Outline For Today

- Class Announcements
- Student Presentation
- ERP and other Organizational Applications
- Frito Lay Case
Class announcements

- Assignment 2 due Wednesday

- Project Proposal due April 25
  - See guidelines on Class Webpage.

- Look at “Strategy and the Internet,” by M. Porter
  - In your reader
  - Discusses how the Internet affects the Porter 5 forces.
  - It might be a good article to cite in your business paper.

- Group Issues??
  - Students without a group?
  - Groups missing a group member?
  - Groups of 2 wanting to add another member?
Class announcements

- **Reading for next class**
  - *Messerschmitt Ch 3.4, 3.5, 3.6, 3.7*
  - *Alibris Case (Required)*
  - *Student Presenters next class:*
    - Weseloh, Matthew Thomas (Alibris case)
    - Laje, Clayton Roy Fontechia (news article)

- **Forum**
  - Put your first and last name on any posts

- **Class**
  - If you think you made a good comment in class that got overlooked, you may talk to Shiv after class.
Student Presentation

Ting Ting He
So what exactly is ERP??
Early MRP

- MRP (Material or Manufacturing Resource Planning)
  - Take:
    - Product Demand forecasts
    - Inventory Balances
    - Replenishment Lead Times
  - Develop a Production schedule for a single plant
  - At this Point, it is a planning tool
Later on, more capabilities added:

- Order Processing
- Product Costing

The planning tool begins to take more and more of an active roll in the business processes.
A desire to Link Across Functional Departments of firm

- Each functional department had its own legacy application
  - Programmed in different languages
  - Different Data formats

- Often some data was shared between departments by duplicating it.
MRP evolves into ERP

- A common software architecture with modules to support different business functions.
  - Accounting, finance, sales, HRM, material management, etc...

- Key features:
  - Multi-functional
  - Integrated
  - Modular
ERP Overview

![ERP System Diagram]

- Human Resources
- Financials & Accounting
- Sales & Distribution
- Inventory & Manufacturing
- Suppliers
- Customers

ARCHITECTURE

INDUSTRY SOLUTIONS
ERP

- How would you design an ERP?
- Design a user interface for each module
  - Ask user to fill in certain “fields” at particular times.
  - Set up a sequence of events
    - When the sales department enters an order, that event triggers an event at the manufacturing department.
- But by doing this, aren’t we presuming a particular business process?
Questions

How standardized are organizational processes?

- Customer service
- Finance
- Manufacturing
Fundamental options

- Customize the application to existing organization?
- Mold organization to off-the-shelf application?
  - Is software a good way to propagate best practices?
What did Cisco do?

- “All-Star” team from people in all functional departments.
- Commitment from Oracle and KPMG to work with Cisco to customize the software to Cisco's needs.
- Commitment from top management
- Rapid Iterative Prototyping approach
ERP’s are difficult

- Dow chemical spent $500 million implementing one system, gave up and switched to another!

- Many retailer shelves were bare of Hershey Candy for Halloween 99 after Hershey tries to adopt SAP’s ERP.

- Many other fiascos...
Some ERP categories

- Sales force management
- Document management
- Customer service and support
- Manufacturing logistics
- Accounting
- Human resources
- Supply-chain management

Slide adapted from slides for *Understanding Networked Applications*
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Productivity quandary

Economists have difficulty identifying major productivity improvements due to investment in information technology.

Questions:
- How does one separate quality from productivity?
- In what ways can computing harm productivity?
Classification of Organizational Applications

These don’t necessarily have to be implemented as part of an ERP

- Worker Collaboration
- Operations and Logistics
- Decision Support
- Information and Knowledge Management
- Customer Outreach
  - Also Called Customer Relationship Management (CRM)
Frito Lay Case

Student Presenter:

- John Joseph Prager
Frito Lay Case

- Is the HHC a good idea?
Frito Lay Case

Risk?

Project Size?
Rollout?