E-Commerce: A useful Marketing Innovation for Agriculture & Agribusiness?

Statements from the long-past:
“... electronic markets will require intermediation services, albeit in ways that differ from traditional physical markets.”
(Bailey and Bakos 1997)

“But:”
- anonymity on the web favors opportunism
- bulk-to-value ratio matters
- power laws govern the distribution of website visits

Approach: Study an early adoption industry!

Why Wine?
- Highly differentiated product
- an information-intensive experience good
- vigorous international trade
- intensive competition: New World vs. EU exporters
- tradition in catalog and direct sales
- and: *wineries adopted e-commerce early!*

Why Australia, California, and Germany?
- ~ 90% of US wine production from CA
- are among the world’s 7 largest wine producing countries
- jointly account for 18% of world wine production
- gradient in export shares: AUS 53%; GER 34%; USA: 16%
- variation w.r.t. regulations, winery sizes, distance to markets
- e-commerce readiness: varies but unconstrained by digital network infrastructure

Online survey, 3rd Q. 2003
- 1,690 wineries contacted by e-mail
- questionnaire responses recorded on the web
- 268 responses (response rate: 16%)
  - 70 Australia (r.r. 13%)
  - 89 California (r.r. 16%)
  - 109 Germany (r.r. 20%)
- +100 German wineries surveyed by telephone
- Total: 368 responses

Theory: Transaction Cost Economics

Method: Analysis of Survey Data

Results & Insights

Website impact on direct wine sales

<table>
<thead>
<tr>
<th>Region</th>
<th>No. wineries</th>
<th>Website has increased direct wine sales(*)</th>
<th>Yes [%]</th>
<th>No [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>67</td>
<td>83.6</td>
<td>16.4</td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>51</td>
<td>43.1</td>
<td>56.9</td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>115</td>
<td>55.7</td>
<td>44.3</td>
<td></td>
</tr>
<tr>
<td>online survey</td>
<td>79</td>
<td>63.3</td>
<td>36.7</td>
<td></td>
</tr>
<tr>
<td>telephone survey</td>
<td>36</td>
<td>38.9</td>
<td>61.1</td>
<td></td>
</tr>
<tr>
<td><strong>All</strong></td>
<td><strong>233</strong></td>
<td><strong>60.9</strong></td>
<td><strong>61.1</strong></td>
<td></td>
</tr>
</tbody>
</table>

(*): Chi-square test significant at the 0.01-level

Results
- Winery size determines
  - whether & when website is adopted
  - intensity of website use
- Website success factors
  - maintenance status
  - sales channel conflict management
- high per unit shipping costs for small consignments → web sales are domestic sales
- some sales from gift orders from abroad
- website attracts tourists


Contact addresses:
- Dr. Susanne Stricker: susanne.stricker@statistik-nord.de
- Prof. Dr. Rolf A.E. Mueller: raem@agric-econ.uni-kiel.de
- Prof. Daniel A. Sumner, Ph.D.: dasumner@ucdavis.edu