

Ithaca 2018 Abstract Submission

Title

Toward an Understanding of Industry Cluster Development among New World Wineries: a comparative study of the Okanagan Valley, Canada and the Waipara region, New Zealand.

I want to submit an abstract for:

Conference Presentation

Corresponding Author

Lee Cartier

E-Mail

lcartier@okanagan.bc.ca

Affiliation

Okanagan College, Canada

Co-Author/s

Name	E-Mail	Affiliation
Svan Lembke	svan.lembke@ubc.ca	University of British Columbia Okanagan, Canada
Joanna Fountain	Joanna.Fountain@lincoln.ac.nz	Lincoln University, New Zealand
Nicholas Cradock-Henry	CradockHenryN@landcareresearch.co.nz	Manaaki Whenua - Landcare Research, New Zealand
Leo-Paul Dana	lp.dana@supco-montpellier.fr	Montpellier Business School, France

Keywords

Wine industry, Cluster development, Competition and cooperation, Rural communities

Research Question

What are the developmental stages and the strategic triggers across the lifecycle of a cluster?

Methods

This investigation is a quantitative and qualitative design based on documentary analysis of secondary data including academic articles and publicly available data.

Results

A comparison of cluster development across the two regions points to clear inception conditions, which triggered visible strategic alignment across at least two of the cluster determinants.

Abstract

Introduction

There is growing consensus that clusters are beneficial for regional economic prosperity. Furthermore the maturity of an industry cluster and its regional competitive advantage is often critical to the prosperity and long-term success of rural businesses. Clusters enable operational scale, enhance resilience to unexpected events or threats,

and deliver innovation opportunities particularly for small and mid-size businesses on the basis of their synergies. The wine industry – and other agricultural activities that create value beyond primary production – appears to be drawn to the cluster model on the basis of shared land base, physical infrastructure, and often perishable nature of their goods that need to be processed quickly.

While clusters are a function of the unity of firms and institutions, no specific activities have yet been identified that can be readily duplicated to achieve effective cluster behaviours. An understanding of the dynamics between stakeholders, and ways to encourage and/or discourage competition and cooperation, can deliver valuable insights to new and embryonic clusters, while enabling existing clusters to navigate novel risks and emerging challenges. While Michael Porter's cluster model has enabled researchers to identify and map clusters (Porter, 1990; Porter, 2003), it provides limited insight into the factors influencing cluster development. As a result, the catalysts for cluster maturity remain undefined.

Drawing on comparative case study analysis, this paper proposes a model of cluster development. Two wine regions – the Okanagan Valley, British Columbia (BC), Canada and Waipara, Canterbury, New Zealand – provide the basis for this study. Both regions have been studied previously using Porter's (1990, 2003) diamond framework, allowing a structured comparison across the determinants of the clusters (Dana & Winstone, 2008; Dana, Granata, Lascha, & Carnaby, 2013; Cartier, 2014; Cartier, 2017; Lembke & Cartier, in press). The wine clusters in these regions are examined to assess strategic alignment, and determine the balance of strategic activities that nurture cooperation and competition. Gap analysis and comparison within and between each wine region seeks to identify some of the building blocks for cluster maturity. Future research directions with the potential to refine our understanding of cluster development and lifecycles are also identified.

The Okanagan Valley is located in south-central British Columbia, Canada, and is the nation's second largest wine producing region after Niagara, Ontario. The mild, dry, continental climate, and well-drained, sandy soils, clays and loam soils have supported a diversity of wineries from the time of European settlement. In the Okanagan, the BC wine industry was transformed following ratification of the North American Free Trade Agreement (NAFTA), which led to re-planting of new varieties, and gradual development of a wine cluster assisted by an advantageous government retail model and growth in tourism. Over the past thirty years this environment has led to a rapid and profitable growth in the wine industry focused on premium quality wines, almost exclusively sold to the domestic market. The industry is now exposed to new challenges and opportunities that are threatening the status quo (Cartier, 2017).

