

Handbook of Research on Global Business Opportunities

Bryan Christiansen
PryMarke, LLC, USA

A volume in the Advances in Business Strategy
and Competitive Advantage (ABSCA) Book Series



An Imprint of IGI Global

Managing Director: Lindsay Johnston
Acquisitions Editor: Kayla Wolfe
Production Editor: Christina Henning
Development Editor: Austin DeMarco
Typesetter: Kaitlyn Kulp
Cover Design: Jason Mull

Published in the United States of America by
Business Science Reference (an imprint of IGI Global)
701 E. Chocolate Avenue
Hershey PA, USA 17033
Tel: 717-533-8845
Fax: 717-533-8661
E-mail: cust@igi-global.com
Web site: <http://www.igi-global.com>

Copyright © 2015 by IGI Global. All rights reserved. No part of this publication may be reproduced, stored or distributed in any form or by any means, electronic or mechanical, including photocopying, without written permission from the publisher. Product or company names used in this set are for identification purposes only. Inclusion of the names of the products or companies does not indicate a claim of ownership by IGI Global of the trademark or registered trademark.

Library of Congress Cataloging-in-Publication Data

Handbook of research on global business opportunities / Bryan Christiansen, editor.

pages cm

Includes bibliographical references and index.

Summary: "This book combines comprehensive viewpoints and research on various business enterprises from around the world in companies of all sizes and models, discussing different aspects and concerns in the global business environment such as corruption, taxation, supply chain management, and economic impacts"-- Provided by publisher.

ISBN 978-1-4666-6551-4 (hardcover : alk. paper) -- ISBN 978-1-4666-6552-1 (ebook : alk. paper) -- ISBN 978-1-4666-6554-5 (print & perpetual access : alk. paper) 1. International trade. 2. International business enterprises. 3. Investments, Foreign. 4. Commercial policy. 5. International economic relations. I. Christiansen, Bryan, 1960-

HF1379.H365 2015
338.88--dc23

2014029105

This book is published in the IGI Global book series Advances in Business Strategy and Competitive Advantage (ABSCA) (ISSN: 2327-3429; eISSN: 2327-3437)

British Cataloguing in Publication Data

A Cataloguing in Publication record for this book is available from the British Library.

All work contributed to this book is new, previously-unpublished material. The views expressed in this book are those of the authors, but not necessarily of the publisher.

For electronic access to this publication, please contact: eresources@igi-global.com.

Chapter 25

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

Guido Bortoluzzi
University of Trieste, Italy

Francesco Venier
University of Trieste, Italy

Patrizia de Luca
University of Trieste, Italy

Bernardo Balboni
University of Trieste, Italy

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

DOI: 10.4018/978-1-4666-6551-4.ch025

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). On 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; Lazzeri & 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 northeast 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.

Innovation Scope and the Performance of the Firm

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.

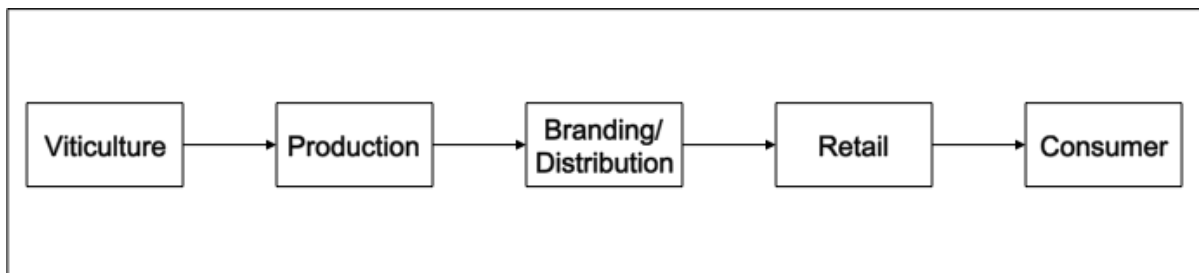
Premium wine is the result of a process of diffusion of deep technical innovations in agronomic and eno-technical practices. These innovations enabled the evolution (and diffusion) of a different wine culture. Furthermore, they triggered a radical change in the definition of the production and service 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

