

Using Economic Analysis to Inform Business Decisions – Examples for the Oregon Wine Industry

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A quick review – The three-legged stool...

- OWRI's original mandate included 3 areas of research – “a three-legged stool”
 - 3 Areas - Viticulture, enology, and economic/business
 - Early priorities led to a focus on viticulture and enology
 - Yet the intent always remained to develop all three areas of research

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What exactly is “economic research”?

- Guidelines for Economic Research
- How to “think like an economist”
- How to think like a “wine economist”
- What are OWRI economists thinking about?

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Guidelines for economic analysis

- Be relevant - provide results that help inform decisions and policies important to stake-holders like *the Oregon viticulture and wine industries*
- Be theory-based – use economic theory both to guide experimental design and the analysis of data
- Be empirical – collect and analyze data using questionnaires, focus groups, controlled environments (e.g., choice experiments, nudging field experiments), *and/or* use market-level data on prices, quantities, wages, point-of-sale data, etc.

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Thinking like an economist...

- What are the incentives? Economists like to look at the underlying economic motivations of behavior.
- What are the financial trade-offs? Economists seek to compare costs and benefits of each choice.
- What are the economic trade-offs? Economists include *opportunity costs* of a choice when comparing costs and benefits – when you choose Option 1, what do you have to give up (e.g., Options 2, 3, and 4)?
- What determines the choice set? Economists study how market structure and market power affects the choices you have available.

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Thinking like a wine economist...some *topics*

- Market Supply of grapes – the role of price, grower incentives, wine-maker incentives, market coordination within supply chains
- Market Demand for wine – the role of price, market signals, consumer perceptions, preferences and ignorance
- Profitability in...
 - The Vineyard – economic returns to alternative production practices
 - The Winery – economic returns with differences in scale, pricing strategies, and labeling/quality signaling
 - Supply chains – market power and access to buyers, concentration and negotiation power of distributors, direct sales to consumers, effective strategies for managing margins (both costs and revenues)

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And wine economists are out there!

- Professional Society – American Association of Wine Economists
 - Publications – online at <http://www.wine-economics.org>
 - Over 200 working papers; Journal in publication since 2006
 - Annual Conference – this year marks 12th annual event
 - Other academic journals publishing articles based on economics, both with and without a wine focus such as *Am. J. Enology and Viticulture*, *Food Quality and Preference*.
- Academic Programs
 - Undergraduate and Graduate Education
 - Research Centers
 - Technical Education
 - Certificates
 - Associate Degrees

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But what are “OWRI wine economists” thinking?

- What are the economic implications of innovations in the vineyard, as developed by our colleagues doing viticulture research?
- What are the market implications of the insights about wine as discovered by our colleagues doing enology research?
- How can economics be used to complement the market research provided by the Oregon Wine Board? What are the economics explaining market trends and buyer preferences?
- Plus, a broadening of perspectives about potential research questions that can be addressed in OWRI’s mission to serve the industry.

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Other OWRI Economic Research Initiatives

□ First two OWRI Economic Projects

- Valuation of Wine Growing Regions – AVA Designations and land values
- Potential effects on vineyard values of location-specific adaptability to climate change

□ Second designated study area was pretty broad

- Consumer demand...more on this on the next slide.

□ Additional Ideas in development

- Labor in the Pacific Northwest wine industry – considerations for a long-term roadmap
- Return on investment in wine grape crop insurance

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To study consumer demand, we began by listening...

