#### Information Rules:

A Strategic Guide to the Network Economy

# **Versioning Information**

Carl Shapiro Hal R. Varian

## 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)

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# Quicken Example Revisited

- Quicken for Windows at \$20
- Quicken Deluxe at \$60

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#### **Traditional Information Goods**

- Hardback/paperback
- Movie/video

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#### Dimensions to Use

- 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)

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## Example

- 40 type As: \$100 for speed, \$40 for slow
- 60 type Bs: \$50 for speed, \$30 for slow
- Identity-based pricing: \$7000 revenues
- Offer only speedy: \$50 is best price, revenues=\$5,000
- Offer only slow: not as profitable

## 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

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## 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!

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#### **Pitfalls**

- Resentment
  - Victoria's secret
- Arbitrage
  - Windows NT workstation/server

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# Online and Offline Versions

- The Whole Internet
- Netscape Navigator
- Dyson Dictum: think of content as free
  - Focus on adding value to online version
- · National Academy of Science Press
  - Format for browsing, not printing

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## How Many Versions?

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

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## 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

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## Goldilocks Pricing

- Mass market software (word, spreadsheets)
  - Network effects
  - User confusion
- Default choice: 3 versions
- Extremeness aversion
- Small/large v. small/large/jumbo

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## 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

- Collect behavior information (Java)
- Optimize viewing
  - B&W page images
  - Buffering
- · Can turn it on and off

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#### Bundling

- · Offer a package
- · Microsoft Office
  - 90% market share
- · Work together
- Discount one of the products
- Option value: zero incremental price
- Microsoft's per-processor license

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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
  - With bundling: \$440

#### 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
  - In previous example sell first item for \$120
  - Sell second item for \$100
  - Example: MusicMaker

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# **Promotional Pricing**

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

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#### Lessons

- Version your product
- Delay, interface, resolution, speed, etc.
- Add value to online information
- Use natural segments
- Otherwise use 3
- · Control the browser
- Bundling may reduce dispersion