Handbook of Research on Global Business Opportunities

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Chapter 25
Innovation Scope and the Performance of the Firm:
Empirical Evidence from an Italian Wine Cluster

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ABSTRACT

Innovation is a key factor for surviving and competing in the global scenario. However, findings from existing studies provide conflicting evidence in this regard, and the relationship between company innovation and performance remains undetermined. This chapter aims to deepen our understanding of this subject by looking at a less studied topic: the relationship between the innovation scope of a firm and its performance. The study is based on empirical research carried out in a sample of 74 firms belonging to the Friuli Wine Cluster located in northeastern Italy. Empirical results support the view that the most successful winemakers are those who have a wider innovation scope and who, in the last years, have considerably revised their innovation-related processes in a more market- and experience-related way.

INTRODUCTION

Innovation is undoubtedly one of the most studied topics in management. From Schumpeter’s (1942) pioneering contributions onwards, innovation has been tackled as a multifaceted concept with meaning extending well beyond the narrow boundaries of technological innovation. The Oslo Manual (OECD, 2005: 46) shares the same vision and defines innovation as “the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method in business practices, workplace organization or external relations”.

Despite significant research, the relationship between innovation and performance remains an open issue. Findings from field research conducted at both the firm and the regional level...
suggest a need for further investigations (e.g., Garcia & Calantone, 2001). The majority of studies carried out at the firm level are grounded in the resource-based theory of the firm. They are mainly interested in finding meaningful correlations between performance and the possession of innovation-related resources, such as investments in R&D activities or innovation-related capabilities, such as the degree of innovativeness of the firm (Barney, 1991; Amit & Schoemaker, 1993; Hamel & Prahalad, 1994). One one hand, some of those studies highlight a positive effect exerted by innovation-dedicated resources and capabilities on performances (e.g., Hall & Mairesse, 1995; Adams & Jaffe, 1996; Chesbrough, 2007). However, other studies highlight that investing in innovation could be a necessary but non-sufficient condition to get better results at the economic and competitive level (Kafouros et al., 2008; Rosenbusch et al., 2011; Lazzari & Piccaluga, 2011).

Fewer studies that explore the innovation construct examine the various sides that comprise the innovation activity and connect them to the performance of the firm (Sawhney et al., 2006). However, studies carried out at the regional level are mainly focused on the so-called “agglomeration effect” and its impact on firms. The agglomeration effect is supposed to be positive for clusters according to the Marshallian view and the extant literature on Regional and National Innovation Systems (Cook et al., 2007; Camagni & Cappello, 1997). However, the validity and consistency of the agglomeration-effect have been heavily discussed in recent literature (Malmberg & Power, 2005; Grandinetti & De Marchi, 2014). Within this puzzled framework, this chapter aims to deepen our understanding of this relationship in a particular sector—the wine sector. The results of our study refer to a homogeneous territorial area that is known as the Friuli Wine Cluster (Venier, 2013). The cluster takes its name from the Friuli Venezia Giulia region which is located in the northeastern of Italy. Hence, despite being based on primary data direct from firms, our research put together two levels of analysis: the firm level and the cluster level.

Empirical results support the view that the most successful wine makers are those who considerably revised their innovation-related processes in a more market and experience-related way in recent years. Furthermore, despite being more open to foreign markets, the most successful companies are also the ones that have more intimate relationships with other firms and public and private institutions inside the cluster.

**BACKGROUND: INNOVATION AND PERFORMANCE IN THE WINE INDUSTRY**

**The Evolution of the Wine Industry**

The wine industry has been completely turned around in the last three decades. From a low added value primary sector product, wine has become one of the most important items in the agriculture budget of many countries and regions. This is the result of a cultural and technological revolution that redefined wine as a product as well as its market (Zampi, 2003).

The modern approach to wine production really developed in the 1980s (Filiputti, 1997), and it gave birth to a revolution that radically redefined the concept of wine, replacing the millenary concept of “wine as food,” (i.e., a source of calories during the day and of euphoria in the evening), with the modern idea of “wine as discovery,” i.e., a source of emotion, delight, and learning.

