ISM 50 - Business Information Systems
Lecture 8

Guest Instructor: John Musacchio
Instructor: Rom Akella
UC Santa Cruz
Jan 26, 2010

Class announcements

Reading for next class
  • Messerschmitt Ch 4

Student Presentation

Cisco Review

- Team of people from all types of departments
  - "cross-functional team"
- Was this necessary?

Cisco Review

- Vendor Selection
  • KPMG consultants
  • Oracle ERP
  • Good selection? Why were they "hungry"?

Cisco Review

- Top Management made it a priority
  • What effect did this have?
Cisco Review

- Rapid Iterative Prototyping?
  - What was this?
  - Was it a good strategy?
  - Was aggressive pace good, or reckless?

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?

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?

Cisco review

- Project justification
  - Did they do a RoR or NPV analysis to justify the project?

Cisco Summary

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

E-Commerce

- Major Categories
  - Consumer (B2C)
    - Example: Amazon.com sells books to consumers.
  - Inter-consumer (C2C)
    - Example: e-bay
  - 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
  - All cars
  - Features

**SCM**
- 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
Alibris

- Why did Interloc succeed so early on?

- Why did Manley feel they needed the Sparks facility?

- How does the Sparks facility keep them from becoming disintermediated?

Alibris

- If Interloc is so successful, why change it?

- What will change as Interloc becomes Alibris?

- Should Alibris actually buy books and fill up the Sparks facility?
Alibris

- Why is Alibris having so much trouble setting up simple e-commerce capabilities?
- Is this really that hard??
- Is it rare for a new software product from an established, reputable vendor not to work properly?

Alibris

- Should Alibris stick with Oracle? Or switch back to Thunderstone?

Alibris

- Should Manley take the "white knight's" offer and fire the whole IT staff??!

Alibris

- Rejects "white knight" offer
- Manley secures another bridge loan
- Goes Live 1998
- Thunderstone's software works ok
- 1 million books at Sparks warehouse by 2000
  - Originally all on consignment from dealers
  - Later, purchases books
- 2002 - Revenue $31 million, loss $7.2 million
- 2003 - Revenue $45.5 million, loss $4.8 million
- March 2004 files for "auction based" IPO
  - May 2004, withdraws IPO after price too low
  - Still relying on private financing