay or a veteran user, we have just the right tools to get you on the right track.

- [New to eBay](#)
- [How to buy](#)
- [How to sell](#)
- [Increase your sales](#)

### Shop safely on eBay


**eBay Buyer Protection**  
We've got you covered!

**eBay Top-Rated Sellers**  
Get great service & fast shipping from top-rated sellers.

**PayPal**  
PayPal is the world's most-loved way to pay and get paid.

### Sign in

[Back](#)  
buy, bid,  
account

[Sig](#)

Not re  
Join t  
already

[Re](#)

All Categories

Search

Advanced

## priceline.com®

flights | hotels | cars | vacation packages | cruises | activities | pricebreaker deals | hotel guides | rewards | groups

[watch the new tv ad](#)

+ sign in | + my profile | + my trips | check your request | + help

### shop for discount travel

new to priceline?

flights

hotels

cars

vacations

cruises

### search over 165,000 hotels

city or airport

check-in

 mm/dd/yyyy

check-out

 mm/dd/yyyy

rooms

For Deeper Discounts  
**NAMED YOUR OWN PRICE**  
start here

[search now!](#)
**name your own price® - backed by our Big Deal Guarantee**

save up to  
40% on flights\*

[bid now](#)

save up to  
60% on hotels\*

[bid now](#)

save up to  
40% on cars\*

[bid now](#)

THOUSANDS AND THOUSANDS

# OF HOTELS

ON SALE

[BOOK NOW](#)

Ends February 20th

**popular hotels on sale!**

**Cannery Casino Hotel**  
North Las Vegas, NV 

**The Historic Powhatan**  
Resort  
Williamsburg, VA 


## B2C Forms

- *Content Providers*: offer information, artistic work, classified ads, and video
- *Electronic bill presentment and payment (EBBP)*: provides online bills and payment options
- *Extra-Organizational Workforce*: augment intellectual pool by using Web to employ talent

## B2C: m-Commerce

- *Mobile commerce, or M-commerce:* business conducted on mobile devices
  - Allows people to use mobile devices to experience an event and react immediately
  - Applications: shopping, salesforce automation, location services

## B2C: Virtual Worlds

- *Virtual Worlds*: a combination of images, video, sound, and avatars that resemble the real world
  - Created by software and accessible for interaction by subscribers
  - Avatar: 3D graphical character that represents a user in a virtual world

[What Is Second Life?](#)[World Map](#)[Shopping](#)[Buy Land](#)[Community](#)[Help](#)[Join Now >>](#)

It's fast, free and easy!

## What is Second Life?

[Intro](#)[Welcome](#)[Start Exploring](#)[Meet People](#)[Go Shopping](#)[Get Settled](#)[Be Creative](#)[Make Money](#)[Education & Enterprise](#)[Join Now >>](#)

## Get Educated

Educators worldwide are discovering the limitless academic possibilities of Second Life.

# Consumer-to-Consumer (C2C)

- *Consumer-to-Consumer (C2C)*: involves electronic transactions between consumers using a third party to facilitate the process
- Popular sites: e-Bay, Bidzcom, Craigslist, eBid, Kijiji, ePier, Ibidfree, Ubid, and Tradus

# Consumer-to-Consumer (C2C)

Factors	B2B	B2C	C2C
Value of sale	Thousands or millions of dollars	Tens or hundreds of dollars	Tens of dollars
Length of sales process	Days to months	Days to weeks	Hours to days
Number of decision makers involved	Several people to a dozen or more	One or two	One or two
Uniformity of offer	Typically a uniform product offering	More customized product offering	Single product offering, one of a kind
Complexity of buying process	Extremely complex, much room for negotiation on price, payment and delivery options, quantity, quality, options, and features	Relatively simple, limited discussion over price and payment and delivery options	Relatively simple, limited discussion over payment and delivery options; negotiation over price
Motivation for sale	Driven by a business decision or need	Driven by an individual consumer's need or emotion	Driven by an individual consumer's need or emotion

Reference:

Reynolds, G. (2014). *Information Systems Principles. Philippine Edition.* Cengage Learning Asia Pte.