According to Heijbroek (2003), we can distinguish between two main market segments using price criteria: basic wines are those wines whose retail price is below the US$5.00/liter threshold and premium wines which remain above US$5.00/liter. Basic wines essentially compete with water, beer, and soft drinks for everyday consumption.
Their value is deeply rooted in material aspects such as standardization of quality, and they compete essentially in terms of price and brand. Premium wines are those which satisfy the most sophisticated needs of the consumer. Their value is mainly emotional or experiential. This second segment, which in the Friuli Venezia Giulia region was almost negligible until the 1980s, has basically become the only one produced in the 11 DOC Guarantee of Origin areas in the region.

Premium wine is the result of a process of diffusion of deep technical innovations in agronomic and eno-technical practices. These innovations enabled the evolution (and diffusion) of a different wine culture. Furthermore, they triggered a radical change in the definition of the production and service standards in the industry by raising the bar. The premium wines which consumers drink today have taste, fragrance, and complexity, but they also have production costs higher than the basic wine their fathers used to drink. From a marketing point of view, it is a completely different product that satisfies the social and cultural needs of a more sophisticated consumer.

In terms of Product Life Cycle (Rink & Swan, 1979), premium wines started reaching the mass market in the 1980s. During the first 20 years, the market went through phases of introduction and development. In this period, two critical learning processes occurred: producers refined their technical skills and started to compete in technological innovation and product quality, and customers started refining their tastes. During this period, on the production side, the main capabilities were with agronomists and wine-makers and their ability to improve the technology connected to wine production. But this success, which meant putting field and cellar technology and techniques at the center of the business model, gave rise to a conviction that if one produces excellent wine, it will almost automatically sell. Starting in the mid-2000s, the wine market entered a maturity phase and the rules of competition changed. The attention of wine producers had to shift from the supply side to the demand side. It is important to review the supply chain in order to fully understand this point. The wine supply chain consists of five main phases: viticulture, production, branding/distribution, retail, and consumers (Figure 1).

During the introduction and development phases, it was enough for companies to pursue excellence in managing viticulture and production. Distribution was not a problem; retail was highly fragmented and customers were highly influenced by opinion makers such as wine guides and magazines. Therefore, managing these kinds of relationships was the most important, and for many the only, marketing activity conducted by winemakers. Wine producers from Friuli Venezia Giulia were no exception. They have long benefited from high consumption in the regional market, which led to some inertia towards change and gave them more time to adapt to the new rules of the game. More recently, the regional and the

**Figure 1. The wine supply chain**
national (Italian) market started to shrink and become more open to international competition. Therefore, local winemakers had to organize to export and deal with new competition rules.

During the maturity phase, the wine industry experienced some major changes which made competition more difficult:

- A worldwide over-supply of wine that exceeded consumption by 10% or higher since the year 2000 (OIV, 2013) created pricing pressures.
- There was a consolidation of the wine producers, distributors, and retailers (Castaldi, Cholette, & Frederick, 2005). The wine industry is characterized by relevant economies of scale; in the last 15 years, this process has given birth to huge groups like Constellation which sells approximately 1,224,000,000 bottles of wine, or E&J Gallo which sells about 960,000,000 bottles of wine.
- Consumer behavior patterns shifted (Vlachvei, 2011). Today, consumers around the world can buy wine produced from every region of the globe. This has opened new markets, changed consumer behavior, and opened a wealth of new opportunities along with formidable challenges to wineries worldwide.

Given these situations, firms’ drivers for success changed course significantly: consumers developed an independent ability to judge products, the retail system started concentrating, and small independent wine shops started to be replaced by bigger retailers that asked for higher rotation on the shelves and higher margins. Hence, the natural agricultural cycle placed non-negligible rigidities into the production processes and the product mix that wineries could offer, while distribution started to exert an increasing pressure on winemakers, thus forcing them to provide distributors with better logistics services and engage in continuous innovation in products, packaging, and branding. In other words, distribution pushed wine suppliers to develop fast moving consumer goods (FMCG) management competences. Under these circumstances, the aspect of the supply chain on which the two aspects clash is Branding/Distribution. In this way, branding and distribution became the new core competency that winemakers needed to create a sustainable competitive advantage in the industry (Figure 2).

