MANAGEMENT INFORMATION SYSTEMS

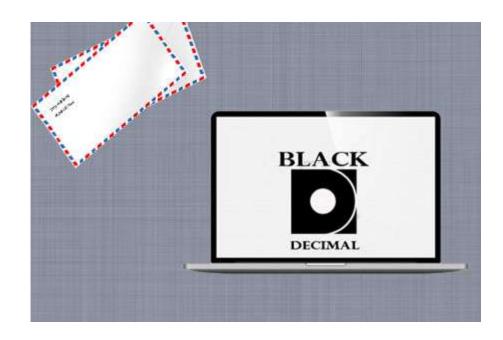


Lecture 8: E-Commerce, Web 2.0, and Social Networking



Class Website

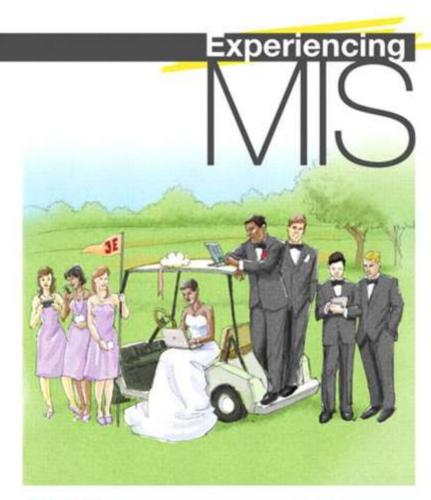
www.blackdecimal.com







Course Textbooks - Recommended





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Session Objectives

It is expected that at the end of the session, students will understand:

- E Commerce and the categories of E Commerce
- The benefits of E Commerce
- The Challenges of E Commerce
- Web 2.0
- The characteristics of Web 2.0
- Benefits of Web 2.0
- Types of Business Capital
- Social Networking
- Responding to Social Media problems
- Social Media Applications providers



E-Commerce

- E-commerce is the buying and selling of goods and services over public and private computer networks.
- E-commerce became feasible with the creation and widespread use of HTTP, HTML, and server applications such as **Web storefronts** that enabled browserbased transactions.



- E-commerce was not only faster than pre-Internet commerce, it also brought vendors closer to their customers, and in the process changed market characteristics and dynamics.
- Amazon.com and eBay were two big winners in the e-commerce era.



Nonmerchant companies

Auctions

Clearinghouses

E-Commerce Categories

Merchant Companies

- Business to Consumer(B2C)
- Business to Business (B2B)
- Business to Government (B2G)
- Non Merchant Companies
 - Auctions
 - Clearinghouses
 - Exchanges

Business to business (B2B)
Business to government (B2G) Business to business (B2B)



E - Commerce Merchant Companies

- The U.S. Census Bureau defines merchant companies as those that take **title** to the goods they sell. They **buy** goods and **resell** them.
- The three main types of merchant companies are those that,
 - sell directly to consumers,
 - sell to companies, and
 - sell to government.
- Each uses slightly **different** Information systems in the course of doing business.



Business To Consumer (B2C)

- B2C E-commerce concern **sales** between a **supplier** and a **retail customer** (the consumer).
- Traditional B2C information systems rely on a **Web storefront** that customers use to **enter** and **manage** their orders.
- Amazon.com, REI.com, and LLBean.com are examples of companies that use B2C information systems.



Business To Business (B2B)

• Business-to-business e-commerce, refers to sales between companies. For example raw materials suppliers use B2B systems to sell to manufacturers, manufacturers use B2B systems to sell to distributors, and distributors uses B2B systems to sell to retailers.



Business To Government

- Business-to-government e-commerce, refers to sales between companies and governmental organizations. For instances, the manufacturer that uses an e-commerce site to sell computer hardware to the Ghana Armed Forces is engaging in B2G commerce.
- Suppliers, distributors, and retailers also sell to the government as well.



Non - Merchant Companies

 Non – merchant companies as those that arrange for the purchase and sale of goods without ever owning or taking title to those goods.



E - Commerce Auctions

- E-commerce auctions match buyers and sellers by using an e-commerce version of a standard auction.
- This e-commerce application enables the auction company to offer goods for sale and to support a competitive-bidding process.
- The best-known auction company is eBay, but many other auction companies exist; many serve particular industries.



Clearing Houses

- They provide goods and services at a stated price and arrange for the delivery of the goods, but they never take title.
- One division of Amazon.com, for example, operates as a non merchant clearinghouse, allowing individuals and used bookstores to sell used books on the Amazon.com Web site.



Electronic Exchange

- An electronic exchange matches buyers and sellers; the business process is similar to that of a stock exchange. Sellers offer goods at a given price through the electronic exchange, and buyers make offers to purchase over the same exchange. Price matches result transactions from which the exchange takes a commission.
- Priceline.com is an example of an exchange used by consumers.



How Does E-Commerce Improve Market Efficiency?

- E-commerce leads to **disintermediation**, which is the elimination of middle layers of distributors and suppliers.
- E-commerce also improves the **flow of price information.** As a consumer, you can go to any number of Web sites that offer product price comparisons.