# e-Government

- *e-Government*: use of information and communications technology to:
  - Simplify the sharing of information
  - Speed formerly paper-based processes
  - Improve the relationship between citizen and government

# e-Government

- Forms of e-Government
  - Government-to-consumer (G2C)
  - Government-to-business (G2B)
  - Government-to-government (G2G)



# Mobile Commerce

- *Mobile commerce (m-commerce)*: relies on the use of mobile, wireless devices to place orders and conduct business
- The Internet Corporation for Assigned Names and Numbers (ICANN):
  - Created a .mobi domain to help attract mobile users to the Web



# e-Commerce and m-Commerce Applications

- B2B, B2C, C2C and m-Commerce applications:
  - Retail and wholesale
  - Manufacturing
  - Marketing
  - Advertising
    - Price comparison
    - Couponing



# e-Commerce and m-Commerce Applications

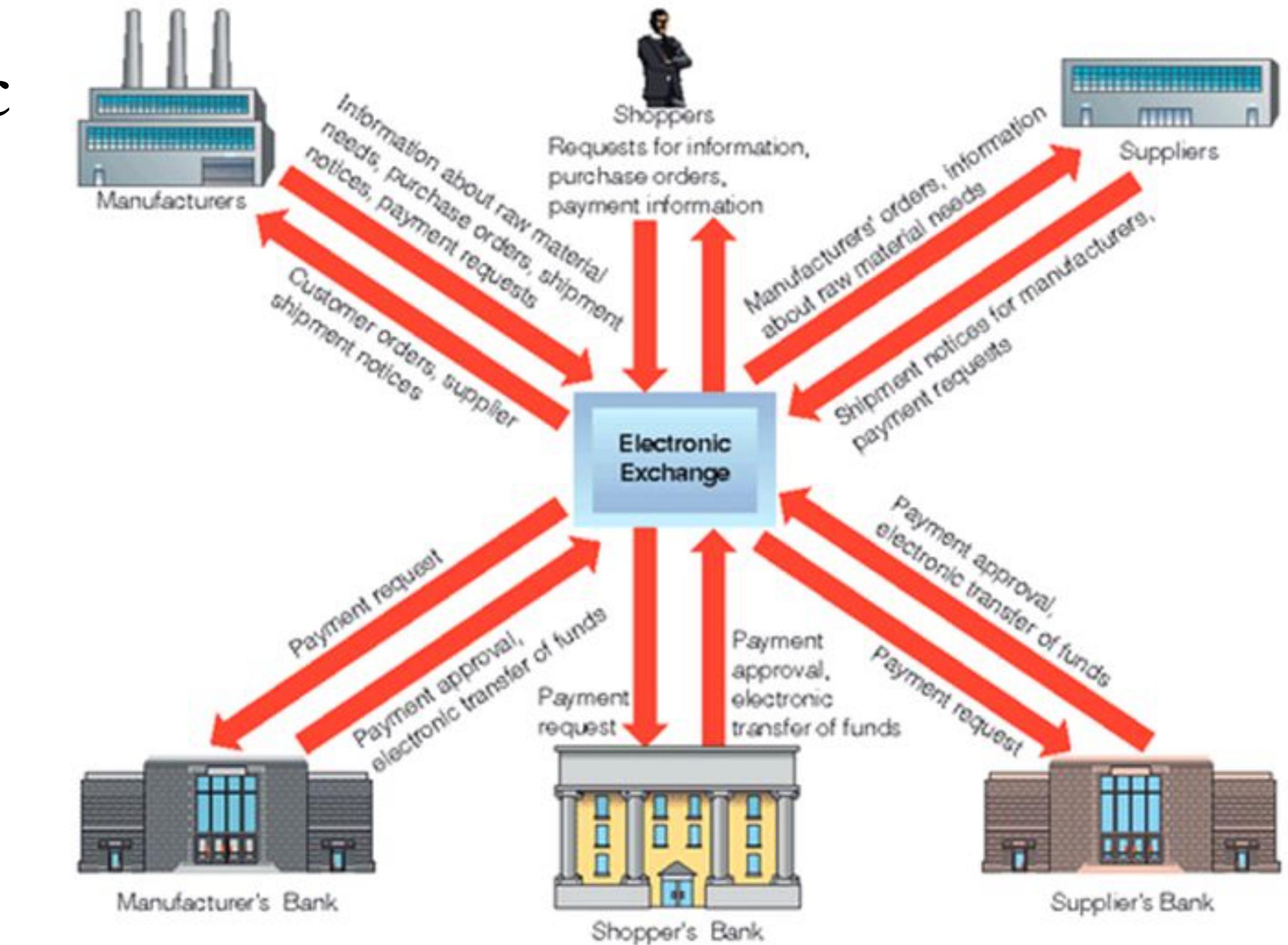
- B2B, B2C, C2C and m-Commerce applications:
  - Investment and finance
  - Banking
  - E-boutiques

