The Demand for Voice over IP: An Econometric Analysis

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VoIP Workshop
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Size of VoIP Market?

- Internet Households: 62 M
- High Speed: 23 M
- WTP > 0: 6 M
- WTP > Total Telephone Bill: ??????
VoIP "Drivers"

- Average WTP for VoIP: $37
- Average Telephone Bill: $42
- Broadband penetration: (23 - 24%)
Forecasts of VoIP Depends on:

- Broadband Growth
- Price versus Value
- Regulatory Environment
- Quality of Service
- 911 and Related Issues
- Competitive Response
- Marketing
Distribution of telephone expenditures is a factor in VoIP growth.
"Demand for VoIP" based on WTP and Broadband access. At a "price" of $20, the expected size of the market is approximately 6 million households. This computation does not take into account the associated distribution of telephone bills, which once factored in, would likely result in a lower market potential.
### Elasticities

<table>
<thead>
<tr>
<th>WTP</th>
<th>Broadband Households</th>
<th>Non Broadband Households*</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1-$10</td>
<td>-0.20</td>
<td>-0.80</td>
</tr>
<tr>
<td>$11-$20</td>
<td>-0.59</td>
<td>-1.12</td>
</tr>
<tr>
<td>$21-$30</td>
<td>-0.98</td>
<td>-1.44</td>
</tr>
<tr>
<td>$31-$40</td>
<td>-1.37</td>
<td>-1.76</td>
</tr>
<tr>
<td>$41-$50</td>
<td>-1.76</td>
<td>-2.08</td>
</tr>
<tr>
<td>$51-$75</td>
<td>-2.54</td>
<td>-2.72</td>
</tr>
</tbody>
</table>

* Assuming $20 month for broadband
Market Potential

The first simulation assumes a "price" (p) of $50. Based on this price, the associated distribution of households meeting the criteria (Telephone bill > p and WTP > p) is estimated, which represents an estimate of market size (potential). Subsequent simulations are made by changing price.
Expected Number of Customers I

- Price: $50
- Telephone Bill: >$50 / month

810,000
Expected Number of Customers II

Price

$40

Telephone Bill

>$40 / month

2,170,000
Expected Number of Customers III

Price

$30

Telephone Bill

>$30 / month

2,700,000
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