Britannica v. Encarta

- Britannica: 200 years, $1,600 for set
- 1992: Microsoft purchased Funk & Wagnalls to make Encarta
- Britannica response
  - Online subscription at $2,000 per year
  - Sales dropped 50% between 1990 and 1996
  - Online subscription at $120
  - CD for $200, since 1996 $70-$125

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
  - …and 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
  - 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, Reuters
  - Reduces average cost

Differentiate Product

- Bigbook and maps
- West Publishing and page numbers
- Copyright and content

First-mover Advantages

- Avoid greed
  - Respond to threat quickly and decisively
  - Limit pricing; highly credible with high FCs
- Play tough
  - Discourage future entry
  - Protects expression, not ideas
  - Imitation as a strategy
  - Constant innovation (search engines)

Hard to do for Incumbent

- May not recognize threat till too late
  - CP/M
  - Wordstar
  - VisiCalc

Know Your Customer

- Registration
  - Required: NY Times
  - Billing: Wall Street Journal
  - AOL’s ace in hole: ZAG
- Know your consumer
  - Observe Queries
  - Observe Clickstream

Clickstream

- Interest and how long you look
Logic of Pricing

- Quicken example
  - 1 million wtp $60, 2 million wtp $20?
  - Demand curve (next slide)
  - Problems
    - How do you know wtp?
    - How do you prevent arbitrage?

Demand Curve

<table>
<thead>
<tr>
<th>Price (Dollars)</th>
<th>Quantity (Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$20</td>
<td>0</td>
</tr>
<tr>
<td>$40</td>
<td>1</td>
</tr>
<tr>
<td>$60</td>
<td>2</td>
</tr>
</tbody>
</table>

Forms of Differential Pricing

- Personalized pricing
  - Sell to each user at a different price
  - 1st degree price discrimination
- Versioning
  - Offer a product line and let users choose
- Group pricing
  - Based on group membership/identity
  - 3rd degree price discrimination
- Quantity sold (2nd degree price discrimination)

Personalized Pricing

- Catalog inserts
  - Market research
  - Differentiation
- Easy on the Internet

Traditional Industries

- Airlines
- Lexis/Nexis
- Supermarket scanners
  - Profit margin more than doubled 1993-1996
  - More effective than other forms of advertising

Internet

- Virtual Vineyards
- Auctions
- Closeouts, promotions
Group Pricing

- 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

- Compatibility
  - Site licenses
  - Variety of schemes: per client, per user, per server, etc.
- Lock-In
  - *Wall Street Journal*’s Newspapers-in-education
- Microsoft Office
  - Per seat, concurrent

Sharing

- 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