Objective of the research

To study the influence of the landscape, thought as a representation of the production territory of wine, for wine quality perception, using Conjoint Analysis.

Conjoint Analysis

1. Conjoint Analysis (CA) is a statistic technique whose aim is to study the consumer’s choices starting from their preference judgments about some different product/service versions.
2. These products/services must be represented by combinations of different attributes (levels);
3. From the analytical-statistical point of view, CA calculates the partial utilities associated to each level and the relative importance of the product attributes;
4. We recognize 3 main approaches between the CA methods developed in literature: Traditional CA, Choice-based CA and hybrid methods (ex: Adaptive CA).

Wine marketing

1. The wine market is very complex and we acknowledge a growing work in marketing and research fields.
2. The product on sale is not the only wine, but all the elements that compose and characterize it, such as type, package, label, price, denomination, or origin region, or unique year, awards, certifications, traceability…
3. These factors are more (or less) important in accordance with the consumer’s economic/demographic situation, way of life and product involvement;
4. Also the consumption situation has a great impact on his decisions.
5. In the last few years several CA studies were leaded to examine the wine market (or the food market, in more general terms) and to study the consumer’s behavior.
6. The aim was to define ideal products, to estimate optimal prices, to make some market stratifications, to see the market reaction for a launch of a new product.
The landscape role

- The landscape aesthetic quality can be influenced by its physical components, that is by their characteristics and by the effect they have on people.
- A recent research regarding the aesthetic-perceptive quality of wine landscapes in Treviso emphasized that:
  - a \textit{villa} generates a notable increment of the quality;
  - a \textit{factory} impact is drastic;
  - a \textit{Tomato} has a negative effect, while a \textit{modern vineyard} shows a less considerable effect.
- Many other researches found out interesting results, like:
  - the elements which give naturality, or recall a traditional view of the landscape, represent the factors that make it more pleasant;
  - regarding to the \textit{demoting} factors, factories and pylons act a very important role.

The application

- This study has been designed, realized and analyzed with Choice-based Conjoint Analysis (CBCA): the respondents are asked to choose a product profile between some sets of possible alternatives (choice set).
- Attributes and levels selected to represent wine:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality</td>
<td>Low quality, medium quality, high quality</td>
</tr>
<tr>
<td>Wine price</td>
<td>€3, €5, €8 Euro</td>
</tr>
<tr>
<td>Landscape</td>
<td>Blemishing features, monotonous, well preserved, evocative</td>
</tr>
</tbody>
</table>

- Before receiving the CBCA questionnaire, the respondents answered to some questions prepared to create their complete individual profiles.
- Then they were asked to taste different wines associated to different prices and landscapes, and at last to express:
  - a valuation of preference;
  - a valuation of likelihood of purchase.

Steps of the analysis

- Pre-test, performed at the Agripolis complex in Legnaro (PD), made with a sample of 41 university students.
- Piave tasting: 52 persons sample.
- Prosecco tasting: 53 persons sample.
- Lison-Pramaggiore: 72 persons sample.
- Total sample of 183 individuals.

The questionnaire

- The CBCA questionnaire developed for this analysis is made up of 5 tasks containing 4 product profiles (different combinations of wine, price and landscape), plus the "No choice" option (None).
- The selection, for each of the 5 tasks, of the 4 profiles was based on a statistic algorithm, so as to get an estimate of the parameters (corresponding to the attributes effects) as efficient as possible.
- Each of the 5 tasks is characterized by the level overlap for the attributes wine and price.
Results: Pre-test (pilot study)

Joining all the answers collected during the 3 tasting evenings, completed with the ones obtained in the pre-test, it was possible to consider a total sample of 224 respondents.

Stratification

Some significant differences stood out between the expressed preferences with reference to some individual variables.

The estimate of the effects for preference was calculated stratifying the sample by:

- Age
- Gender
- Purchase of wine at supermarket/grocer’s shop
**Stratification**

*Appeared segments*

<table>
<thead>
<tr>
<th>Segment</th>
<th>Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>M + F &gt; 40 NO supermarket</td>
<td>They take the wine quality into consideration and it influences them a lot</td>
</tr>
<tr>
<td>F 25-40 NO supermarket</td>
<td>They consider the price as very influential on their preferences/valuations</td>
</tr>
<tr>
<td>M + F 18-39 NO supermarket</td>
<td>They deem the landscape is very important for wine quality perception</td>
</tr>
</tbody>
</table>

**Conclusions**

- The favourite attributes' levels for the respondents are:
  - high quality
  - medium price
  - evocative landscape
- The most important attributes are:
  - landscape
  - price
- In the case of the estimate for likelihood of purchase, the landscape’s influence becomes more considerable.
  - The association to any wine (with any price) of an image with a high aesthetic quality induces a greater preference for the tasted wine.
  - The effect of the landscape on the consumer’s preferences proved to be positive and statistically significant.