
Shiny App: California Wine Visualization

July 31, 2016



Agenda

- Context and Overview
- Next Steps

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Two interesting wine datasets are available: Wine.com's current catalog of bottles for sale, and the USDA's grape crush reports

Analysis Context

- Wine.com has over 96,000 bottles from around the world for sale on its website and has made an API available to access this catalog, which includes information such as:
 - Winery name, url, and coordinates
 - Product name and type (specific bottle of wine for sale, whether red vs white)
 - Score rating where available (e.g., Wine Spectator / Robert Parker point rating out of 100)
 - Retail price
 - American Viticultural Area (AVA); specific region where grapes are grown
- I filtered this dataset to focus only on wines made in California from 2010 to 2015, limiting results to approximately 9,000 bottles in the catalog
- The USDA's National Agricultural Statistics Service publishes annual grower's reports for various commodities, including grapes used to make wine and includes information around:
 - Tons crushed and purchased for each varietal (e.g., Chardonnay)
 - Average price per ton
 - Average degrees brix (measure of sugar / alcohol content)

Focusing on both the retail and supplier dimensions gives us a unique perspective of both ends of the wine value chain

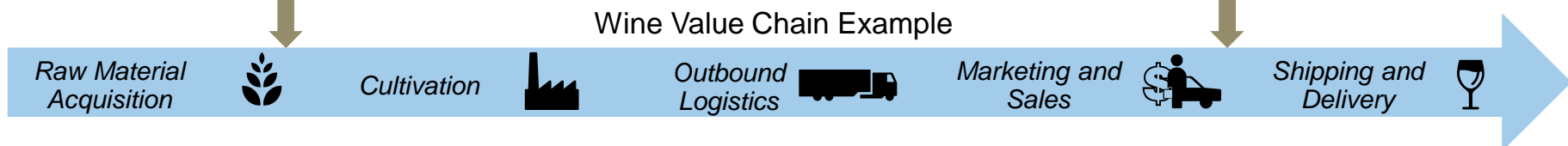
What questions can this data help answer?

USDA Agricultural Data

- How has total production in California varied year-over-year?
- Which varieties are grown most? How is this changing?
- How do average crop prices compare (by vintage, AVA, varietal, etc.)?
- What link do we see between sugar content (degrees brix) and production? Does this tell us something about the growing season?

Wine.com API

- Which varieties are:
 - Most popular?
 - Most expensive?
 - Highly scored?
- Which wineries have the highest ratings?
- Which vintages score the highest?
- Which wineries provide better value (lower price for same score)?
- What does each AVA produce and how do products compare?



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A number of enhancements can be made to this Shiny App

Next Steps

- Additional changes could be made to this app, including:
 - Incorporation of weather data for each vintage
 - Interactivity between map and scatter charts (i.e. link winery tooltips)
 - Appellation comparison
 - General bug-fix / formatting updates
- Questions?