

# ITC 250/CPET 499 Web Systems

## E-Commerce & Business: an Introduction

### References:

- \*Chapter 1 of the text book: *e-Commerce: Business, Technology, and Society*, 8<sup>th</sup> edition, 2012, by K. C. Laudon and C. G. Traver, publisher Pearson Education Inc.,
- \* World Street Journal
- \* U.S. Census Bureau

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1

## Topics

- Facebook: IPO
- PART I
  - E-Commerce
  - Major Trend in E-Commerce
  - E-Commerce Definitions
  - E-Commerce vs. E-Business
  - Unique Features of E-Commerce Technology
  - Types of E-Commerce
  - Origins and Growth of E-Commerce
  - Technology and E-Commerce in Perspective
  - Insights on Technology

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2

## Topics (continue)

- PART II
- E-Commerce: A Brief History
  - E-Commerce 1995-2000: Innovation
  - E-Commerce 2001-2006: Consolidation
  - E-Commerce 2006-Present: Re-innovation
- Insight on Business
- Assessing E-Commerce: Success, Surprises, and Failure
- Prediction for the Future

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3

## Topics (continue)

- PART III
- Understanding E-Commerce
  - Technology: Infrastructure
  - Business: Basic Concepts
  - Society: Taming the Juggernaut
- Insight on Society
  - Online Privacy
- Case Study: The Pirate Bay

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4

## Facebook -

- Breaking news,  
<https://www.facebook.com/BreakingNews>
- How News Feed Works,  
<https://www.facebook.com/help/327131014036297/>
- Why teens are tiring of Facebook, by Jennifer Van Grove, CNET, March 2, 2013,  
<http://www.cnet.com/news/why-teens-are-tiring-of-facebook/>
- Facebook unethical experiments: It made news feeds, June 2014, by Katy Waldman,  
[http://www.slate.com/articles/health\\_and\\_science/science/2014/06/facebook\\_unethical\\_experiment\\_it\\_made\\_news\\_feeds\\_happier\\_or\\_sadder\\_to\\_manipulate.html](http://www.slate.com/articles/health_and_science/science/2014/06/facebook_unethical_experiment_it_made_news_feeds_happier_or_sadder_to_manipulate.html)

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5

## Facebook - Innovations

- Facebook Innovations, Sept. 2011,  
<http://rocketpopmedia.com/discover/2011/09/23/5-new-facebook-innovations/>
  - 1. Newsfeed: Top stories, Most recent
  - 2. The Ticker: Real-time friendly activity update
  - 3. Lists
  - 4. Timeline: “all the stories, all your apps, a new way to express who you are.”
  - 5. Spotify and App Integration

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6

## Facebook - Innovations

- Facebook Graph Search Could be Its Greatest Innovation, <http://mashable.com/2013/01/15/facebook-graph-search-great/>
- 3 Recent Facebook Innovations Nonprofits Need to Know, Jan. 29, 2014, <http://www.thenonproffitimes.com/news-articles/3-recent-facebook-innovations-nonprofits-need-to-know/>
  - 1. Mobile
  - 2. Apps and Games
  - 3. Post Reach

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7

## Facebook - IPO

- Is Facebook Ready for the Big Time? Interviewed by Shayndi Raice, WSJ, Jan. 14-15, 2012, pp. B1+B3,
  - CEO Mark Zuckerberg, 27, who built Facebook out of his Harvard College dorm room in 2004, and COO Sheryl Sanderberg, 42, a former Google Inc, executive
- Is Facebook Ready for Its IPO?, San Francisco, via Skype, 4:19 minute, Sheryle Sanderberg
- Facebook Sets Historic IPO, by Shayndi Raice, Feb. 2, 2012,

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8

## Facebook – IPO (cont.)

- Facebook: a social networking service, based at Menlo Park, California
- Mr. Zuckerberg has focused on building **social features for the site**
- Ms. Sanderberg has spent the last 3 ½ years: cultivating relationships with **Global Brands** and developing new ways for marketers to **reach Facebook's users**.
- Facebook's **advertising revenue**
  - \$264 million in 2008
  - \$3.8 billion in 2011
  - \$6 billion by the end of 2012 (estimated by eMarketer)
- As Facebook social network move toward an **IPO**, It **must prove** to investors that it is ready for the big time.