- We wanted to know which questions should be the highest priority for the Oregon wine industry
- Conducted a “listening tour” to five sites around the state
Willamette Valley, Hood River, Milton-Freewater, Roseburg, Central Point
- What we learned – At all 5 sites, a strong interest in research on direct-to-consumer marketing and sales
 - Effective management of wine clubs (work in progress)
 - Tasting Room Strategies to influence customer behavior (this work is just beginning)

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Wine Club Strategies: a preliminary look

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GRAPE DAY
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Why look at wine club strategies

- Stable and important portion of income
 - ~ 7% of Oregon wine is sold to winery wine club members
 - Studies (limited) have indicated that the tradeoff between cost of selling in tasting room at full price and via wine club at discount make them of roughly equal value to the winery. With both better than wholesale.
- Listening sessions revealed that the Industry realizes that wine clubs were mostly designed for winery convenience
 - that that design may not attract or preserve membership
- So the Economists Objective of **Relevance** of the topic is met.

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How do we look at wine club strategies?

- Economic *Theory* reminds us to look at the utility, or the value, of membership to the individual.
 - a key determinant for joining a wine club is how much the individual likes/wants the wines they will access.
 - A key economic determinant is the price of the wine, thus the discount on wine price for the club v. other channels of purchase
- However wine club membership is more involved, there are additional benefits and costs which we might place a 'value' on through design of our study.

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So, how **do** we **examine** wine club strategies?

- Be *empirical* – in this case
 - Design our study to capture the complex factors that influence club membership (interviews of industry, review of academic and popular publications)
 - Collect data using questionnaires and other sources
 - Build models to estimate the influences of the complex factors
 - Report on, and have critically reviewed, all of these steps and the statistical validity of those findings
- Report to industry to actually accomplish *relevance*

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Design and Data Collection

- Somewhat simplistically we want to evaluate what consumers like and dislike about wine clubs, that is, the utility (**overall satisfaction**) of that club to the individual. Economic Theory tells us to look at the attributes of the good, and the characteristics of the individual that may cause variation in their appreciation for the good and its attributes.
- We can collect data on wine club **attributes** directly from web pages, but we will need to go to the wine club members to measure their **satisfaction** and their **characteristics**.

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Attributes of Membership

- Beyond appreciation for the wine itself*
 - Discount level, Waived tasting fees
 - Special **event** opportunities
 - **Access** to special wines
 - **Relationship** developed with winery staff and venue
 - ❖ **Amenities** of Winery for repeat visits ETC
- Club Added 'Costs' or negative utility
 - Potential reduction in choice
 - Concerns about timing of delivery etc.
 - Shipping cost or distance for pick up

*which we will measure by asking/rating as well

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Characteristics of individuals

- Identify characteristics of Individuals that influence club selection and satisfaction. For example, a household that entertained often might select a club that delivered more cases or prefer a club that offered mixed cases.
 - Age, gender
 - Household Composition (singles, couples) or # of wine drinkers
 - Amount of entertaining
 - Frequency of winery visits
 - Wine appreciation level
 - ETC

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Models

- Satisfaction as a function of:
 - liking for wines received, size of shipment, annual cost estimate/bottles, frequency of delivery (actual* or rating of), discount on wine purchases, liking for staff, liking for tasting room situation, liking for events, etc, and individual characteristics
- This multi-attribute approach is designed to create quantitative answers as to whether these factors significantly impact satisfaction, and how, relatively, each factor contributes
- Note that this is quite different than simply having a multiple choice question percentage

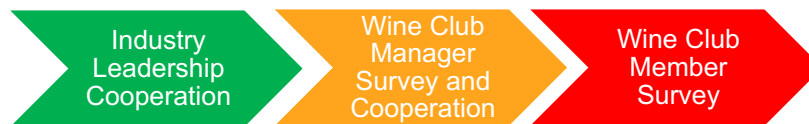
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Collection of data

- We have already collected information about wine clubs (discounts and composition of wines included in shipments, wine quality, winery amenities, etc) that attract individuals to a club.

Now we need club member information

- We have contacted **Wine Club Managers** to collect data and to request their cooperation in reaching **Wine Club Members**.



