Class announcements
- Assignment 3 due Tuesday 10/18
- Project Proposal due Thursday 10/20
  - See guidelines on Class Webpage.
- Reading for next class
  - Messerschmitt Ch 4
- Student Presentations Tuesday 10/18
  - Brandi Carter
  - Lilian Nguyen
- Midterm on 10/25
  - Less than 2 weeks from today!

Student Presentation
Karlen Knight

Cisco Summary
Success Factors
- Cross-Functional Team of top people
  - People from across the company involved
- Hungry Vendors
  - Oracle and KPMG needed this to succeed
- Strong Support from Top Management
- Favorable Hardware Contract
- Rapid Prototyping
- Aggressive pace
Good management or luck?

Cisco Summary
Challenges
- Poor testing Strategy
- Inadequate Hardware
- Software required more modifications than originally hoped.

Cisco Summary
What did it cost?
Costs Beyond original budget:
Non-IT Personnel In Project
- 80 personnel X 8 months X 160 hours / month X 100 hour = $10 million
IT-Personnel beyond original 20
- 80 personnel X 4.5 months X 160 hours / month X 100 hour = $5.7 million

Actually cost more than 15 million more than the original budget of $15 million!

Was this really a success?
E-Commerce

- Major Categories
  - Consumer (B2C)
    - Example: Amazon.com sells books to consumers.
  - Inter-consumer (C2C)
    - Example: eBay
  - Inter-enterprise (B2B)
    - Example:

E-Commerce Principal Steps

- Matching buyers and sellers
- Negotiating terms
- Consummation
- Customer service

Matching Buyers and Sellers

- Catalog
  - Seller publishes a catalog of goods and services
  - Willing buyers access at their initiative
- Advertising
  - Attach advertisements to other publications or web pages
  - Example: Spam
- Intermediary Recommender
  - Examples?

Intermediaries?

- What roles should intermediaries play in the networked age?
- What intermediary roles may change or even be eliminated?
  - Travel Agents?
  - Others?

Negotiating Terms

- Fixed price
- Price based on buyer characteristics
  - History
  - Demographics
  - Behavior
  - Sequential versioning
  - Examples?
    - (Airlines, Hotwire, TurboTax)
- Auctions

Consummation

- Order
- Fulfillment
  - Seller conveys goods to buyer
- Payment
  - Buyer conveys payment to seller
- Security?
  - Need to ensure both fulfillment and Payment occur.
Payment options

(Topic of Chapter 14)
Account transfer authorization
Credit/debit card
Digital cash

Micropayments
- Low transaction costs
- Consolidation

Customer Support

- Often need to provide post-sales service to the customer
  - In person
  - Over telephone
  - Via Network
    - Email
    - Remote conferencing
    - FAQ board
    - Automatic distribution of new versions or patches

Customer Relationship Management

- The challenge of maintaining the relationship with a customer is called Customer Relationship Management (CRM)

- CRM software applications seek to provide customer facing employees a complete view of each customer.
  - What they've bought and returned.
  - What problems they've reported.
  - What other agents they've talked to in the past.

- An opportunity to add value.

E-Commerce

- Major Categories
  - Consumer (B2C)
  - Inter-consumer (C2C)
  - Inter-enterprise (B2B)

Consumer e-commerce (B2C)

- What have you bought on the Internet, or what do you buy most often?

- What are the advantages and disadvantages compared to a retail store or direct mail catalog?

Some Advantages

- For the Consumer
  - Check prices at many vendors with minimal effort
  - Price many options
  - Anonymity
  - Order tracking

- For the Business
  - Global reach
  - Automate order taking (cost savings)
  - Price Discrimination
Inter-Consumer (E-commerce)

- Prime Example
  - E-Bay

- Other examples?

- What value does something like E-bay add over a simple classifieds listing like craigslist?

Inter-Enterprise E-Commerce (B2B)

- **Procurement**
  - One enterprise purchases goods or services from another

- **Direct Procurement**
  - Ongoing, consistent, and scheduled procurement

- The relationship between firms involved in direct procurement often called a **Supply Chain**

- The set of problems associated with managing a supply chain is called **Supply Chain Management** (SCM)

SCM

- Need to manage the procurement of parts
  - Don’t run out of any one
  - Don’t order too many
  - Order far enough in advance

- Ideally
  - Know in advance
    - # cars
    - features

- **Thousands of orders per day, each with different requirements!**

- Adjusting orders from suppliers constantly according to demand

- Minimal inventories
  - Cut costs
  - Much more sensitive to errors or disruptions

- **Mass customization** requires sophisticated SCM

Networked Computing in direct Procurement

- History predates Internet

- **Electronic Data Interchange (EDI)**
  - Exchange order information between firms involved in direct procurement
  - Usually large firms who could who afford proprietary communication links
  - Initially order and invoice
  - Existed since 70's

- **Financial EDI (FEDI)** later added EFT payment capability

Networked Computing in direct Procurement

- XML (Extensible Markup Language) is another data interchange format making an impact on inter-enterprise commerce

- We will talk more about this later in the quarter.
**Indirect Procurement**

- Sporadic purchase of goods and services to support organizational objectives
  - Example: Office Furniture