On the Relationship between Innovation Scope and the Performance of the Firm

In recent decades, the competitive landscape has changed consistently for firms in most, if not all, industries. The globalization of the world economy and the continuous evolution of technologies have been pushing firms to evolve continuously and considerably. Coupling strategic agility with the capability to innovate has become compulsory (Doz & Kosonen, 2008, 2010). But, unlike the past, it is now less a matter of innovating to maximize profits and more a matter of innovating to survive the competition (Brown & Eisenhard, 1995; Johnson et al., 1997; Dervitisiotis, 2010). But what exactly is innovation and how many types of innovations are there? Although the subject has risen in importance, some of the managerial literature still relies on an obsolete and narrow view of it.

One of the most popular distinctions is the one introduced by Damanpour (1991) that distinguishes between technical and administrative innovation. While the former (technical) refers to the launch of new products in the market and to the adoption of new production processes to increase efficiency, the latter (administrative) refers to new procedures, policies, and organizational forms. An alternative proposal comes from Tidd and Bessant (2009) who refer to a “4Ps framework” of product, process, position, and paradigm. While product and process represent traditional aspects
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Figure 2. Sources of pressure in the wine supply chain and strategic implications

- **Agricultural Cycle**
  - Viticulture
  - Production

- **Branding/Distribution**
  - Distribution
  - Retail

- **Consolidation**
  - Consumer

**Shelf space is a limited resource - an increasing barrier to entry**

Producer has to be able to convince a retailer that its brand represents the best allocation of that scarce resource. Brand value reduces the risk of failure for the retailer.

**Increasing importance on brand management and FMCG skill base**

of innovation, position refers a change trigged in the consumers’ perception of a product, a brand, or a firm. With innovation at the paradigm level, the authors refer to changes occurring at the business model level. It goes without saying that pursuing such types of innovation is the most complex, since it involves different levels (strategic, operative) and functions (marketing, supply chain, operation management, finance, etc.) in the firm.

Another suggestion comes from Sawhney, Wolcott, and Arroniz (2006) as an “innovation radar.” This radar refers to 12 possible dimensions along which companies can innovate and differentiate themselves from competitors. These dimensions include customer experience (“redesign customer interactions across all touch points and all moments of contact”), presence (“create new distribution channels or innovative points of presence, including the places where offerings can be bought or used by customers”), value capture (“redefine how [a] company gets paid or create[s] innovative new revenue streams”) and networking (“create network-centric intelligent and integrated offerings”). These proposals have at least one thing in common: they recognize that innovating is an activity that now pertains less to the domain of technology and more to domains such as marketing, operation management, and supply chain management and their combination.

Sharing the same belief, we decided to measure the scope of the innovation activity carried out by small- to medium-sized winemakers by looking beyond the domains of product and process innovation and including additional sides. We eventually developed a proposal comprised of the following 12 dimensions:

1. The company has introduced additional varieties of grapes. This dimension refers to the introduction, in the production process, of new-to-the-firm kinds of grapes and reflects a typical innovation at the product and process level.
2. The company has introduced/created new types of wines. This dimension refers to the creation of new wines coming from new
blends of grapes or different types of grapes (such as organic wines). Hence, it reflects a typical innovation occurring at the product and process level.

3. The company has refined its production process. This dimension refers to modifications/improvements occurring at the production process level and thus with process innovation.

4. The company has revised its way of organizing the work in order to increase its efficiency and/or effectiveness. This dimension relates to the revision of the organizational routines that a firm already has in place.

5. The company has acquired new equipment and machineries. This dimension refers to the acquisition of new tangible assets aimed at replacing old ones. It relates to organizational and process innovation.

