Office Hours

- 4 - 5 Tuesdays
- Office: E2 - 557

Announcements

- Business paper preferences due Tuesday
- Assignment 1 posted and due Thursday (4/10)
  - On OTIS case
- Read ch 3 of Laudon and Laudon

Business Analysis Paper Preferences

Due Tuesday 4/8!

At least two of your preferred companies must be from this list:
- Ryanair
- CVS Caremark
- eBay
- Carrefour
- Zara
- Netflix
- Barclays
- Amazon

With your preferences in mind, we will make the final company assignments to the groups.

Business Paper Preferences 4/8

- To help us create balanced groups...
- ...you will self identify your best skills from:
  - W: Writing
  - A: Accounting and finance
  - C: Computers and technology
  - S: Business strategy
  - L: Literature Search

Example:

- Bob Smith smith@yahoo.com A, L
- Jane Do jdo@hotmail.com C, W
- Chris Tomas christ@gmail.com S, W
Business Paper Proposal
- As a group write a 2-3 page description of what you plan to investigate in your business paper!
- Show that you've done some research!
- Cite some facts, and some technologies and or strategies that you've heard about the company that you would like to investigate further.
- Remember to cite your sources properly!!!
- DUE: April 24

Business Paper
First Draft
- draft of your final paper
- The closer to "done" the better
- Due 5/20

Business Paper
• Final Draft
• Due 6/5 (Last Day of Class).

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

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.
**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.

**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.

**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

A Business Process

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

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
Processes tend to be more simple at smaller organizations

Enrollment Process at UCSC...

Similarly, at small companies

Example: Capital Equipment Purchase
Business Process...

Big company

Capital Equipment Purchase
Business Process

Business and Firm Hierarchies

• Hierarchy with authority is concentrated at top
• Goal: Achieve Coordination
• Typical Breakdown:
  – Senior management
  – Middle management
    • Knowledge workers
  – Operational management
    • Data workers
    • Production or service workers
• Each group has different needs for information

Components of a Business

Transaction processing systems:
  • Keep track of basic activities and transactions
  • (e.g., sales, credit decisions, flow of materials in a factory)
• Management information systems and decision-support systems:
  • Assist monitoring, controlling, decision making, and administrative activities
• Executive support systems:
  • Help address strategic issues and long-term trends, both in firm and in external environment
Types of Business Information Systems

- Transaction processing systems:
  - Serve operational managers.
  - Answer routine questions
    - E.g., Is the widget in stock? Was Bob paid?
  - Monitor status of internal operations and firm’s relationship with external environment.
    - E.g., Is the gizmo in production? Did we get paid?
  - Feed information to higher level info. systems.

- Management information systems:
  - Assist middle managers with reports on firm’s performance.
  - Summarize and report on basic operations using data from TPS.
  - Provide weekly, monthly, annual results, but may enable drilling down into daily or hourly data.
  - Typically not very flexible systems with little analytic capability (in contrast to higher level systems).

Components of a Business

- Transaction processing systems (TPS):
  - Capture employee payment transaction data (e.g., timecard).
  - Produce online and hard copy reports for management and employee paychecks.

- Management information systems (MIS):
  - Assist middle managers with reports on firm’s performance.
  - Summarize and report on basic operations using data from TPS.
  - Provide weekly, monthly, annual results, but may enable drilling down into daily or hourly data.
  - Typically not very flexible systems with little analytic capability (in contrast to higher level systems).

Sample MIS Report

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>PRODUCT DESCRIPTION</th>
<th>SALES REGION</th>
<th>ACTUAL SALES</th>
<th>PLANNED</th>
<th>ACTUAL SALES PLANNED</th>
</tr>
</thead>
<tbody>
<tr>
<td>4469</td>
<td>Carpet Cleaner</td>
<td>Northeast</td>
<td>4,066,700</td>
<td>6,000,000</td>
<td>0.68</td>
</tr>
<tr>
<td></td>
<td></td>
<td>South</td>
<td>3,176,112</td>
<td>3,700,000</td>
<td>0.85</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Midwest</td>
<td>4,187,061</td>
<td>6,000,000</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>West</td>
<td>4,065,440</td>
<td>6,000,000</td>
<td>0.91</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td>18,718,283</td>
<td>17,000,000</td>
<td>0.95</td>
</tr>
</tbody>
</table>

This report, showing summarized annual sales data, was produced by the MIS in Figure 2-10.

