Lecture notes I- 3
Versioning Information

- Product line (menu) pricing
- Market segmentation
- Self-selection
- Quality (Vertical) Differentiation
- Bundling

Value-Based Pricing

- Don't need to price by identity
- Offer product line, and watch choices
- Design menu of different versions
  - Target different market segments
  - Price accordingly (self selection)

Example

- Quicken example
  - Quicken for Windows at $20
  - Quicken Deluxe at $60
- Traditional Information Goods
  - Hardback/paperback
  - Movie/video

Dimensions to Use (quality differentiation)

- Delay (Fed Ex, PAWWS)
- User Interface (DialogWeb, DataStar)
- Image Resolution (PhotoDisk)
- Speed of operation (Mathematica)
- Format (Lexis/Nexis)
- Capability (Kurzweil)
- Features (Quicken, tech support)
- Comprehensiveness (DialogWeb, DataStar)

Example

- 40 type As (High type): $100 for speed, $40 for slow
- 60 type Bs (Low type): $50 for speed, $30 for slow
- Identity-based pricing: $7000 revenues
  - 100x40+50x60 (both speed)
- Offer only speedy: $50 is best price, revenues=$5,000
  - 50x(60+40)>100x40
- Offer only slow: not as profitable ($3000)
  - 30x(60+40)>40x40

Versioning Solution

- Try speedy for $100, slow for $30
  - Will this work? Compare benefits and costs
  - 100-100=0, but 40-30=10 > 0
  - Discount the fast version: 100-p=40-30
  - So, p=90
  - Revenues = $5,400 = 90x40 + 30x60

Making Self-Selection Work

- May need to cut price of high end
- May need to cut quality at low end
- Value-subtracted versions
  - May cost more to produce the low-quality version.
- In design, make sure you can turn features off!

Pitfalls

- Make sure users cannot easily turn the low-end version into high-end versions
- Arbitrage
  - Windows NT workstation/server

Online and Offline Versions

- Book: "The Whole Internet"
  - Online free, $24.95 sold in bookstores
- Software: Netscape Navigator
  - Download for free, purchased on disk
- National Academy of Science Press
  - Both online (browsing format) and offline version (reading)
- Separate distribution channels
  - Substitute or complement ?
    - Substitute : fee, advertising, or versioning
    - Complement : promote online as aggressively as possible

How Many Versions?

- One is too few
- Ten is (probably) too many
- Two things to do
  - Analyze market
  - Analyze product

Analyze Your Market

- Does it naturally subdivide into different categories? AND
- Are their behaviors sufficiently different?
- Example: Airlines
  - Tourists v. Business travelers

Analyze Your Product

- Dimensions to version
- High and low end for each dimension
- Design for high end, reduce quality for low end
- Low end advertises for high end

Goldilocks Pricing

- Goldilocks: Just right
- Mass market software (word, spreadsheets)
  - One or two version (professional, standard)
  - Network effects
  - User confusion in identifying appropriate product
- Default choice: 3 versions
- Extremeness aversion
- **Small**/large v. small/**large**/jumbo

Microwave Oven Example

- Bargain basement at $109, midrange at $179
  - Midrange chosen 45% of time
- High-end at $199 added
  - Mid-range chosen 60% of time
- Wines
  - Second-lowest price

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Customizing the Browser

- Java as a versioning technology
- Collect behavior information (Java)
- Optimize viewing
  - B&W page images
- Can turn it on and off

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Bundling

- Offer a package
- Example: Microsoft Office
  - 90% market share
- Work together
- Discount one of the products

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Reduce Dispersion

- Example: price separate or together
- Mark: $120 for WP, $100 for spreadsheet
- Noah: $100 for WP, $120 for spreadsheet
- Profits
  - Without bundling: $400 (100 for WP,100 for spreadsheet)
  - With bundling: $440 (220 for WP+ spreadsheet)

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Reduce Dispersion: Price separate or together?

	Word Processor	Spreadsheet
Mark Ketting	$120	$100
Noah Count	$100	$120

Profits: With Bundling: $440 Without: $400

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Information Bundles

- Magazines and newspapers
- Law of large numbers
- Customized bundles
- Nonlinear pricing
  - Value decreasing
  - In previous example sell first item for $120
  - Sell second item for $100
  - Example: MusicMaker

Promotional Pricing

- Sales, coupons, rebates
- Only worthwhile if segment market
- Credible signal of price sensitivity
- Chanallege: software agents
  - Example: Bargain Finder,Price Scan

Summary

- Version your product
- Version dimensions: Delay, interface, resolution, speed, etc.
- Add value to online information
- Use natural segments, otherwise use 3 versions (Goldilocks pricing)
- Control the browser
- Bundling may reduce dispersion