6. The company has used alternative power sources. This dimension is related to green marketing initiatives, namely the use of alternative power sources, such as solar, photovoltaic, geothermal and Aeolian.

7. The company has entered new foreign markets. This dimension relates to the international expansion of the firm in new markets and thus deals with market and organizational innovation.

8. The company has increased the number of distributors in foreign markets. This dimension relates to additional investments at the sales and marketing side that winemakers make to increase their presence in already served foreign markets.

9. The company has increased the number of distributors in the domestic market. This dimension relates to the additional efforts on the sales and marketing side that winemakers make to increase their presence in the domestic market.

10. The company has launched new marketing initiatives. This dimension relates to the launch of new initiatives at the sales and marketing levels, such as new market promotions, new strategic agreements, new merchandising, inbound marketing activities, etc.

11. The company has introduced new/additional product-related benefits. This dimension relates to changes occurring in non-core activities within the product domain. Examples include the obtainment of new quality certifications, the adoption of new packaging and/or new labels, the use of new types of bottles and/or corks, etc. These innovations are meant to enhance the consumption experience of consumers and to reinforce an emotional connection with them.

12. The company has diversified its revenues streams leveraging complementary services. This dimension relates to the diversification of entry sources coming from complementary services, such as tourist and restorative services.

Together, the 12 dimensions are the “innovation scope” of the firm. The higher the number of the dimensions involved in the innovation effort of the firm, the wider the firm’s innovation scope. Most empirical studies dealing with the relationship between innovation and performance provide evidence that this relationship is positive and significant (e.g., Damanpour, 1991; Hansen et al., 1999; Thornhill, 2006; Weerawardena et al., 2006). However, both the literature (Wright et al., 2005; Simpson et al., 2006) and common sense suggest that innovation activity is risky and has no automatic returns.

The changes that recently occurred in the wine sector (see Section 1) suggest that wine producers today should invest much more in innovating beyond the technological level than they have done in the past. Their performances should be increasingly linked to their ability to innovate at the marketing level, in managing distributors locally and abroad, in offering new services to the trade, and in innovating the organizational pro-
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cesses and products and processes. We expect the data to confirm what other authors have recently shown (Brannon, 2011; Burgstone & Murphy, 2012) investing in innovation on multiple aspects of the business model has a much higher return than investing on just product and process quality. Hence, following the above arguments, our research hypothesis is:

**Small- to medium-sized winemakers with a wider innovation scope (i.e., focusing on more business model dimensions) have a significantly higher performance than winemakers with a narrow innovation scope, i.e., focusing only on the quality dimension of the traditional product.**

**FIELD RESEARCH ON A WINE CLUSTER: OBJECTIVE AND METHOD**

Our empirical research is based in a wine cluster with boundaries that perfectly match those of the Italian region Friuli Venezia Giulia (FVG). The FVG region is in the north east of the country and borders Slovenia and Austria. The cluster counts for 18,000 hectares dedicated to wine production, which are managed by approximately 9,000 winemakers. The majority of wineries are family-owned firms. The concentration of micro and small firms is extremely high; the average surface is two hectares per winemaker, and the presence of big firms is sporadic. Of the production area, 75% is reserved for the production of high-quality wines that can hold the “DOC Guarantee of Origin” label. There are 11 DOC areas in the region (Venier, 2013).

According to most recent official data (ISTAT, 2013), in 2012, a total of 178.3 million liters of wine were produced in the cluster. Only 16% of this amount was exported, compared to an average of 52% on the national level. However, FVG ranked highest among the Italian regions in terms of the average price of exports. In order to test our research hypothesis, quantitative research was conducted starting with a population of the 150 biggest bottlers/wineries in the cluster. After obtaining data from 74 firms, we organized face-to-face interviews with entrepreneurs and managers and used a semi-structured questionnaire. Our aim was to understand whether and in which way the innovation scope of firms was related to the performance of the same firms during the period 2010–2012.