- From the seller's side, e-commerce produces information about **price elasticity** that has not been available before.
- Price elasticity measures the amount that demand rises or falls with changes in price.
- Managing prices by direct interaction with the customer yields better information than managing prices by watching competitors' pricing



Factors That Disfavor E-Commerce

- Companies need to consider the following economic factors:
 - Channel conflict
 - Price conflict
 - Logistics expense
 - Customer service expense
 - Infrastructure Challenges (E.g. Payment and communication infrastructure)



Web 2.0

- The increased capabilities of browsers, together with browser extensions such as Flash, have enabled thin-client applications to have considerable functionality.
- Vendors can now perform sophisticated operations in a browser, with no program download or installation required. The collection of many of these new capabilities, and the new business models that have resulted, has come to be known as **Web 2.0**.



Software as a (Free) Service

- Google, Amazon.com, and eBay exemplify Web 2.0. These companies do not sell software licenses, because software is not their product. Instead, they provide software as a service (SaaS).
- You can search Google, run Google Docs, use Google Earth, process Gmail, and access Google Maps, all from a thin-client browser.
- Instead of software license fees, the Web 2.0 business model relies on advertising or other revenue that results as users employ the software as a service.



Web 2.0 and Traditional Processing

Web 2.0 Processing	Traditional Processing
Major winners: Google, Amazon.com, eBay	Major winners: Microsoft, Oracle, SAP
Software as a (free) service	Software as product
Frequent releases of thin-client applications	Infrequent, controlled releases
Business model relies on advertising or other revenue-from-use	Business model relies on sale of software licenses
Viral marketing	Extensive advertising
Product value increases with use and users	Product value fixed
Organic interfaces, mashups encouraged	Controlled, fixed interface
Participation	Publishing
Some rights reserved	All rights reserved



Characteristics of Web 2.0

- Use Increases Value: The value of the site increases with users and use. Amazon.com gains more value as more users write more reviews.
- Organic User Interfaces and Mashups: Dynamic user interface derived from different sources. Mashups, result when the output from two or more Web sites is combined into a single user experience. Google's My Maps is an excellent mashup example.



• Participation and Ownership Differences:

- Traditional sites are about publishing; Web 2.0 is about participation. Users provide reviews, map content, discussion responses, blog entries, and so forth.
- Traditional vendors and Web sites lock down all the legal rights they can. For example, Oracle publishes content and demands that others obtain written permission before reusing it. Web 2.0 locks down only some rights.



Benefits of Web 2.0

- Advertising AdWorks & AdSense
- **Mashups** Combining two items and providing them through E Commerce Sites.



Types of Business Capital

- Physical capital factories, machines, manufacturing equipment
- Human capital human knowledge and skills
- Social capital social relations

Social Networks

- A **Social Network** is a structure of individuals and organizations that are related to each other in some way.
- Social networking is the process by which **individuals** use relationships to communicate with others in a **social network**.
- Social capital is earned through social networking.
- Social capital is the investment in social relations with the expectation of returns in the marketplace.



Social Media Application Providers

- Facebook
- Twitter
- LinkedIn
- Google
 - Free to users
 - Most earn revenue through some type of advertising model

Value of Social Capital

- Relationships in social networks can:
 - Provide information about opportunities, alternatives, problems, and other factors important to business professionals.
 - Provide an opportunity to **influence** decision makers who are critical to your success.
 - Be a form of social credentials.
 - Reinforce a professional's **image** and **position** in an organization or industry.
- Value of social capital is measured by:
 - Number of relationships, strength of relationships, and resources controlled



Ways of Increasing Social Capital

1. Ask them to do you a favor

2. Frequent interactions strengthen relationships

3. Connect to those with more assets

Social Capital = NumberRelationships x
 RelationshipStrength x EntityResources

Rules of Social Media Engagement

Disclose	Be transparent—real name and employer Be truthful—point out if you have a vested interest Be yourself—stick to your expertise and write what you know
Protect	Don't tell secrets Don't slam the competition Don't overshare
Use Common Sense	Add value—make your contribution worthwhile Keep it cool—don't inflame or respond to every criticism Admit mistakes—be upfront and quick with corrections



Responding to Social Networking Problems

- If it is a reasonable criticism of the organization's products or services, **leave it.**
- Responding to problematic content is dangerous. If the response could be construed as patronizing or insulting, it could enrage the community and generate a strong backlash. "Never wrestle with a pig; you'll get dirty and the pig will enjoy it." Instead, allow the community to constrain the user.
- **Deleting** should be reserved for inappropriate, irrelevant and obscene content.



References

- David M. Kroenke (2012) Experiencing MIS. 3rd Edition, Prentice Hall.
- David M. Kroenke (2010) MIS Essentials. 2nd Edition, Prentice Hall.
- Kenneth C. Laudon and Jane P. Laudon (2009). Essentials of Management Information Systems. 8th Edition, Pearson Prentice Hall.



Next Lecture

Business Intelligence and Information Systems for Decision Making

