# Information Systems

... Connecting to the Outside World

# Web 2.0

- Participative (or Participatory) and Social Web
- Concept established by Tim Reilly
- Focuses on providing services, not simply a reference tool
- Recognizes the importance of the user as a part of the system, providing data and information (feedback) that makes the service better
- Natural evolution of e-commerce and m-commerce
- Example: everything on the web today. (even Wikipedia is 'interactive')

### **Connecting with Customers and Suppliers**

### Key Concepts:

- Information systems remove time and distance barriers to many types of sales compared to brick and mortar.
- Information systems enable a company to make its sales process more effective.
- Information systems enable a company to treat its customers personally, even without personal contact.
- Information systems enable a company to manage its supply chain, making it more efficient and more effective.

#### **E-Business and E-Commerce**

#### In 2012:

consumers bought about a trillion dollars worth of goods from online sources. (\$1,000,000,000,000.00)

That's less than 10% of what they bought from traditional stores but traditional stores have existed for millennia and online shopping is about as old as you are

#### In 2017:

consumers bought about 2.3 trillion dollars worth of goods from online sources. (\$2,300,000,000,000.00)

That's 35% of what they bought from traditional stores Amazon accounted for 44% of all U.S. ecommerce sales

Helpful numbers to put these statistics in perspective: The world population is 7.6 billion and the internet has 4.1 billion users.

#### **E-Business and E-Commerce**

#### **E-Commerce:**

online **buying** and **selling** of goods and services.

#### **E-Business:**

Carrying out any type of business activity online.

Filing an automobile insurance claim,

registering for courses online,

or checking how much your dental insurance will cover

E-Business is NOT e-commerce since nothing is bought or sold (but e-commerce is a part of e-business)



#### **E-Commerce**

#### **E-Commerce:**

- falls into two (2) categories:

### **Merchant companies**

- that take title to the goods they sel buy goods and resell them
- sell services that they provide

#### **Merchant Companies**

- Business-to-consumer (B2C)
- Business-to-business (B2B)
- Business-to-government (B2G)

#### **Nonmerchant Companies**

- Auctions
- Clearinghouses
- Exchanges

### **Nonmerchant companies**

- arrange for the purchase and sale of goods without ever owning or taking title to those goods
- sell services provided by others

### **E-Commerce Merchant Companies**

**Business-to-consumer (B2C)** 

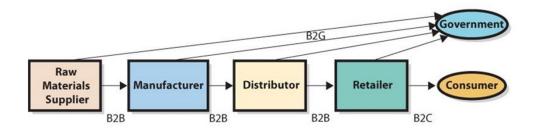
Sales between a supplier and a retail customer (the consumer)

**Business-to-business (B2B)** 

Sales between companies

**Business-to-government (B2G)** 

Sales between companies and governmental organizations



### **E-Commerce Non-Merchant Companies**

#### **Auctions**

Facilitate outside buyer - seller transactions

### Clearinghouses

Listing overstock surplus for sales from outside seller

### **Exchanges**

Facilitates trades of non real goods (i.e. stocks and futures)

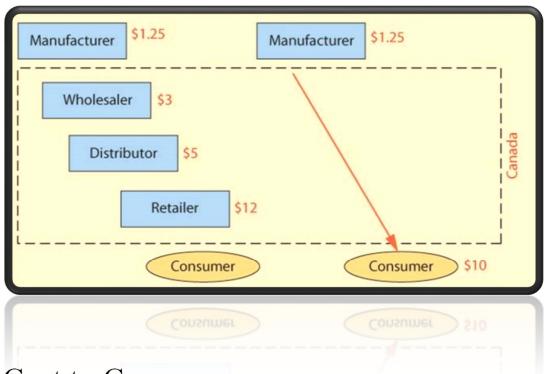
#### **Consumer to Consumer**

Craiglist and Kijiji - electronic swap meet

### **Mobile Commerce (M-Commerce)**

- more than just using a mobile device such as a laptop, tablet, or smartphone for e-commerce
- e-commerce based on location opportunities:
  - using location information to customize a transaction.
- performing an activity in a way that it could not be performed with a non-portable device.
  - paying with a smartphone instead of cash or debit card.
- mobile commerce offers many opportunities to customize the live shopping experience.

### **Disintermediation**



- a.) Lower Cost to Consumer
- b.) Higher per unit profit for Manufacturer
- c.) (maybe) increase sales...

#### **Issues with E-Commerce**

#### **Channel conflict**

- Manufacturer sells through two methods (traditional and B2B)
- Retailer discovers being 'cut out of the loop' (B2B means no sales for them...)
- Retailer retaliates by discontinuing sales of their product to the general public
- Result: manufacturer loses more sales in the end

### **Issues with E-Commerce**

### **Price conflict**

- Manufacturer lowers price by B2B
- Retailer does not want consumers to know reduced price
- Result: competition for sales reduces the retailer's ability to compete

#### **Issues with E-Commerce**

### **Logistics expense**

- Cost of sale per unit may increase if sold one at a time (vs. shipping multiple units to a retailer all at once).
- entire fulfillment department would need to be created
- Result: per unit profit may actually decrease due to increased logistical costs

#### **Issues with E-Commerce**

### **Customer service expense**

- Traditional sales: Manufacturer demonstrates how a product works to one (1) regional manager, who instructs their sales people, who instruct the consumer
- B2C: Manufacturer must instruct each buyer
- Result: Increase training/support costs

#### **Issues with E-Commerce**

### **Showrooming**

- Consumer goes to physical store to examine the product in person ...
- then consumer buys the item on-line
- Result: Store pays sales people, but no direct sale results. Physical store incurs cost with out realizing a profit.

#### **Issues with E-Commerce**

#### **Taxation**

- Traditional sales are taxed on location of sale (purchase an item in Ontario and pay Provincial and Federal taxes)
- B2C sales: how to tax?

  Physicals goods could be subject to duties
  What about software or services?
- Result: Reduced revenue for the Government

### **Business Capital**

Business literature defines three types of capital:

Physical: the investment of resources for future profit

**Human**: the investment in human knowledge and skills for future profit

**Social**: investment in social relations with the expectation of returns in the marketplace

**Social Capital** adds value in four ways:

- Information
- Influence
- Social credentials
- Personal reinforcement

### How Do Social Networks Add Value to Business?

- Organizations have social capital just as humans do
- Social capital is measured using: number of relationships, strength of relationships, and resources controlled by "friends"
- Endorsements by high profile people are a traditional way of increasing social capital
- Progressive organizations maintain a presence on Facebook, LinkedIn, Twitter, and possibly other sites

### **Computing your Social Capital**

Social capital is not an abstract concept that applies only to organizations

It applies to you as well

You and your classmates are accumulating social capital now

### **Computing your Social Capital**

# **Hiding the Truth?**

No one is going to publish their ugliest picture on their Facebook page

How far should go to create a positive impression?

What is your digital footprint?

What does it 'say' about you?

### **Computing your Social Capital**

Do we weigh more with more information?

Is it always the same information?

Given to your employer Given to your friend

### **Computing your Social Capital**

# **Employment**

Impact of Social Networking

Reference Checks (search engines)

Staying Employed (blogs, etc..)

Facebook – MySpace

What's on your page? – Your Personal Profile

What might be on your friends & family pages?

### **MIS - Business**

### Common Sense

- how can you ensure efficient AND effective.