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9

## Facebook – WSJ Interview (Mark Zuckerberg)

- WSJ: **How has Facebook changed when it comes to trying to make money?**
- WSJ: **How does that work?**
- WSJ: **What do you say to those who suggest Facebook can't grow revenue without alienating users?**

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10

## Facebook – WSJ Interview (Mark Zuckerberg)

- WSJ: What's the company's first focus, business or product?
- WSJ: What companies do you admire?
- WSJ: Do you place Facebook in the same category as those businesses?

## Facebook – WSJ Interview (Sheryl Sandberg)

- WSJ: What steps does Facebook still need to take to solidify its position?
- WSJ: How does that help Facebook make money?
- WSJ: What is the long-term vision for Facebook?

## Facebook – Financial Reports

- Facebook – Investor Relations,  
<http://investor.fb.com/results.cfm>
  - Earnings: 2012, 2013, 2014 (Third Quarter),
- Facebook Shares Surge on First Ever \$1 billion Mobile Ad Revenue Quarter, Jim Edwards, Jan. 29, 2014,  
<http://www.businessinsider.com/facebook-q4-2013-earnings-2014-1>

## Types of Business & E-Commerce

- U.S. Census Bureau Definitions,  
<http://www.census.gov/econ/estats/definitions.html#e>
- **E-Commerce**: This term describes transactions sold on-line whether over open networks such as the Internet or proprietary networks running systems such as Electronic Data Interchange (EDI).
- **Brick-and-mortar retailers**: This is a business model by which a company integrates both offline (*bricks*) and online (*clicks*) presences.

## Types of Business & E-Commerce

- **Business-to-business (B-to-B or B2B):** This term describes commerce transactions between businesses, such as between a manufacturer and a wholesaler, or between a wholesaler and a retailer. In regards to the E-Stats report, this by definition is transactions by Manufacturers and Merchant Wholesalers.
- **Business-to-consumer (B-to-C or B2C):** This term describes activities of businesses serving end consumers with products and/or services. An example of a B2C transaction would be a person buying a pair of shoes from a retailer.

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15

## Major Types of E-Commerce

- Classified **by Market Relationship**
  - Business-to-Consumer (B2C)
  - Business-to-Business (B2B)
  - Consumer-to-Consumer (C2C)
- Classified **by Technology**
  - Peer-to-Peer (P2P)
  - Mobile Commerce (M-commerce)

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16



## Major Types of E-Commerce

- Classified by Market Relationship
  - **Business-to-Consumer** (B2C)
    - Portals Model (with search engines)
      - Horizontal portals (Yahoo, Google, Bing, Altivista, etc)
      - Vertical portals (WebMD)
    - Online Retailers (Store-Front Model with shopping cart: Amazon.com)
    - Content Providers
    - Transaction Brokers
    - Market Creators
    - Service Providers
    - Community providers, ...

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17

## Major Types of E-Commerce

- Classified by Market Relationship
  - Business-to-Consumer (B2C)
  - **Business-to-Business** (B2B)
    - E-Distributors
    - E-Procurement companies
    - Exchanges and Industry Consortia
    - Industrial Networks: single firm networks, industry-wide networks
  - Consumer-to-Consumer (C2C)

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18

## Major Types of E-Commerce

- Classified by Market Relationship
  - Business-to-Consumer (B2C)
  - Business-to-Business (B2B)
  - **Consumer-to-Consumer (C2C)**
    - Auction Model: eBay

