Context and concepts

- Context: How can you charge differential prices when you can’t identify segments: the customers willing to pay more from those willing to pay less?

Self-selection schemes

- Induce consumers to distinguish themselves
  - Example: airfares (early purchase, Sat night)
  - Restricts your ability to discriminate
- Versioning: design product lines that appeal to different consumers
  - Examples: airfares, cars, computers,...
  - Damaged goods: particular case when differences between products are obtained by “damaging” basic product
    - Examples: Intel 486, Sony, IBM, Mathematica, US Postal Service, TAP-Air Portugal
  - Highlights that price not based on cost!

Versioning 1.0

<table>
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<th>No.</th>
<th>No Rest</th>
<th>Restr’s</th>
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<tr>
<td>Tourist</td>
<td>10</td>
<td>350</td>
<td>300</td>
</tr>
<tr>
<td>Business</td>
<td>10</td>
<td>800</td>
<td>200</td>
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</tbody>
</table>

- Strategy 1: price single ticket (NR) at 350
  Revenue = 350 x 10 + 800 x 10 = 11,000
- Strategy 2: price single ticket (NR) at 800
  Revenue = 800 x 10 = 8000
- Strategy 3: price (R,NR) at (300,800)
  Revenue = 300 x 10 + 800 x 10 = 11,000

Versioning 1.1

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- Strategy 3: price (R,NR) at (300,800)
  Revenue = 300 x 10 + 800 x 10 = 11,000

- Strategy 4: price (R,NR) at (300,700)
  Revenue = 300 x 10 + 700 x 10 = 10,000

Versioning summary

- Part of scheme to induce customers to select into high and low prices themselves
- Key constraint: you can’t make the inexpensive version too attractive to those willing to pay more
- In practice, this is often based on years of experience of what the market will bear
Other discrimination schemes

**Coupons**
- Idea: buyers with low valuations also value their time less, and will put more effort into clipping coupons.
- Example: breakfast cereals (?)

**Bundling**
- Pure and mixed
- Examples: season tickets, technical support, Polaroid/TWA, Hoover/PanAm

**Multiple Two-part tariffs**
- separate between low users and high users
- Example: cell phone calling plans (basic fee + extra)

Bundling: recitals

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<tr>
<th>Type</th>
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<th>Stockhausen</th>
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<tbody>
<tr>
<td>Classical</td>
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<td>50</td>
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<tr>
<td>Sophisticated</td>
<td>40</td>
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<td>50</td>
</tr>
<tr>
<td>Eclectic</td>
<td>20</td>
<td>30</td>
<td>30</td>
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</table>

- Strategy 1: Price of 50 per ticket
  Revenue = 50 x 40 x 2 = 4000
- Strategy 2: Price of 30 per ticket
  Revenue = 30 x (40+20) x 2 = 3600
- Strategy 3: Price of 50 per ticket or 60 for series
  Revenue = 50 x 40 x 2 + 60 x 20 = 5200

More schemes

Intertemporal price discrimination
- Idea: high valuation users are also less patient.
- Price skimming: books, computers.
- Sales: groceries, clothing.

Non-linear pricing
- price per unit depends on quantity bought.
- Examples: 2PT. Quantity discounts, from software licenses and HBS cases to isofoods and soft drinks.

E-commerce and price discrimination
- Cookies
- Referring site identification.
- Relationship marketing.

Takeaways

- Key issues are:
  - Identifying market segments
  - Avoiding “arbitrage”.
  - With clear, separate segments: apply elasticity rule to each separately.
  - To avoid arbitrage, you may want/need to differentiate the products.
  - If segments are unclear, use self-selection schemes: versioning, bundling...

Practice problem 2.3

<table>
<thead>
<tr>
<th>Segment</th>
<th>Units</th>
<th>Stripped Full</th>
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</thead>
<tbody>
<tr>
<td>High end</td>
<td>1mm</td>
<td>800 1500</td>
</tr>
<tr>
<td>Low end</td>
<td>2mm</td>
<td>500 1000</td>
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Production cost: 300

Practice problem 2.3

What is “willingness to pay”?
- You’d pay up to this much
- If you pay less, you get to keep the surplus

Strategy 0 (benchmark): Charge 1500, sell 1mm, make
(1500-300) x 1mm = 1.2b.

Strategy 1: Try to hit each segment by charging 500 for stripped, 1500 for full. Does this work? High-end consumers get zero value from buying full (it’s priced at exactly their value), but 800-500=300 for stripped. Thus they’ll buy stripped. Bad!

Strategy 2: Charge 1200 for full (think of this as slightly less), 500 for stripped. High-end pay 1200. Low-end pay 500.
Profit = (500-300)x2mm + (1200-300)x1mm = 1.3b.