The innovation scope construct basically refers to the innovative activities through which firms are able to convert their basic knowledge into routines, processes, products, and services. In order to operationalize this construct, we referred to several studies that paid particular attention to the ability to develop new products, process, and investments in organizational innovation (Lawson & Samson, 2001; Morales, 2010; Hii & Neely, 2012). For measuring the scope of innovation activities, we used 12 dichotomous items that reflected the effective innovative investment developed by winemakers during the last three years. The reliability indicators (α = .645) approximates 0.700, which meets Nunnaly’s (1981) recommendations for evaluating the internal consistency of the scale. The performance measure was operationalized by adapting existing multi-items scales (Murphy, 1996; Bergkvist & Rossiter, 2007).

We employed a Likert scale (1–5) version of this measure, with higher scores reflecting better performance achieved by firms in last three years and lower scores reflecting worse results. The medium point-of-scale (3) represents substantial stability in terms of economic performance. The reliability of the scale is above the level of 0.700 (α = .685).

**FINDINGS AND DISCUSSION**

Starting from the twelve innovative dimensions above, a hierarchical cluster analysis (SPSS) was performed using the Ward method. Through the
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Table 1. Variable measurement

<table>
<thead>
<tr>
<th>Construct</th>
<th>Items</th>
<th>Scale Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Innovation Scope</strong></td>
<td>1. New grapes</td>
<td>α= .645</td>
</tr>
<tr>
<td></td>
<td>2. New wines</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. New product process</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. New organizational practice</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. New winery facilities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. New power sources</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. New markets</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8. New distribution in the foreign market</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9. New distribution in the local market</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10. New marketing activities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11. New product characteristics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12. New services</td>
<td></td>
</tr>
<tr>
<td><strong>Performance</strong></td>
<td>1. Sales</td>
<td>α= .685</td>
</tr>
<tr>
<td></td>
<td>2. Profit</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Cash-flow</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Technical training</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Managerial training</td>
<td></td>
</tr>
</tbody>
</table>

cluster analysis, we singled out two main clusters that reflect different combinations of innovative activities carried out by firms (Figure 3). The first cluster includes 34 firms (46% of the sample). These winemakers mainly concentrate their innovative efforts on product-oriented activities (production of new wines, refinement of the production process, new organizational practices) and on foreign market development. These firms are labeled *product oriented* winemakers. The second cluster includes 40 firms (54% of the sample) that extend their innovative activities to more marketing-oriented initiatives and are labeled *marketing-oriented* firms. These clusters differ significantly in terms of their innovation scope (Table 2). In particular, marketing-oriented winemakers show a significantly higher innovation scope in relation to specific activities, such as new market efforts, new marketing initiatives, and new product features.

To simplify the reading of the results we grouped the 12 innovation activities conducted by firms into four broader innovative dimensions, each consisting of three items as follows:

- **Product innovation dimension** (PRODUCT_INN) in which the company:
  - Introduced additional varieties of grapes.
  - Introduced/created new types of wines.
  - Refined its production process.

- **Process innovation dimension** (PROCESS_INN) in which the company:
  - Revised the ways of organizing the work in order to increase its efficiency and/or effectiveness.
  - Acquired new equipment and machinery.
  - Used alternative power sources.
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*Figure 3. The dimensions of innovation scope for the two clusters (% of firms per cluster)*

![Diagram showing innovation scope dimensions for two clusters](image)