## Major Types of E-Commerce

- Classified by Market Relationship
  - Business-to-Consumer (B2C)
  - Business-to-Business (B2B)
  - Consumer-to-Consumer (C2C)
- **Classified by Technology**
  - Peer-to-Peer (P2P)
  - Mobile Commerce (M-commerce)

## E-Commerce: An Introduction

- E-Commerce Statistics in 2011 (from pp. 6-7)
  - Online consumer sales (expected to grow 14% vs. 4% of traditional retail)
  - The major source of online retail growth in the U.S. (existing buyers rather than new buyers)
  - Mobile commerce
  - Online population and activities

## E-Commerce: Online User Activities

- Online Users Activities Survey 2011, Pew Internet & American Life Project, May 2011 Survey, <http://www.pewinternet.org/Static-Pages/Trend-Data/Online-Activites-Total.aspx>
  - 78% of American adult (18 and older) use the Internet
  - 92% send/read emails (11/1/2010)
  - 92% use search engine (5/1/2011)
  - 76% get news (5/1/2011)
  - 61% do online banking (5/1/2011)
  - 65% use social network: MySpace, Facebook or LinkedIn (5/1/2011)
  - 71% watch an online video: YouTube or Vimeo (5/1/2011)
  - 71% buy a product (5/1/2011), ...

## E-Stats from U.S. Census Bureau

- The 2009 E-commerce multi-section "E-Stats" report, released May 26, 2011, <http://www.census.gov/econ/estats/>
- U.S. Shipments, Sales, Revenue and E-Commerce: 2009 and 2008 (in billions of dollars)
- Sector Analysis
  - Manufacturing
  - Merchant Wholesale
  - Retail
  - Selected Services

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23

## U.S. Shipments, Sales, Revenues and E-Commerce: 2009 and 2008

Description	Value of Shipments, Sales, or Revenue				Year to Year Percent Change		% Distribution of E-commerce	
	2009		2008					
	Total	E-commerce	Total	E-commerce	Total	E-commerce	2009	2008
<b>Total *</b>	20,014	3,371	22,470	3,774	-10.9	-10.7	100.0	100.0
<b>B-to-B*</b>	9,602	3,073	11,630	3,482	-17.4	-11.8	91.2	92.3
Manufacturing	4,436	1,862	5,468	2,171	-18.9	-14.2	55.2	57.5
Merchant Wholesale	5,166	1,211	6,162	1,311	-16.2	-7.6	35.9	34.7
Excluding MSBOs <sup>1</sup>	3,707	729	4,435	739	-16.4	-1.4	21.6	19.6
MSBOs	1,459	483	1,727	572	-15.5	-15.7	14.3	15.2
<b>B-to-C*</b>	10,412	298	10,840	292	-3.9	2.1	8.8	7.7
Retail	3,638	145	3,953	142	-8.0	2.1	4.3	3.7
Selected Services	6,774	153	6,887	150	-1.6	2.2	4.5	4.0

\* We estimate business-to-business (B-to-B) and business-to-consumer (B-to-C) e-commerce by making several simplifying assumptions: manufacturing and wholesale e-commerce is entirely B-to-B, and retail and service e-commerce is entirely B-to-C. We also ignore definitional differences among shipments, sales, and revenues. The resulting B-to-B and B-to-C estimates, while not directly measured, show that almost all the dollar volume of e-commerce activity involves transactions between businesses. See the "Note to reader" for cautions relating to the interpretation of the "Total" shown here.

<sup>1</sup>Manufacturers' Sales Branches and Offices

## **U.S. Shipments, Sales, Revenues and E-Commerce**

- 2011 E-commerce Multi-sector Data Tables (released May 23, 2013),  
<https://www.census.gov/econ/estats/2011/all2011tables.html>

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25

## **E-Commerce: Innovation, Consolidation, and Re-innovation**

- E-Commerce: A Brief History
  - E-Commerce 1995-2000: Innovation
  - E-Commerce 2001-2006: Consolidation
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26

# Summary

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27