Lecture notes I- 2
Pricing Information

- Pricing strategies
- Personalized pricing
- Group pricing

Example: Britannica v. Encarta

- Britannica: 200 years, \$1,600 for a hardback set
- Microsoft purchased Funk & Wagnalls to make Encarta (1992)
- Britannica response
  - Sales dropped 50% between 1990 and 1996
  - Online subscription at \$2,000 per year
  - Online subscription at \$120
  - CD for \$200
  - CD \$70-\$125 since 1996
- Problem: Whether it can sell to a large enough market to recover its costs.

Production Costs

- First-copy costs dominate
  - Sunk costs (not recoverable)
- Variable costs small; no capacity constraints
  - Microsoft has 92% profit margins
- Significant economies of scale
  - Marginal cost less than average cost
  - Declining average cost

Implications for Market Structure

- Cannot be "perfectly competitive"
- 2 sustainable structures
  - Dominant firm/monopoly
  - Differentiated product
- Combinations of above

Strategy

- What to do
  - Differentiate your product
    - Add value to the raw information to distinguish yourself from the competition
  - Achieve cost leadership through economies of scale and scope

Commoditized Information

- CD ROM phonebooks
- 1986: Nynex charged \$10,000 per disk for NY directory
- ProCD and Digital Directory Assistance
- Chinese workers at \$3.50 daily wage
- Bertrand competition
  - Start at \$200 each
  - Price forced to marginal cost

If You are in Commodity Business

- Cost leadership
- Sell the same thing over again
  - Baywatch (TV show), Reuters
  - Reduces average cost

Differentiated Product

- Bigbook (maps+ database of phone numbers and address)
- West Publishing (copyright key number systems)
  - Copyright and content

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Personalize Your Product

- Personalize product, personalize price
  - PointCast
  - Personalized ads
- Hot words (in cents/view)
  - Deja News: 2.0 4.0
  - Excite: 2.4 4.0
  - Infoseek: 1.3 5.0
  - Yahoo: 2.0 3.0

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Know Your Customer

- Registration
  - Required: NY Times
  - Billing: Wall Street Journal (ZIP code)
- Know your consumer
  - Observe Queries
  - Observe Clickstream

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Clickstream

- Interest and how long you look
- Problem: Connectionless nature of HTTP
- Java: a promising solution
  - Virtual Vineyards
  - Optimized browsers

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Logic of Pricing

- Quicken example
  - 1 million wtp $60, 2 million wtp $20?
  - Demand curve (next slide)
  - Assumes only one price
    - $60 or $20 has same revenue $60 million
  - Price discrimination
    - Price discrimination gives $100 million
  - Problems
    - How do you know wtp?
    - How do you prevent arbitrage?

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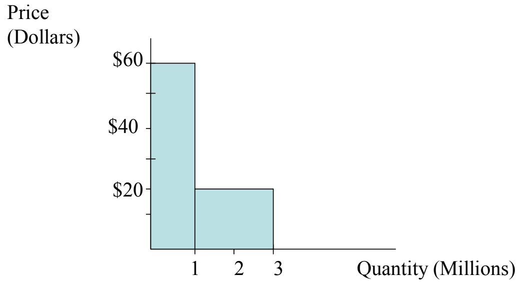
Demand Curve



Forms of Differential Pricing

- A.C. Pigou (1920)
- Personalized pricing (first degree pricing)
  - Sell to each user at a different price
- Versioning (second degree pricing)
  - Offer a product line and let users choose
- Group pricing (third degree pricing)
  - Based on group membership/identity

Personalized Pricing

- Vendor charges different prices to different consumer
  - Market research
  - Selling via catalog
- Easy on the Internet
  - Eg. Online travel agency
    - Deep-sea fishing (high-price package)
    - Snorkeling (budget package)

Personalized Pricing - Internet

- Example
  - Virtual Vineyards (trace clickstream)
  - Amazon.com (recommendation systems)
  - Auctions
  - Closeouts, promotions

Personalized Pricing (summary)

- Personalize your product and personalizing you pricing
- Know the customer
- Differentiate your prices when possible
- Use promotions to measure demands

Group Pricing

- The prices weren’t really perfectly individualized. Instead, people who had certain purchase histories, zip codes, or behavior patterns were offered different prices (based on a **group identity**)
  - Price sensitivity
  - Network effects, standardization
  - Lock-In
  - Sharing

Price Sensitivity

- International pricing
  - US edition textbook: $70
  - Indian edition textbook: $5
- Problems raised by Internet
  - Localization as solution

Network Effects

- Sellers of software can exploit this desire for standardization and offer the organization quality discount
- Compatibility
  - Site licenses
  - Variety of schemes: per client, per user, per server, etc.

Lock-In

- *If you are selling a good that has big switching costs, then it pays you to offer deep discounts to get customers*
- *Example*
  - *Wall Street Journal's* Newspapers-in-education
- Microsoft Office
  - Per seat, concurrent

Sharing

- Inconvenient for the individual user to manage information
- **Information Intermediaries** such as library or system administrators can perform the coordination task
- Transactions cost of sharing
  - Videos
  - Desire for repeat play

Summary

- Understand cost structure
- Commodity market: be aggressive, not greedy
- Differentiate product and price
- Understand consumer
- Personalize products and prices
- Consider selling to groups