# Retail and Wholesale

- Electronic retailing (e-tailing)
  - Direct sale from business to consumer through electronic storefronts
- *Cybermall*
  - Single web site that offers many products and services at one Internet location
- Manufacturing, repair and operations (MRO)

# Manufacturing

- Electronic exchange



Reference:

Reynolds, G. (2014). *Information Systems Principles*. Philippine Edition. Cengage Learning Asia Pte.



# Manufacturing

- Types of electronic exchanges
  - Private exchanges
  - Consortium-operated exchanges
  - Independent exchanges
- Strategic and competitive issues

# Marketing

- Market segmentation
  - Identification of specific markets to target them with advertising messages

# Advertising

- Price Comparison
  - Mobile phone services enable shoppers to compare prices and products on the Web
- Couponing
  - Many manufacturers and retailers now send mobile coupons directly to consumers' smartphones



# Investment and Finance

- The Internet:
  - Has revolutionized the world of investment and finance
- The brokerage business:
  - Adapted to the Internet faster than any other arm of finance



# Banking

- Online banking customers:
  - Can check balances of their savings, checking, and loan accounts
  - Transfer money among accounts
  - Pay their bills
- Many banks support bill payment via cell phone

# E-Boutiques

- Offer personalized shopping consultations for shoppers
- Operate on a philosophy of high customer service and strong, personal client relationships