Waipara, in North Canterbury, on New Zealand's South Island, is a much smaller area – approximately one third the size of the Okanagan, as measured in planted hectares. While the first vines were established in the 1980s, production has expanded most rapidly since the late 1990s, in part due to the establishment of government-funded irrigation schemes. An influx of corporate investment in the early 2000s further changed the production landscape, resulting in rapid growth. Throughout its development, the region's focus has always been on premium quality wine for the local domestic market, the South Island's largest city – Christchurch – 60 km to the south.

Previous analysis of both regions identified that the inception of the cluster was driven through the collective strategy of its key stakeholders. From the outset, key stakeholders in both regions elected to pursue a collective strategy to development, incorporating elements of cooperation and innovation through competition. The clusters' strategic alignment has yielded more recently to more tactical activities, despite some ongoing collaboration. We propose that both clusters are at a crossroads in their development. The following analysis seeks to gain insight into the causal process of cluster formation and development, and identify the ways in which these clusters learn to adapt to changing conditions. The resulting model has the potential to guide policy makers' and trade associations' objectives relating to economic development or stabilization in rural communities driven by a number of small and medium-sized enterprises.

Research Problem

The aim of the research is to establish the basis for a model of cluster development, which addresses the overarching research question: What are the developmental stages and the strategic triggers across the lifecycle of a cluster?

Methodology

This investigation is a quantitative and qualitative design based on documentary analysis of academic articles published about the regions, publicly available strategy documents produced by each region's firms and institutions, government, industry and research statistics. The study focuses on the 2000-2014 period, with assessment based on the strategic behaviours of the clusters during the first half and second half of this timeframe.

The clusters are assessed using Porter's (1990, 2003) diamond framework determinants': firm strategy, structure and rivalry; demand conditions; related and supporting industries; and factor conditions. Strategic activities already taken and planned by firms and institutions within each determinant and their alignment across activities are captured for each region. These are then validated against their proposed measures, proposed and achieved targets. Activities are then analysed in terms of their ability to promote or inhibit strategic cooperation and competition between cluster participants. A traffic light system (colour coding) is employed to illustrate changes over time and highlight possible areas of weakness, and the need for intervention.

Results and Discussion

While we cannot compare, or duplicate, specific cluster activities between regions, we can compare the 'quality' of their strategic activities and alignment. So, while the Okanagan and Waipara clusters exhibit some distinctly different characteristics, we are able to use the proposed cluster development model to compare like-with-like, focusing on the strategic alignment and maturity of the cluster determinants.

In the Okanagan region, the wine cluster was formalized as a response to favourable demand conditions based on a government retail monopoly and a growing tourism trade. These conditions reduced competition between wineries, which recognized the value of a unified brand and quality standards to differentiate themselves from imported wine. Between 1990 - 2008, a recognizable regional brand and quality standard was established. Trade associations were also created to assist with quality monitoring and marketing. As a result, this period saw significant economic growth, however no subsequent strategic activities of this scale have been seen since. The development model indicates a decline in cluster strength for the period 2009 - 2014. The cluster stakeholders have not built on their initial success, and price-based competition between cluster participants has been observed with negative implications for the premium brands and profitability margins. The impact of the weakened cluster relationships has not yet been tested, but with emerging environmental and resource challenges such as climate change, and limits on freshwater, as well as changes in political and market conditions likely, the cluster's resilience may soon be tested.

The Waipara wine cluster was formalized in late-2004. The initial goals were to develop a stronger identity for the region domestically, provide an educational function, and to foster collaborative, community spirit (Dana & Winstone, 2008). The earliest evidence of this activity is shown by cooperation between university and industry scientists, wine makers and viticulturalists who worked together to improve grape and wine quality by reducing yield, and established a scheme to improve the sustainability of vineyard practices. The cluster's marketing activities at this time were more tactical than strategic, and mainly involved regional marketing at local and Christchurch events. The lack of a more strategic approach to marketing is due in part to the competitive nature of wine distribution, which involves forming and maintaining distributor relationships to ensure shelf space and visibility.

