Influence of Information on Hedonic Appreciation of Burgundy Red Wines

American Association of Wine Economists
10th Annual Conference
Bordeaux, France, June 21-24, 2016

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Context

- Economic and sensory literature acknowledges the effect of information on consumer perception of food products
  - Each factor of information is often measured separately, with a special focus on price and brand name
  - Very little is known on the effect of information as a whole (holistic effect)
- We measure the holistic effect of information on hedonic perception
  - Sampling: 40 medium range Burgundy red wines, half Village Appellation, half Regional
    - Not so easy to sale in France,
    - Too much expensive as medium range wines
    - Underconsidered compared to Premiers Crus or Grands Crus

Research questions

- What are the significant factors acting in wine appreciation change once information is released?
- Is consumer knowledge, or socio-demographic descriptors, acting?
- Is Appellation d’Origine Contrôlée acting as well?
Aim of the selection: sampling from the diversity of Burgundy red wines

Selection criteria:
- N-S-W-E Burgundy
- Vintage 2010
- 100% Pinot Noir
- Village /Regional appellation
- Medium range quality
- Price 5-20 € excl. VAT /bottle
- Award winner for half sampling
Consumer tests

- 415 French adult consumers from Dijon and Lyon
- July 2013 - July 2014
- Experimental protocol:
  - Sampling Latin square: 6 wines tasted / each consumer
  - Zero alcohol blood content controlled before and after tastings
    - Blind tasting
      - Hedonist visual tasting (0.15 cl each sample in clear glass)
      - Wine knowledge questionnaire (20 Q)
      - Smell & taste evaluation (0.15 cl each sample in dark glass)
      - Commitment questionnaire (16 Q)
    - Identified tasting (the bottle of each tasted sample is displayed)
      - Hedonist visual tasting
      - Smell & taste evaluation (0.15 cl each sample in clear glass)
      - Willingness to buy with tasting (3 Q)
      - Consumption questionnaire (10 Q)
    - Trade-off measurement (CA: 16 cards, 5 attributes, 2 to 3 modalities each)
    - Average time consumers’ stay in laboratory: 1h 10’ incl. debrief
Individual differences of evaluation with and without information

Information has a positive effect on hedonic evaluation
More important on smell & taste / visual evaluation

| Evaluation     | Mean   | SD      | Min  | Max  | T Student | Pr > |t|   |
|----------------|--------|---------|------|------|-----------|-------|-----|
| Visual         | 0.2877 | 2.4216  | -9.3 | 10.0 | 5.87      | <.0001|
| Smell & taste  | 1.0218 | 3.2394  | -9.2 | 10.0 | 15.59     | <.0001|

Positive effect for 57% respondents

Range: +4.25 -3.59

Positive effect for 75% respondents

Range: +6.1 -3.1
K-means clustering

<table>
<thead>
<tr>
<th>Final centres of k-means clusters /100</th>
<th>Cluster</th>
<th></th>
<th></th>
<th></th>
<th>μ</th>
<th>σ</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Connoisseur</td>
<td>Amateur</td>
<td>Novice</td>
<td>Expert</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>N (N/415)</strong></td>
<td>103 (24.8%)</td>
<td>113 (27.2%)</td>
<td>69 (16.6%)</td>
<td>130 (31.3%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geographical knowledge</td>
<td>53</td>
<td>45</td>
<td>29</td>
<td>79</td>
<td>54.9</td>
<td>23.0</td>
</tr>
<tr>
<td>Semantic knowledge</td>
<td>47</td>
<td>54</td>
<td>23</td>
<td>68</td>
<td>51.5</td>
<td>20.6</td>
</tr>
<tr>
<td>Wine-making knowledge</td>
<td>61</td>
<td>28</td>
<td>30</td>
<td>72</td>
<td>50.5</td>
<td>23.7</td>
</tr>
</tbody>
</table>

Clustering very easy between Novice and Expert
Difference between Connoisseur and Amateur based on technical vs. general knowledge

Consumer panel recruited on the basis of interest for wine: over-representation of experts within the panel, quite interesting for deeper characterization of this targeted cluster
Effect of information on smell & taste appreciation according to consumer wine-related knowledge %

Neutral: difference of appreciation with/without information = ±0.5
Information effect varies according to Appellation & Gender

Smell & taste appreciation, Regional appellations according to gender

Without information

With information

Stronger information effect on Village appellations and female appreciation

Higher magnitude and lower marks given by women

Smell & taste appreciation, Village appellations according to gender

Without information

With information
Conclusion

- Information is acting on appreciation of Burgundy red wines
  - Information as a set of brand name, visual and textual content of label, color of wine, price
- Effect is stronger for smell & taste appreciation / visual one
- Information effect stronger according to Appellation level
- Moderating variables are gender and wine-related knowledge

- Women expectations towards Burgundy red wines are quite different than those from connoisseur or expert, most often men
- Managerial perspectives would recommend to better target wines for different consumer clusters with not similar expectations and not using the same distribution channels, and will take benefit from differentiated storytelling
Thanks for your attention
Enjoy Burgundy wines!