# Advantages of Electronic and Mobile Commerce

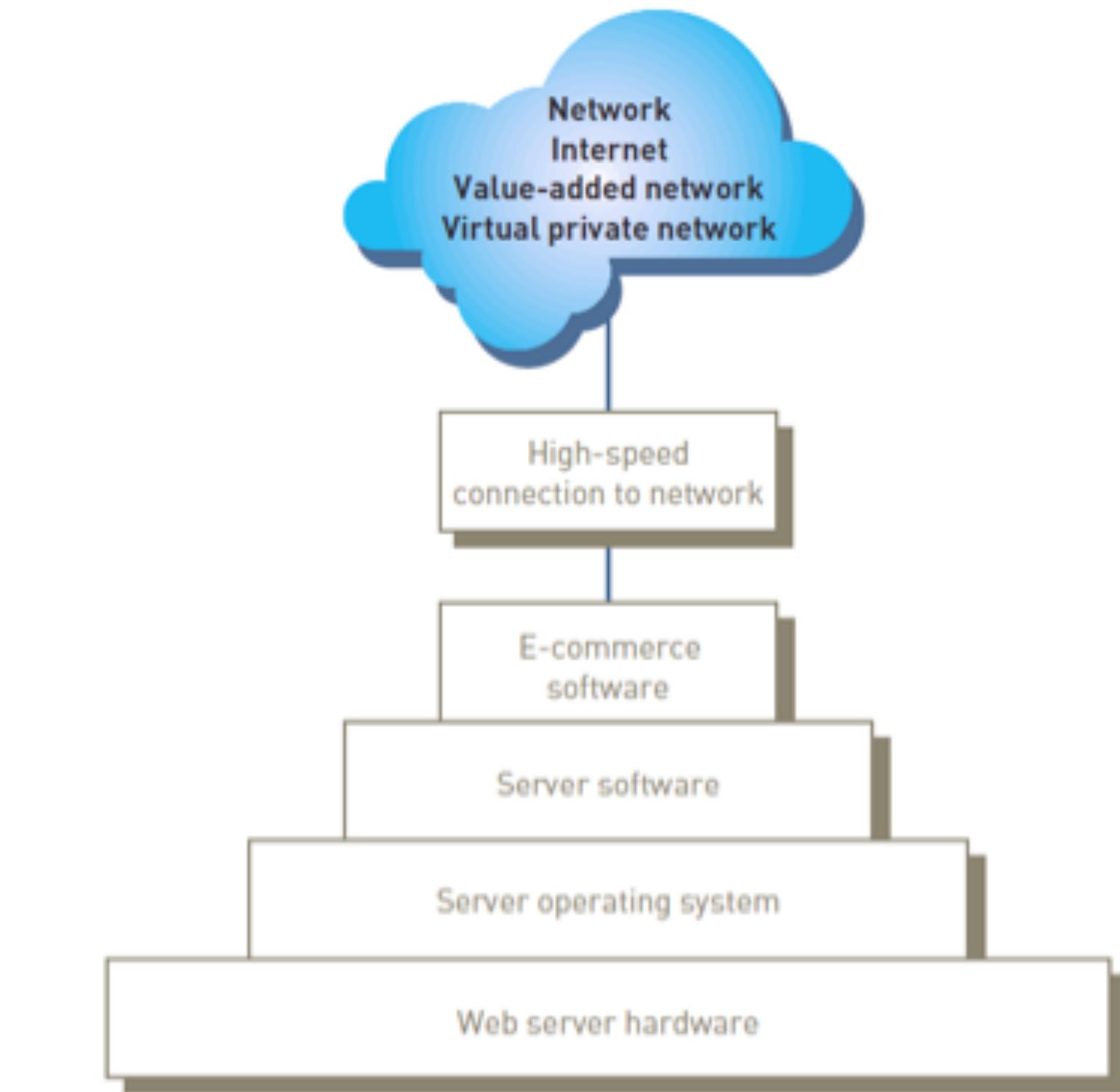
Advantages	Explanation
Provides global reach	Allows manufacturers to buy at a low cost worldwide and offers enterprises the chance to sell to a global market right from the very start-up of their business.
Reduces costs	Eliminates time-consuming and labor-intensive steps throughout the order and delivery process so that more sales can be completed in the same period and with increased accuracy.
Speeds flow of goods and information	The flow of information is accelerated because of the established electronic connections and communications processes.
Increased accuracy	Enables buyers to enter their own product specifications and order information directly so that human data-entry error is eliminated.
Improves customer service	Increased and more detailed information about delivery dates and current status increases customer loyalty.

*Reference:*

Reynolds, G. (2014). *Information Systems Principles. Philippine Edition*. Cengage Learning Asia Pte.

# Technology Infrastructure

- Key technology infrastructure components



*Reference:*

Reynolds, G. (2014). *Information Systems Principles*. Philippine Edition. Cengage Learning Asia Pte.



# Hardware

- Key e-commerce infrastructure ingredient:
  - Web server hardware platform complete with the appropriate software
- Key decision facing new e-commerce companies:
  - In-house or outsourced hosting

# Software

- Web server software
  - Security and identification
  - Retrieval and sending of Web pages
  - Web site tracking
  - Web site development
  - Web page development

# e-Commerce Software

- e-Commerce software support five core tasks:
  - Catalog management
  - Product configuration
  - Shopping cart facilities
  - E-commerce transaction processing
  - Web traffic data analysis

*An electronic shopping cart allows online shoppers to view their selections and add or remove items.*

