

Strategic
Computing and Communications
Technology

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Versioning Information

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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

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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)
- interface (DialogWeb, DataStar)
- resolution (PhotoDisk)
- speed of operation (Mathematica)
- format (Lexis/Nexis)
- capability (Kurzweil)
- features (Quicken, tech support)
- comprehensiveness (DialogWeb, DataStar)

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

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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 = $\$5,400 = 90 \times 40 + 30 \times 60$

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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 services
 - 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

- The Whole Internet
- Netscape Navigator
- Dyson Dictum: think of content as free
 - add 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

- segments with different behaviors
- airlines: tourist/business
 - professional/casual

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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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Customize browser

- collect behavior information
- 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

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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 bots
 - 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

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