*Table 2. The innovative efforts within two clusters*

<table>
<thead>
<tr>
<th>Innovative Items</th>
<th>Cluster 1 Product Oriented</th>
<th>Innovative Dimensions</th>
<th>Cluster 2 Marketing Oriented</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>Sum</td>
<td></td>
</tr>
<tr>
<td>New grapes</td>
<td>44.1</td>
<td>1.79</td>
<td>PRODUCT_INN</td>
</tr>
<tr>
<td>New wines</td>
<td>70.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New product process</td>
<td>64.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New organizational practice</td>
<td>73.5</td>
<td>1.79*</td>
<td>PROCESS_INN</td>
</tr>
<tr>
<td>New winery facilities</td>
<td>67.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New energy sources</td>
<td>38.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New markets</td>
<td>82.4</td>
<td>2.14*</td>
<td>MARKET_INN</td>
</tr>
<tr>
<td>New distributors in the foreign market</td>
<td>88.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New distributors in the local market</td>
<td>44.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New marketing activities</td>
<td>29.4</td>
<td>1.12*</td>
<td>MKTNG_INN</td>
</tr>
<tr>
<td>New product characteristics</td>
<td>58.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New services</td>
<td>23.5</td>
<td>6.85*</td>
<td>INNOVATION_SCOPE</td>
</tr>
</tbody>
</table>

*p<.05*
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- **Market Innovation dimension (MARKET_INN)** in which the company:
  - Entered new foreign markets.
  - Increased the number of distributors in foreign markets.
  - Increased the number of distributors in the domestic market.

- **Marketing innovation dimension (MKTNG_INN)** in which the company:
  - Launched new marketing initiatives.
  - Introduced new/additional product-related benefits.
  - Diversified its revenue streams leveraging complementary services.

The differences in terms of item frequency remain statistically significant when we analyze the innovative dimensions defined. Indeed, marketing-oriented firms show a higher attitude toward innovation at the process (PROCESS_INN), market (MARKET_INN) and marketing level (MKTNG_INN), while innovation at the product level (PRODUCT_INN) is substantially undifferentiated within the two clusters. In terms of structural characteristics (age and size of the firms), the two clusters show no substantial differences. In this vein, innovative activities carried out by firms are considered the result of a precise strategic orientation by the firms (Table 3).

The two clusters were compared to the performances achieved by the firms in the last three years (Table 4). Results show that marketing-oriented winemakers achieved far better economic performances than product-oriented firms in terms of sales, profits, and cash flow. Furthermore, these firms showed a higher attitude toward investing in the skill development of their employees. In addition, while being more focused on foreign markets than product-oriented winemakers, marketing-oriented firms showed a high level of

### Table 3. Cluster structural characteristics

<table>
<thead>
<tr>
<th>Structural Characteristics</th>
<th>Total Sample</th>
<th>Cluster 1 Product Oriented</th>
<th>Cluster 2 Marketing Oriented</th>
<th>T-Test (Sig.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm Age</td>
<td>68.84</td>
<td>77.45</td>
<td>61.73</td>
<td>n.s.</td>
</tr>
<tr>
<td>Number of associates</td>
<td>14.45</td>
<td>17.79</td>
<td>12.35</td>
<td>n.s.</td>
</tr>
<tr>
<td>Number of employees</td>
<td>9.01</td>
<td>6.82</td>
<td>10.88</td>
<td>n.s.</td>
</tr>
<tr>
<td>Wine production (hectoliters)</td>
<td>7,510</td>
<td>6,714</td>
<td>8,242</td>
<td>n.s.</td>
</tr>
<tr>
<td>Number of firms</td>
<td>74</td>
<td>34</td>
<td>40</td>
<td></td>
</tr>
</tbody>
</table>

### Table 4. Performance by two clusters

<table>
<thead>
<tr>
<th>Performance Indicators (Likert Scale 1–5)</th>
<th>Total Sample</th>
<th>Cluster 1 Product Oriented</th>
<th>Cluster 2 Marketing Oriented</th>
<th>T-Test (Sig.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of Improvement Related to Performance in the Last Three Years (1 ‘Reduction’; 3 ‘Stable’; 5 ‘Increase’)</td>
<td>Mean</td>
<td>Mean</td>
<td>Overall Performance</td>
<td>Mean</td>
</tr>
<tr>
<td>Sales</td>
<td>3.50</td>
<td>3.15</td>
<td>3.02*</td>
<td>3.80</td>
</tr>
<tr>
<td>Profit</td>
<td>2.97</td>
<td>2.88</td>
<td></td>
<td>3.05</td>
</tr>
<tr>
<td>Cash flow</td>
<td>2.81</td>
<td>2.65</td>
<td></td>
<td>2.95</td>
</tr>
<tr>
<td>Technical training</td>
<td>3.45</td>
<td>3.26</td>
<td></td>
<td>3.60</td>
</tr>
<tr>
<td>Managerial training</td>
<td>3.36</td>
<td>3.18</td>
<td></td>
<td>3.53</td>
</tr>
</tbody>
</table>