Decision Support System Example:
Voyage-Estimating Decision Support System

This DSS operates on a powerful PC. It is used daily by managers who must develop bids on shipping contracts.

Figure 2-8
Executive support systems (ESS):
- Serve senior managers.
- Address strategic issues and long-term trends
  - E.g., what products should we make in five years?
- Nonroutine decision making
- Provide generalized computing capacity that can be applied to changing array of problems
- Draw summarized information from MIS, DSS, and data from external events
- Typically use portal with a Web interface to present content

Types of Business Information Systems

**Executive Support Systems**
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**Model of an Executive Support System**

This system pools data from diverse internal and external sources and makes them available to executives in an easy-to-use form.

**Enterprise Applications**
- Systems that span functional areas, focus on executing business processes across the firm, and include all levels of management.
- Supply chain management systems.
- Customer relationship management systems.
- Knowledge management systems.

**Supply Chain Management Systems**
- Manage relationships with suppliers, purchasing firms, distributors, and logistics companies.
- Manage shared information about orders, production, inventory levels, and so on.
  - Goal is to move correct amount of product from source to point of consumption as quickly as possible and at lowest cost.
- Type of interorganizational system:
  - Automating flow of information across organizational boundaries.

**Customer Relationship Management Systems**
- Help manage relationship with customers.
- Coordinate business processes that deal with customers to optimize revenue and customer satisfaction, and increase sales.
- Combine sales, marketing, and service record data from multiple communication channels to provide unified view of customer, eliminate duplicate efforts.
- E.g., Saab CRM applications to achieve 360 degree view of customers resulted in greater follow-up rate on sales leads and increased customer satisfaction.

**Enterprise Systems**
- Integrate data from key business processes into single system.
- Speed communication of information throughout firm.
- Enable greater flexibility in responding to customer requests, greater accuracy in order fulfillment.
- Enable managers of large firms to assemble overall view of operations.
- Alcoa used ERP to eliminate redundancies and inefficiencies in its disparate systems.
Knowledge Management Systems

- Intangible knowledge assets
- Knowledge about producing and delivering products
- Source of value and advantage for firms
- Knowledge management systems:
  - Help capture, storage, distribute, and apply knowledge so that it can be leveraged for strategic benefit.
  - Include systems for:
    - Managing and distributing documents, graphics, other digital knowledge objects
    - Creating knowledge directories of employees with specialized expertise
    - Distributing knowledge

Systems That Span the Enterprise

Business Benefits of Collaboration and Teamwork

- Large business firms: "command and control" organizations in which upper management created the strategy and middle management carried out their orders.
- Today, businesses rely on collaborative culture.
- Teams of employees responsible for creating and building

Evaluating and Selecting Collaboration Software Tools

- What are your firm’s collaboration challenges?
- What kinds of solutions are available?
- Analyze available products’ cost and benefits.
- Evaluate security risks.
- Consult users for implementation and training issues.
- Evaluate product vendors.

The Time/Space Collaboration Tool Matrix

Collaboration technologies can be classified in terms of whether they support interactions at the same or different time or place, and whether these interactions are remote or colocated.

The Information Systems Department

- Programmers
- Systems analysts
- Principle liaisons to rest of firm
- Information systems managers
- Leaders of teams of programmers and analysts, project managers, physical facility managers, telecommunications managers, database specialists, managers of computer operations, and data entry staff
- Senior managers: CIO, CSO, CKO
- End users
- External specialists

Information Systems Services

- Services provided by the information systems department include:
  - Computing and telecommunications services
  - Data management services
  - Application software services
  - Physical facilities management services
  - IT management services
  - IT standards services
  - IT educational services
  - IT research and development services