**amazon** Try Prime Josephine's Amazon.com Today's Deals Gift Cards Sell Help

Shop by Department Search All Go Hello, Josephine Your Account Try Prime Wish List Cart

Josephine, Get \$10 Off Instantly upon approval for the Amazon.com Store Card

Current subtotal: \$ 5.00

Gift Card savings: - \$ 10.00

**\$ 0.00**

Savings remaining: \$ 5.00

**\$10 Instant Gift Card** Apply now

**Subtotal (1 item): \$5.00**

Add \$30.00 of eligible items to your order to qualify for FREE Shipping. See details

This order contains a gift

Proceed to checkout

or

Sign in to turn on 1-Click ordering.

Estimate your shipping and tax

**Shopping Cart**

	Price	Quantity
 <b>PTX, Vol. III</b> by Pentatonix Audio CD In Stock Eligible for FREE Shipping Includes: AutoRip > (What's this?) <input type="checkbox"/> This is a gift Learn more	<b>\$5.00</b> You save: \$3.98 (44%)	1

**Subtotal (1 item): \$5.00**

The price and availability of items at Amazon.com are subject to change. The Cart is a temporary place to store a list of your items and reflects each item's most recent price. [Learn more](#)

Do you have a gift card or promotional code? We'll ask you to enter your claim code when it's time to pay.

**Frequently Bought With PTX, Vol. III**

  
**Ptx 1**  
Pentatonix  
★★★★★ (324)  
\$5.79  
[Add to Cart](#)

  
**Ptx 2**  
Pentatonix  
★★★★★ (317)  
\$9.00

Management Information System  
[www.amazon.com/gp/cart/view.html?ref=nav\\_flyout\\_viewcart?ie=UTF8&hasWorkingJavascript](http://www.amazon.com/gp/cart/view.html?ref=nav_flyout_viewcart?ie=UTF8&hasWorkingJavascript)



# m-Commerce HW and SW

- For m-commerce to work effectively:
  - The interface between the wireless, handheld device and its user must enable the same easy way to purchase an item on a wireless device as it is using a PC
- Wireless Application Protocol (WAP):
  - Standard set of specifications for Internet applications that run on handheld, wireless devices



# Electronic Payment Systems

- Payments may be made in a variety of ways
  - Electronic cash or wallets
  - Smart, credit and charge cards
- Authentication Technologies
  - Digital Certificate
  - Certificate Authority

# Electronic Payment Systems

- Secure Sockets Layer (SSL):
  - Used to secure sensitive data
- Electronic cash:
  - An amount of money that is computerized, stored, and used as cash for e-commerce transactions



# Electronic Payment Systems

- Credit cards
  - has a preset spending limit
- Charge cards
  - carries no preset spending limit
- Debit cards
  - operate like cash or a personal check



# Electronic Payment Systems

- p-Card
  - Procurement or purchasing card
  - Credit card used to streamline the traditional purchase order and invoice payment process
- Smart card:
  - Credit card-sized device with an embedded microchip to provide electronic memory and processing capability



# Electronic Payment Systems

- Payments using cell phones:
  - Available options:
    - Payments linked to your bank account
    - Payments added to your phone bill

# Electronic Payment Systems

**TABLE 5.5** Comparison of payment systems

Payment System	Description	Advantages	Disadvantages
Credit card	Carries preset spending limit based on the user's credit history	Each month the user can pay all or part of the amount owed	Unpaid balance accumulates interest charges—often at a high rate of interest
Charge card	Looks like a credit card but carries no preset spending limit	Does not involve lines of credit and does not accumulate interest charges	The entire amount charged to the card is due at the end of the billing period
Debit card	Looks like a credit card or automated teller machine (ATM) card	Operates like cash or a personal check	Money is immediately deducted from user's account balance
Smart card	Is a credit card device with embedded microchip capable of storing facts about card holder	Better protected from misuse than conventional credit, charge, and debit cards because the smart-card information is encrypted	Not widely used in the U.S.

# Case Study

- e-Commerce Application