

Strategic  
Computing and Communications  
Technology

CS 294, EE 290X, IS 290, BA 296  
Spring 98

Pricing Information

EECS/BA/SIMS 296  
Spring 1998

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 83% between 1990 and 1996
  - online subscription at \$120
  - CD for \$200, since 1996 \$70-\$125

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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

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Implications for market structure

- Cannot be "perfectly competitive"
- 2 sustainable structures
  - dominant firm/monopoly
  - differentiated product
- ...and combinations of above

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Strategy

- What to do
  - Dominant firm: cost leadership
    - look for channels and resale to reduce AC
  - Differentiated products: differentiate to add value

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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

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## If you are in commodity business

- Cost leadership
- Sell the same thing over again
  - Baywatch, Reuters
  - reduces average cost
- First-mover advantages
  - avoid greed
    - respond to threat quickly and decisively
    - limit pricing; highly credible with high FCs
  - play tough 7

## Differentiate product

- Bigbook and maps
- West Publishing and page numbers
- Copyright and content
  - protects expression, not ideas
  - imitation as a strategy
  - constant innovation (search engines)

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## Hard to do for incumbent

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

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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
  - AOL's ace in hole: ZAG
- Know your consumer
  - queries
  - clickstream

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## Clickstream

- interest and how long you look
- connectionless nature of HTTP
- Java as possible solution
  - Peapod
  - Virtual Vineyards
  - optimized browsers

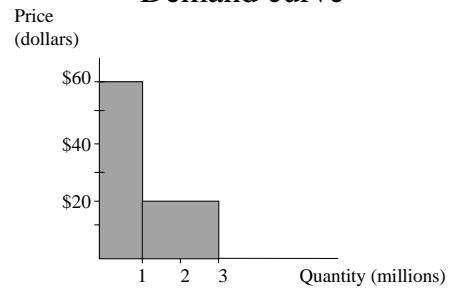
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## Logic of pricing

- Quicken example
  - 1 million wtp \$60, 2 million wtp \$20?
  - demand curve (next slide)
  - assumes only one price
    - price discrimination gives \$10 million
  - problems
    - how do you know WTP?
    - how do you prevent arbitrage?

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## Demand curve



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## Forms of differential pricing

- Personalized pricing: "one-to-one marketing"
- Versioning: product line
- Group pricing: based on group membership/identity

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## Personalized pricing

- Catalog inserts
  - market research
  - differentiation
- Easy on the Internet

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## Traditional industries

- Airlines
- Direct mail
- Lexis/Nexis
- Supermarket scanners
  - profit margin more than doubled 1993-1996
  - more effective than other forms of advertising

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## Internet

- Virtual Vineyards
- Auctions
- Closeouts, promotions

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## Group pricing

- Price sensitivity
- Network effects, standardization
- Lock-in
- Sharing

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## Price sensitivity

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

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## Network effects

- Compatibility
  - site licenses
  - variety of schemes: per client, per user, per server, etc.
- Lock-in
  - Newspapers-in-education
- Microsoft Office: per seat, concurrent

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## Sharing

- transactions cost of sharing
- Videos
- desire for repeat play

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## Electric Library

- who to sell to?
- households
- schools/libraries

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## Summary

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

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