*p<.05
social interactions inside the local cluster (Table 5). This corollary to the empirical results deserves elaboration.

We measured the level of social interactions of firms in terms of Frequency and Intimacy of contacts with other firms and institutions located in the Friuli Wine Cluster (Tshai & Ghoshal, 1998, Molina-Morales & Martínez-Fernández, 2009). According to Molina-Morales and Martínez-Fernández (2009) through these interactions, firms are able to (a) collect more information (product-, process-, and market-related information) and (b) to reduce the amount of time (and the amount of money) required to collect relevant information about their business. Our analysis reveals that marketing oriented firms are not only more global in the sense of being more open to foreign markets than product-oriented firms are, they are also more open to local collaboration and information sharing with local firms and institutions.

### Table 5. Social Interactions developed by two clusters

<table>
<thead>
<tr>
<th>Social Interactions Indicators (Likert Scale: 1 ‘Fully Disagree’ to 5 ‘Fully Agree’)</th>
<th>Total Sample</th>
<th>Cluster 1 Product-Oriented</th>
<th>Cluster 2 Market-Oriented</th>
</tr>
</thead>
<tbody>
<tr>
<td>People from my company spend a considerable amount of time at industry’s events with people from other firms</td>
<td>4.35</td>
<td>4.24</td>
<td>3.48*</td>
</tr>
<tr>
<td>People from my company spend a considerable amount of time on social events organized by the local community</td>
<td>3.23</td>
<td>2.76</td>
<td>3.63</td>
</tr>
<tr>
<td>The local origin and common background of employees at local firms allow social interactions to take place</td>
<td>3.34</td>
<td>3.32</td>
<td>3.35</td>
</tr>
<tr>
<td>There is an informal network among customers, suppliers, and competitors</td>
<td>3.46</td>
<td>3.15</td>
<td>3.73</td>
</tr>
<tr>
<td>I talk to an external contact person very often (more than once per week)</td>
<td>4.05</td>
<td>3.65</td>
<td>4.40</td>
</tr>
<tr>
<td>I feel comfortable talking to the contact person responsible for getting me the information that allowed my company’s performance to improve</td>
<td>4.14</td>
<td>3.76</td>
<td>4.45</td>
</tr>
</tbody>
</table>

*p<.05

### CONCLUSION, LIMITATIONS, AND FUTURE RESEARCH

The Italian wine industry is healthy. Italy is the largest player in terms of volume and second largest in terms of value in the world wine market. However, behind this performance is a scattered landscape comprised of small and medium-sized unbranded wineries that are suffering and medium- to large-sized wineries that have been able to evolve their business model in order to thrive in an industry that is moving fast toward the FMCG culture. The old mentality of many producers totally devoted to the product and of many dealers focused on sales only is no longer valid. The consumer is more knowledgeable, has more sophisticated tastes, and is more discerning. The market is more mature, segmented, and evolved. Large consolidation processes are taking place on the production and retail sides of the supply chain.
In this context, the two clusters we found could also contribute to understanding the growing polarization in the market between integrated 
boutique wineries that compete in micro-market niches, delivering their product to a selected small network of restaurants and independent retailers, and 
large wineries that are able to deal and manage business relationships with large retail groups and importers. These different evolutionary paths rely on the enhancement of winemakers’ managerial and marketing capabilities, which should provide innovative products to enhance logistic services addressed to the trade, develop, and manage a powerful brand.

