

## Ithaca 2018 Abstract Submission

### Title

Assessing environments of commercialization of innovation for SMEs in the global wine industry: a market dynamics approach

### I want to submit an abstract for:

Conference Presentation

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### Keywords

SMEs, Market Dynamics Approach, Wine Innovation, Strategy, Commercialization environments

### Research Question

Which countries have innovation commercialization environments in the context of the global wine industry? What commercialization strategies for wine industry entrepreneurs from a market dynamics approach are apparent?

### Methods

A market dynamic perspective and the identified dimensions of innovation push (market sophistication) and demand pull (wine demand) of commercialization environments. A k-means cluster analysis was undertaken.

### Results

The choice of commercialization strategy to be employed for innovative wine products and production by country is shown in the attachment.

### Abstract

Small and medium enterprises (SMEs) can play an important role in the diffusion of wine innovation. Employing a market dynamics approach where the interaction of producers (supply) and buyers (demand) are seen to influence innovation creation, a conceptual framework is applied to the global wine industry to identify commercialization strategies for SMEs. The framework identifies four commercialization environments or clusters; Innovation Nirvana, Innovation Push, Innovation Pull and Innovation Wasteland as determined by the principle market dimensions of vino-sophistication (innovation-push) and wine demand (market-pull). A k-means cluster analysis is undertaken on twenty-two wine-producing member countries of the OECD to determine which jurisdictions occupy each of the four clusters. The study results in a diverse distribution of old world and new world wine producing countries across all of the identified commercialization environments. Conclusions about national commercialization environments and related strategies for wine industry entrepreneurs are presented. These findings have implications for wine industry SMEs, investors and agri-policy makers. The contribution made by this research includes the provision of a

developed framework and tool for wine entrepreneurs and larger wine companies seeking to assess what form of commercialization strategy, from a market dynamics perspective, would best suit certain wine producing countries and regions. It also adds to the literature on innovation commercialization in the context of the global wine industry.

In determining if certain countries encourage or discourage entrepreneurial opportunities within the wine industry, we produce certain wine market metrics that help identify which environment of innovation commercialization exists within 22 OECD wine-producing countries. Walsh's framework establishes market measures related to market-sophistication (innovation push) or, for the purpose of this research, vino-sophistication, and wine demand (demand-pull). Vino-sophistication was measured by identifying metrics related to the respective wine industry's contribution to gross domestic product (GDP) growth, their improvements in wine productivity, and the presence of institutional education in wine production. Wine consumption data from 2011 - 2014 was used to measure market demand.

Small and medium enterprises (SMEs) can play an important role in the diffusion of wine innovation and the main objective of this paper is to apply a conceptual framework for helping wine SMEs identify the various environments of commercialization for wine innovation. Adapting the framework first put forward by Walsh (2012) in identifying commercialization environments for renewable energy technology we apply the framework to the commercialization of innovation in the global wine industry. Our intent is to classify countries where small and medium firms in the wine industry can employ particular commercialization strategies for the innovation environment they find themselves in.

A number of contributions are made. Firstly, we add to the literature on innovation commercialization environments in the context of the global wine industry. Secondly, we identify commercialization strategies for wine industry entrepreneurs from a market dynamic perspective and lastly, this research employs the developed framework to suggest appropriate commercialization strategies that are best used in certain wine-producing countries around the world.

Taken together, (innovation-push, demand pull), the market dynamic approach considers the supply of innovative products or services and the demand for them. In terms of supply, an underlying factor in this approach is an extensive need for a change of customer behavior toward the innovation (Brem and Voigt, 2009). This behavior is influenced by the sociopolitical and cognitive legitimacy associated with a firm's capabilities to innovate (Sheperd and Zacharakis, 2003). This line of reasoning extends to the level to which a society has developed sophistication or knowledge around the innovation that can impact its diffusion in the market. Said another way, the greater the level of societal or market sophistication the greater the likelihood of the adoption of that innovation (Eng and Quaia, 2009). Demand steers firms to work on certain problems (Rosenberg, 1969) with other factors such as cost and the perceived ease of utility of that product (Wang et. al, 2008); shifts in relative factor prices (Hicks, 1932); geographic variation in demand (Griliches, 1957); the identification of "latent demand" (Schmookler, 1962, 1966); potential new markets (Vernon, 1966) and government policy (Nemet, 2009), all affecting the size of the payoff to successful investment in innovation.

This research has its limitations in that we have focused on only two market dimensions and therefore have restricted the number of commercialization environments to four. The complexity of the global wine industry suggests that other market dimensions might influence innovation strategies for wine producers and that the reliance on demand and vino-sophistication only may be too generalized to rely on when making specific strategic choices. For example, the global wine industry is dominated by major international firms with production in many countries and intrinsic factors such as supply chain management (import/export strategies) practices could impact innovation decisions by the firm. Furthermore, the generalization of results from the k-means cluster analysis particularly for those nations that occupy the peripheries of the clusters may not be appropriate. However, the cluster analysis results suggest that the application of the framework as an initial determination of the environment for commercialization, and related commercialization strategies, is reasonable and that further support can then be obtained through additional market analysis of specific countries.