Class Announcements

- Due Today
  - Project Preferences
  - Assignment 1: Resume and Cover letter

- For Next time Read:
  - Chapter 2 - Section II of O'Brien

Outline For Today

- Class Announcements
- Student Presentations
- Systems Concepts (O'Brien Ch1)
- Ch 2 O'Brien

What is a Business?

An organization that provides a product and/or a service that satisfies a need for which people are willing to pay money.

Makes money if revenues exceed costs.

Why Does a Company Need to Make a Profit?

- An obligation to owners/shareholders
  - Owners and shareholders have invested money and time. They expect to see something in return.

- Survival requires continued investments
  - new product development.
  - facilities and equipment.
  - acquiring other companies.
  - Invest in employees (training and salary increases)

- Stakeholders want to see performance before investing in a company's future.
Recall: What is a System?

System Definition: A group of interrelated components working toward the attainment of a common goal by accepting inputs and producing outputs in an organized transformation process

- Input
- Processing
- Output
- Feedback
- Control

Business as a system

A business is an organizational system where economic resources (input) are transformed by various organizational processes (processing) into goods and services (output).

A Business is a System

Helps to remember and to tie together:

- Some business basics while remembering the importance of making a profit.
- The understanding of business functions.
- The appreciation for the importance of business processes.

Business as a system

A business is an organizational system where economic resources (input) are transformed by various organizational processes (processing) into goods and services (output).

Information systems provide information (feedback) on the operations of the system to management for the direction and maintenance of the system as it exchanges inputs and outputs within its environment.

Important Things to Understand

Two terms:

1) business functions
2) business processes

Will be frequently used throughout this course.

It would be a good idea to make absolutely sure that you know what they are.

Business Functions

Function: A group of people with related skills (specialized) seems to be a good starting point in understanding functions but this is a fairly loose definition.
**Business Functions**

- Examples
  - Design
  - Engineering
  - Sales
  - Finance
  - Marketing
  - Etc...

**What prompts the creation and justification of business functions?**

- Specialization
- Size
- Efficiency
- More cost effective

**Business Processes**

What is a business process?
- A designed **succession of actions** to the accomplishment of some result in a business.
- Example
  - Order Fulfillment

**Cross Functional Process**

- A business process that crosses over multiple functions
- Are all business processes cross functional?

**A Business Process**

**A business process within a function**

Example: Channel Selection Process within Marketing function

- Find sales by channel
- Data for similar products
- Conduct Focus Group Studies
- Mine Demographic data
- Combine information
- Make decision
- New Product idea
- Conduct Focus Group Studies
- Mine Demographic data
- Combine information
- Make decision
- Tell Mfg. to make order
Processes tend to be more simple at smaller organizations

Enrollment Process at a small, fictitious university...

- Fee Processing
- Financial Aid
- Housing
- Dining
- Recreation Membership
- Health Insurance
- Class Registration

Enrollment Process at UCSC...

- Billing
- Financial Aid
- Health Insurance
- Housing
- Dining
- Class Rep.

Similarly, at small companies

Example: Capital Equipment Purchase Business Process...

- BOSS

Big company

Capital Equipment Purchase Business Process

- Director
- Manager
- Accounting
- IT Dept.

So where do Information Systems Fit into this Story??

- Coordinates flow of information between functional departments carrying out a business process.
  - Increase Speed
  - Reduce Errors
- May reduce number of steps in a business process.
- May even allow new processes that would not have been feasible before...

Information System Roles

- Competitive Advantage
- Support of Strategies for Competitive Advantage
- Effectiveness
- Support of Business Decision Making
- Efficiency
- Support of Business Processes and Operations
A few Information System Categories...

Transaction Processing Systems
- Record and Process data resulting from business transactions
- Example: Credit card trans. processing
- 2 types
  - Real-time
  - Batch-Processing

An example: Process Control Systems
- Monitor and control physical processes
- Example:

An example decision support systems

What is Business Process Reengineering?
- A fundamental rethinking and redesign of business processes
- Minor improvement to a business process is often called streamlining the business process
Role of Information Systems in Business Process Reengineering?

- IS often enables complicated business processes be made more simple.

- IS doesn't always drive business process reengineering though…