Significant changes took place in the cluster from 2006 onwards. In two years the area of productive vineyards grew 55% (2006 - 2008), due to an influx of corporate investment. Corporates were attracted to the region's competitive land prices, and proximity to Marlborough - NZ's largest and internationally acclaimed wine region. Most corporates did not generally participate in the local cluster strategy, as much of the wine produced was not sold under a "Waipara brand", and they had little physical presence in the region beyond the vineyards. A critical event for the cluster was the series of earthquakes in 2010/2011 that severely affected the city of Christchurch and Canterbury region, the main markets for Waipara wine. The significant loss of hospitality outlets in the city slowed economic growth, led to the consolidation of some wine companies, and prompted a number of wineries to investigate export opportunities. While the nature of distributor relationships meant that these activities occurred in a competitive environment, the earthquake events cannot be linked to any notable strategic movement. At the

end of 2014 cluster activities remained largely tactical and there was limited involvement by some of the corporate investors in the cluster. It should however be mentioned that more recently, key stakeholders have been seen to evaluate the cluster's strategic focus and approach, and there is a sense that a new cohesiveness has emerged between the non-corporate wine producers in the region that had not been seen in twenty-five years. Changes that are on the horizon include an adjustment of cluster borders, the introduction of legally-binding Geographic Indicators for regionally produced wine on the export market, and greater engagement with tourism operators. Economic growth statistics will have to be analyzed and compared to the cluster development model in future years in order to confirm improvements in cluster strength.

Conclusions

A comparison of cluster development across the two regions points to clear inception conditions, which triggered visible strategic alignment across at least two of the cluster determinants. With tourism and a captured market for the Okanagan valley, and an advanced irrigation system, low land prices and a nearby market for quality wine for Waipara, both regions created strategic initiatives that enabled them to grow and thrive. The cluster development model further illustrates that the maturing of the clusters has however been hindered by unmanaged competition and both regions appear to be at a crossroads as they face new challenges and opportunities.

The researchers believe that the cluster development model introduced in this research may aid in the prioritization of strategy interventions designed to strengthen cluster networks and help manage the competition and collaboration in each of the four determinants of the model. Furthermore, this model provides an assessment tool for other wine regions to better understand cluster development and subsequently strengthen the resilience of a cluster to strategically deal with emerging threats and challenges. Further research and empirical application of the model are still needed to enhance its value to stakeholders and end-users to enhance cluster development and resilience in the face of uncertainty.

References

- Cartier, L. (2014). The British Columbia Wine Institute: Can it compete with the big guys? American Association of Wine Economists, 2014.
- Cartier, L. (2017). Extending Your Brand as an Industry Growth Strategy: Identifying Growth Opportunities for Small Wineries. Presentation at the 11th Annual American Association of Wine Economists Conference 2017 in Padua, Italy (June 28 - July 2, 2017).
- Dana, L.P. & Winstone, K.E. (2008) Wine cluster formation in New Zealand: operation, evolution and impact. *International Journal of Food Science and Technology*, 43
- Dana, L.P., Granata, J., Lascha, F. & Carnaby, A. (2013). The evolution of co-opetition in the Waipara wine cluster of New Zealand. *Wine Economics and Policy*, Vol 2 Issue 1 (June 2013) pages 42-49.
<https://doi.org/10.1016/j.wep.2013.05.001>
- Lembke, S. & Cartier, L. (in press). Producing good wine just isn't enough: The role of management in building a competitive industry cluster. *International Journal of Business and Globalization*.
- Porter, M. (1990). *The Competitive Advantage of Nations*. New York, NY: The Free Press.
- Porter, M. (2003). The Economic Performance of Regions. *Regional Studies*, Vol. 37.6&7 pp. 549-578, August/October 2003. Doi:10.1080/0034340032000108688