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
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
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
Processes tend to be more simple at smaller organizations

Enrollment Process at UCSC...

- Billing
- Financial Aid
- Health Insurance
- Housing
- Dinning
- Rec center
- Class Reg.
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

Support of Strategies for Competitive Advantage

Support of Business Decision Making

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
Business Process Example

Customer

Sales

Finance

Inventory Control

Warehousing

Business Functions

Order

Take Order

Enter Order

Credit Check

Check Stock

Print Packing list

Find Goods

Print Invoice

Ship

Tell Mfg. to make order
A Streamlined Business Process

Customer

Sales

Finance

Inventory Control

Warehousing

Order

Take Order

Credit Check

Enter Order

Check Stock

Tell Mfg. to make order

Print Packing list

Find Goods

Ship

Automatic Credit Check

Print Invoice
A Reengineered Business Process

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

Business Functions

Inform Mfg. to replenish stock

Automatic Credit Check
Automatic Checking of Stock

Order

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...
Porter Competitive Model?

- **What is it?**
  - A model to help understand the competitive environment in which a company operates.

- **What are the “5 forces”?**
  - Intra-Industry Competition
  - Bargaining power of Suppliers
  - Bargaining power of Customers
  - Substitutes
  - Threat of New Entrants.
Porter Competitive Model
(Identify the Industry and the Specific Market Being Evaluated)

- Potential New Entrants
- Intra-Industry Rivalry
  - Strategic Business Unit
- Bargaining Power of Suppliers
- Bargaining Power of Buyers
- Substitute Products and Services
Porter Competitive Model
Education Industry – Universities

Intra-Industry Rivalry
SBU: UCSC
Rivals: UC campuses, CSU, Private universities, Community Colleges

Potential New Entrants
• Foreign Universities
• Shift in Strategy by Universities or Companies

Bargaining Power of Suppliers
• Faculty
• Staff
• Equipment and Service Suppliers
• Alumni
• Foundations
• Governments
• IT Vendors

Bargaining Power of Buyers
• Students
• Parents
• Businesses
• Employers
• Legislators

Substitute Products and Services
• Internet Distance Learning
• Books and Videotapes
• Computer-Based Training
• Company Education Programs

• Students
• Parents
• Businesses
• Employers
• Legislators
Porter Model in Business Paper

- You must include a Porter Model in your Business Paper
  - Figure
    - Make it look nice!
  - Narrative analysis of the five forces
    - Identify the industry.
    - Identify the major buyers, suppliers, potential new entrants, substitutes, and inta-industry rivals.
    - Discuss if and why these players put strong or weak competitive pressures on your business.
Example: Usefulness of Porter Model

- Bob wants to start a dentist office
  - However, bob did not go to dental school
  - Bob will hire the dentist and other staff
  - Is this a good model?

No! Dentist has too much bargaining power, she could always go into business for herself.
Example: Usefulness of Porter Model

- Suppose Alice, who is a dentist, opens an office

  **New Entrants**
  - Dental School Graduates
  - Dentists moving in from other regions

  **Suppliers**
  - Staff
  - Hygienists

  **Intra-industry rivals**
  - SBU: Alice’s Dentist Office
  - Other local dentist offices

  **Substitutes**
  - Alternative Medicine?

  **Buyers**
  - Public in general
  - Insurance companies
  - Those wanting cosmetic dentistry