Outline For Today

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

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

- For Next time Read:
  - Chapter 2 - Section II of O’Brien
STUDENT PRESENTATIONS
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
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.
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.
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 accomplish of some result in a business.

Example

- Order Fulfillment
A Business Process

Customer

Sales

Finance

Inventory Control

Warehousing

Business Functions

Order

Take Order

Enter Order

Credit Check

Check Stock

Print Packing list

Find Goods

Ship

Print Invoice

Tell Mfg. to make order
Cross Functional Process

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

Example: Channel Selection Process within Marketing function

New Product idea

Conduct Focus Group Studies

Find sales by channel
Data for similar products

Mine Demographic data

Combine information
Make decision

Example: Channel Selection Process within Marketing function
Processes tend to be more simple at smaller organizations

Enrollment Process at a small, fictitious university...

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

Student

Universal Bureaucrat
Processes tend to be more simple at smaller organizations

Enrollment Process at UCSC…

- Billing
- Financial Aid
- Health Insurance
- Housing
- Dining
- Class Reg.
- Rec center
Similarly, at small companies

Example: Capital Equipment Purchase Business Process...
Big company

Capital Equipment Purchase
Business Process
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
- Effectiveness
- Efficiency
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
Business Process Example

Customer

Sales

Finance

Inventory Control

Warehousing

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Tell Mfg. to make order
A Streamlined Business Process

Customer

Sales
Finance
Inventory Control
Warehousing

Business Functions

Order
Take Order
Credit Check

Automatic Credit Check

Enter Order
Check Stock

Print Packing list

Find Goods
Ship

Tell Mfg. to make order
A Reengineered Business Process

Business Functions

- Customer
  - Order
    - On web
- Sales
- Finance
- Inventory Control
- Warehousing

Inform Mfg. to replenish stock

Automatic Credit Check
Automatic Checking of Stock

Print
  - Packing list
    - And invoice

Find Goods

Ship
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...