Despite being limited to a single wine cluster, our empirical findings fully confirm this evolutionary representation. The capacity of market-oriented winemakers to widen their innovation scope (i.e., exiting from the cellar and investing in marketing and organizational assets) supported their overall performance improvement. These firms invested in multiple aspects of their business model. They were able to enter new markets and increase the number of foreign and local distributors. They launched new marketing initiatives in terms of promotions, merchandising, and inbound marketing activities. They introduced additional features and complementary services to their core product. These efforts are not restricted to the market-side only, but also concern internal processes. Indeed, these firms showed a higher propensity to revise their organizational practices and introduce new equipment and machineries. The above evidence hints at a possible evolutionary path for product-oriented winemakers who aspire to grow. They should cease focusing only on product and invest in marketing and organizational skills to increase their level of control in the distribution of their wines.

However, will belonging to the market-oriented cluster guarantee the viability of firms’ performances in the medium to long term? We know that increasing brand value/awareness is essential to profitability in the FMCG industry (Aaker, 1992). If the importance of branding is likely to grow in the future, will the relatively small size of firms be a constraint? According to the Intangible Business Report (2014), no Italian winery is yet among the top 100 world wine and spirit brands. Entering in that club requires massive investments that are out of reach for virtually all Italian winemakers. This could operate in two ways: concentration and/or alliances. The high performing, marketing-oriented sub-cluster has taken the right development path, but unless Italian companies learn the subtle art of coopetition, the financial weakness, at least in terms of scale, of most Italian players will run the risk of being taken over by foreign competitors.

Finally, a number of important limitations need to be considered. First, the definition of innovation is only partly clear and complete. Researchers could contribute to a richer conceptualization not only from a theoretical perspective, but also with the goal of better understanding the dimensions of innovation through which companies could seek differentiation. Second, we adopted a descriptive methodology (i.e., cluster analysis, rather than a more robust technique). Cluster analysis presents several limitations, above all based on the identification of cluster boundary and on the selection of the dependent variable (Punj & Stewart, 1983). We adopted it to improve clearness and readability of our findings for different readers of this chapter, such as scholars, managers, and policy makers. Hence, researchers could introduce a more robust technique, such as a multiple regression model, useful for evaluating the effect of innovation predictors on performance. Furthermore, another limit derives from the sample size and a non-probability sampling. In order to generalize the findings, there is a need for new empirical evidence on other wine clusters covering different geographical areas.
ACKNOWLEDGMENT

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REFERENCES


Innovation Scope and the Performance of the Firm


**ADDITIONAL READING**


KEY TERMS AND DEFINITIONS

**Industrial Cluster:** A geographic concentration of interconnected firms, suppliers, and institutions in a particular field. It has the potential to affect competition by increasing the productivity of the companies in the clusters, driving innovation, and stimulating new businesses in the specific field.

**Innovation Scope:** The range of different types of innovation activities carried out by firms.

**Innovation:** A significant positive change regarding new or significantly improved product or process and new marketing or organizational methods. In other words, it refers to renewing, changing, or creating more effective products, processes, or ways of working or doing things. There are different types of innovation: incremental, differential, radical, and breakthrough. Innovation is a process usually involving three fundamental elements: identifying needs, developing competences, and finding financial support.

**Market Innovation:** The improvement of the mix of target markets and of the way in which these are served. It refers to new markets and to new distribution process in foreign and local markets.

**Marketing Innovation:** The implementation of a new marketing methods involving significant changes in the marketing mix: product design or packaging, distribution, communication, or pricing. Its aim is to give value to the customers and to improve competitive advantage.

**Performance:** The results of activities of an organization or investment over a given period measured against preset known standards. Its definition and measurement is complex.

**Process Innovation:** The implementation of a new or significantly improved production or delivery method, such as changes in techniques, equipment, or software. Its aim is to decrease unit costs of production or delivery, increase quality, or offer new or improved products.

**Product Innovation:** This relates to both the development of new products and the improvement of existing products. This improvement can refer to changes in design or use of new materials or components in manufacturing of established products.