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Request to Wineries/Club Managers

- We have already sent out a survey to wine club managers
 - Our first wine club manager recruitment announcement was last fall.
 - But because we would still like to increase the number of wineries participating we haven't fully closed recruitment
 - You could help! (to follow-up contact cathy.durham@oregonstate.edu)
- Survey of wine club members

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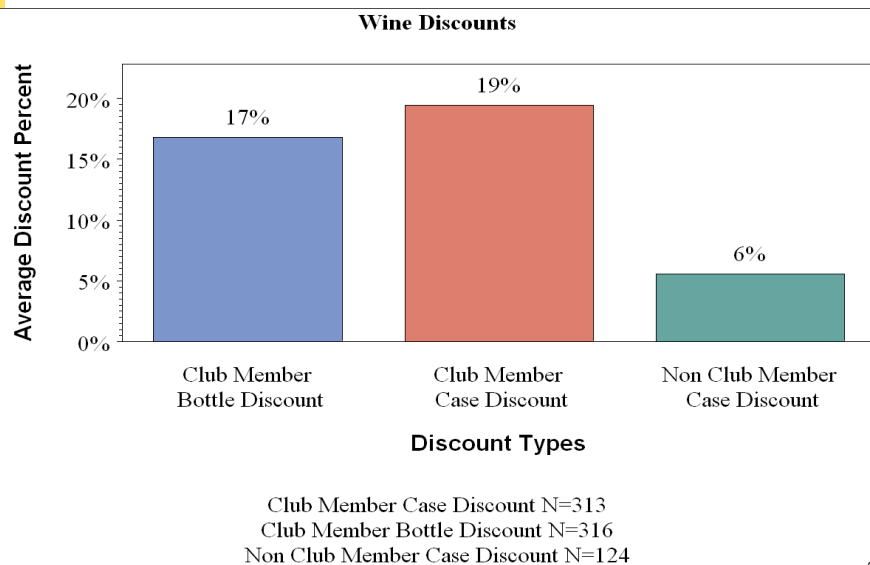
What we are and are not asking wine club managers for

- We are asking them to broadcast an invitation to their wine club members to take the Wine Club Member Survey
- Asking about annual cases sold through clubs v total sales, their opinions about members choices, what they want to learn, ETC
- Some information we can gather from their web pages or from other publicized information
 - We collected the data from the Explore Oregon Wine
 - We collected wine club attributes from each wineries own website

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Wine club benefits-Wine Price Discounts

Note: Sample of 160 wineries from web page information



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N is the number of clubs data collected from not the # of wineries

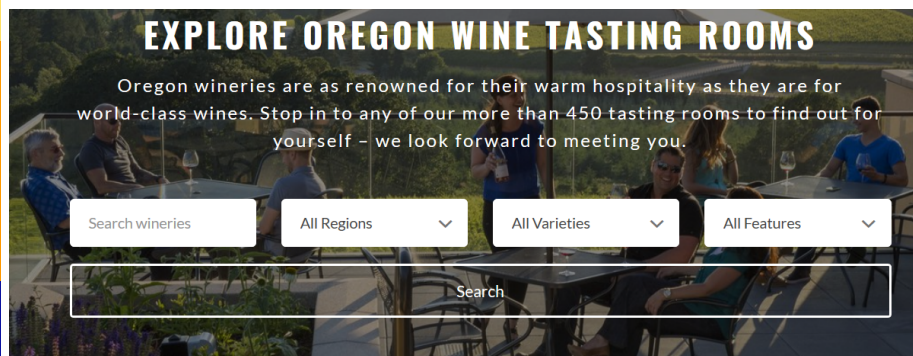
Wine club benefits-tasting fees

from a sample of 160
wineries: 300+ clubs

	Max	Mean	Min	N
Non-Member Tasting Fees (\$)	25	13.4	5	147
Wine Club Tasting Benefits				
Tasting Fee Waived With Club Membership	Waived for members by 85%			312
Number of Guests Allowed for Free Tasting	8	2.95	0	241

