

# ITC 250/CPET 499 Web Systems

## E-Commerce & Business: an Introduction

### References:

- \*Chapter 1 of the text book: *e-Commerce: Business, Technology, and Society*, 9<sup>th</sup> edition, 2014, by K. C. Laudon and C. G. Traver, publisher Pearson Education Inc.,
- \* World Street Journal
- \* U.S. Census Bureau

Paul I-Hai Lin, Professor  
<http://www.etcs.ipfw.edu/~lin>

## Topics

- 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

## Topics (continue)

- 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

Paul I. Lin

3

## Topics (continue)

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

Paul I. Lin

4

## 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.

Paul I. Lin

5

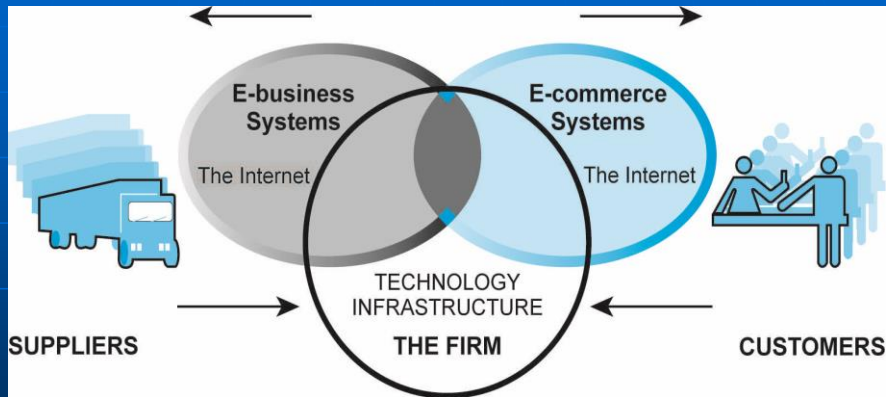
## Types of Business & E-Commerce

- **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.

Paul I. Lin

6

**Figure 1.1 The Difference Between E-Commerce & E-Business** (page 11)



CPET 581 E-Commerce & Business  
Technology, Paul I. Lin

7

## Major Types of E-Commerce

- Classified by Market Relationship or Technology
  - Business-to-Consumer (B2C)
  - Business-to-Business (B2B)
  - Consumer-to-Consumer (C2C)
  - Social E-Commerce
  - Mobile E-Commerce (M-commerce)
  - Local E Commerce

Paul I. Lin

8

## 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, ...

Paul I. Lin

9

## 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)

Paul I. Lin

10

## Major Types of E-Commerce

- Classified by Market Relationship
  - Business-to-Consumer (B2C)
  - Business-to-Business (B2B)
  - **Consumer-to-Consumer (C2C)**
    - Auction Model: eBay
    - Craigslist Inc.,  
<https://www.craigslist.org/about/sites>

## Major Types of E-Commerce

- Classified by Market Relationship
  - Business-to-Consumer (B2C)
  - Business-to-Business (B2B)
  - Consumer-to-Consumer (C2C)
  - Social E-Commerce
    - Facebook
    - Twitters
  - Mobile Commerce (M-commerce)
    - Using Mobile technology
    - iPhone, iPad, Android, Tablet,
  - Local E-Commerce

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

- E-Stats – Measuring the Electronics Economy, the 2012 E-commerce multi-sector “E-Stats” report, released May 22, 2014, <http://www.census.gov/econ/estats/>
- U.S. Shipments, Sales, Revenue and E-Commerce: 2010 and 2011 (in billions of dollars)
- Sector Analysis
  - Manufacturing
  - Merchant Wholesale
  - Retail
  - Selected Services

Paul I. Lin

13

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

U.S. Shipments, Sales, Revenues and E-commerce: 2009 and 2008								
[Shipments, sales and revenues are in billions of dollars.]								
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
Total *	20,014	3,371	22,470	3,774	-10.9	-10.7	100.0	100.0
B-to-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-to-C*	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

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

- E-Commerce: A Brief History
  - E-Commerce 1995-2000: Innovation
  - E-Commerce 2001-2006: Consolidation
  - E-Commerce 2007-Present: Re-innovation
- Insight on Business
- Assessing E-Commerce: Success, Surprises, and Failure
- Prediction for the Future

Paul I. Lin

15

## **Summary**

Paul I. Lin

16