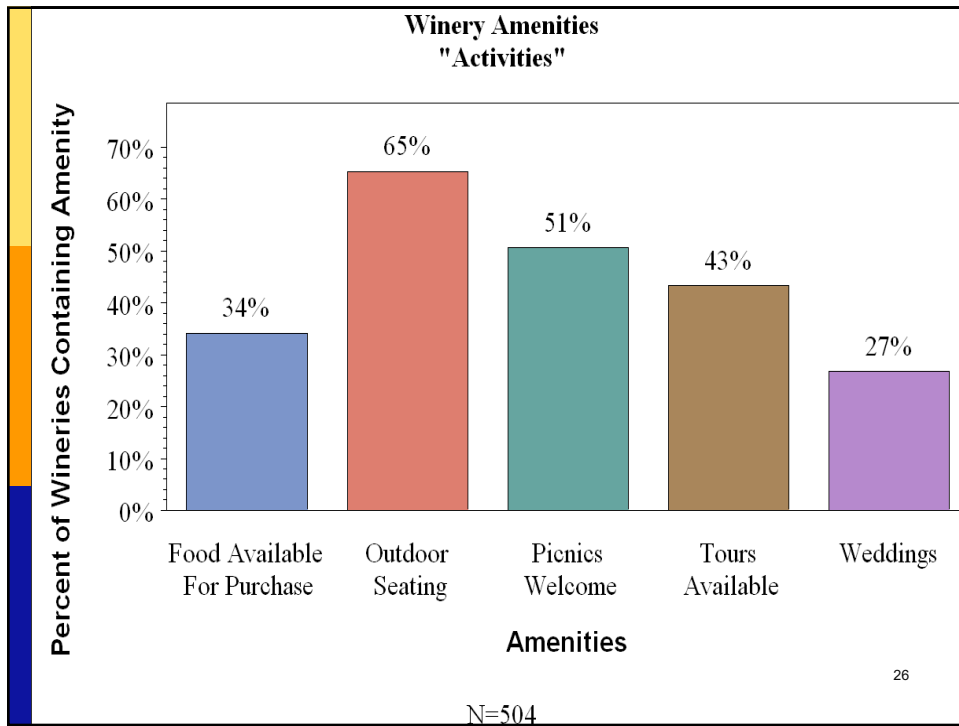
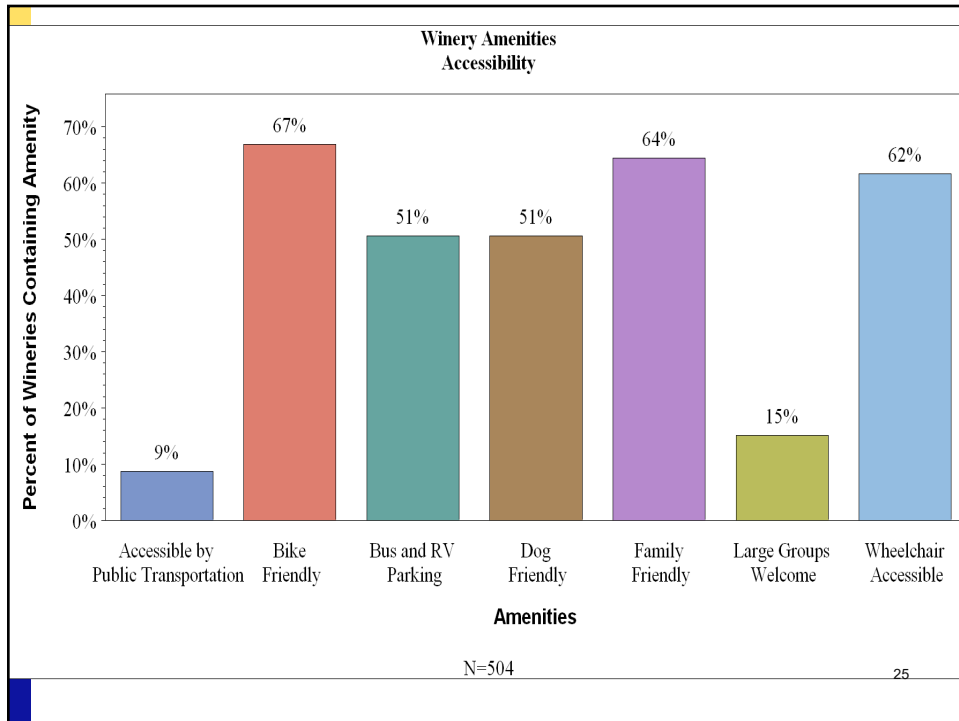
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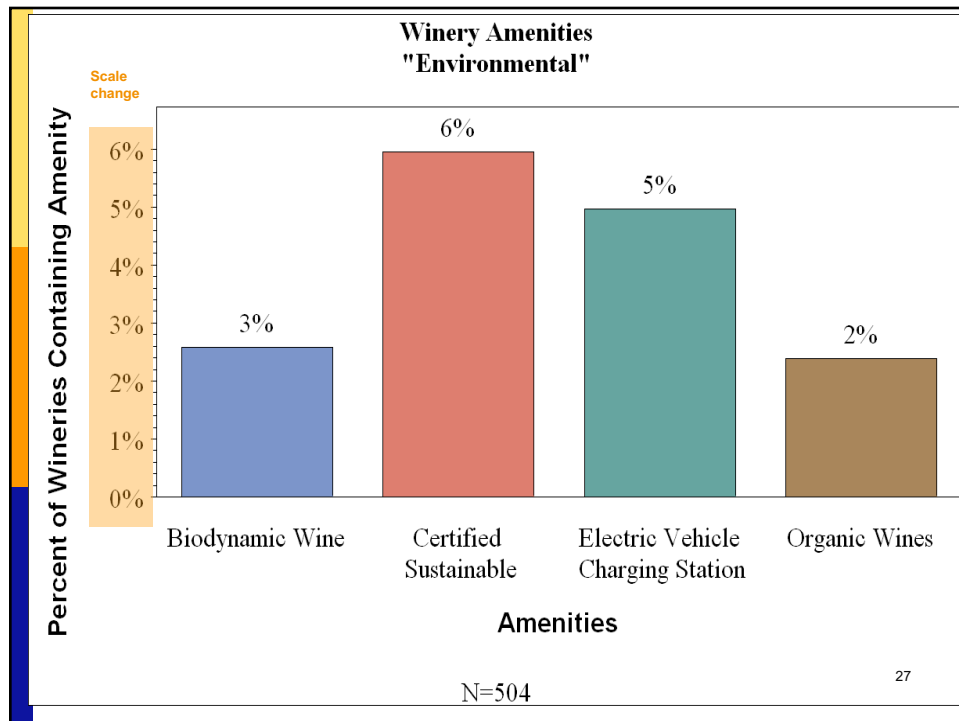
Winery Amenities Data Collected from the Explore Oregon Wine website (504 wineries examined)



<https://visit.oregonwine.org/>

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Current Activities

- The wine club manager survey is not quite cut off
 - It would be nice to raise the number of wineries participating, more data points could increase our ability to test what factors are significant for the success and sustainability of a wine club
 - So if you have any influence on your wine club member encourage them to look the mailings they received from the Oregon Wine Board-or contact me to receive a re-mailing.

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Other OWRI Economic Research Initiatives

- Valuation of Wine Growing Regions – AVA Designations and land values
- Potential effects on vineyard values of location-specific adaptability to climate change
- Just Beginning:
 - Tasting Room Strategies to influence customer behavior (OWB & Eola Hills Foundation supported)
- Recent Ideas under evaluation
 - Labor in the Pacific Northwest wine industry – considerations for a long-term roadmap
 - Return on investment in wine grape crop insurance

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