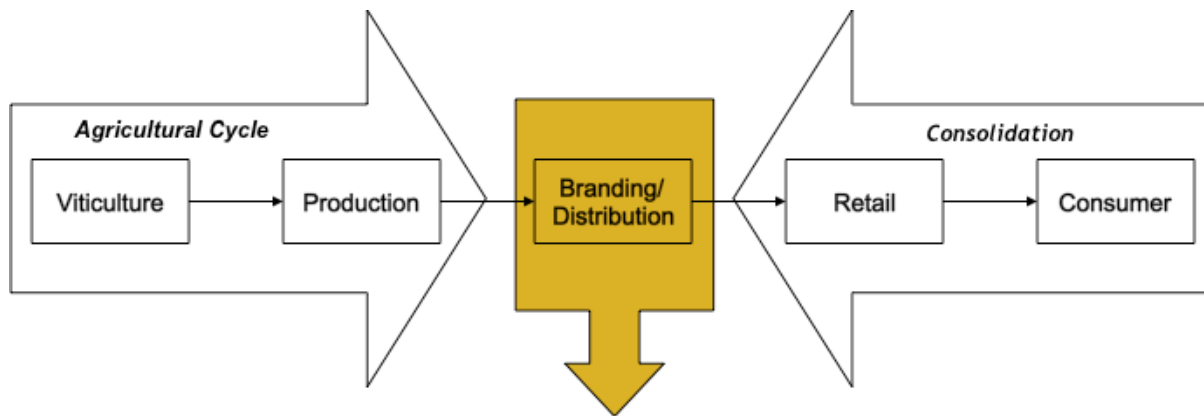
innovation in products, packaging, and branding. In other words, distribution pushed wine suppliers to develop fast moving consumer goods (FMCG) management competences. Under these circumstances, the aspect of the supply chain on which the two aspects clash is Branding/Distribution. In this way, branding 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; Dervitsiotis, 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

Figure 2. Sources of pressure in the wine supply chain and strategic implications



**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 triggered 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* ("re-design 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, geothermic 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-

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 argumentations, 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 ($\alpha = .645$) approximates 0.700, which meets Nunnally'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 ($\alpha = .685$).

FINDINGS AND DISCUSSION

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

Table 1. Variable measurement

Construct	Items	Scale Reliability
Innovation Scope	1. New grapes	$\alpha = .645$
	2. New wines	
	3. New product process	
	4. New organizational practice	
	5. New winery facilities	
	6. New power sources	
	7. New markets	
	8. New distribution in the foreign market	
	9. New distribution in the local market	
	10. New marketing activities	
	11. New product characteristics	
	12. New services	
Performance	1. Sales	$\alpha = .685$
	2. Profit	
	3. Cash-flow	
	4. Technical training	
	5. Managerial training	

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.*

Innovation Scope and the Performance of the Firm

Figure 3. The dimensions of innovation scope for the two clusters (% of firms per cluster)

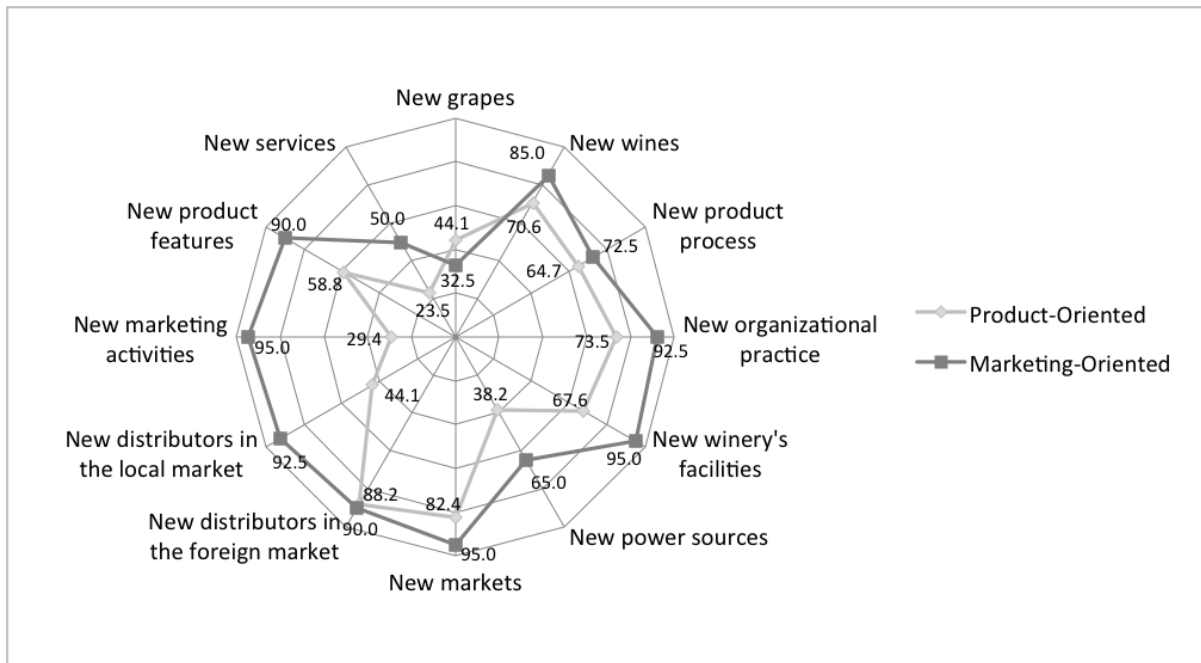


Table 2. The innovative efforts within two clusters

Innovative Items	Cluster 1 Product Oriented		Innovative Dimensions	Cluster 2 Marketing Oriented	
	%	Sum		Sum	%
New grapes	44.1	1.79	PRODUCT_INN	1.90	32.5
New wines	70.6				85.0
New product process	64.7				72.5
New organizational practice	73.5	1.79*	PROCESS_INN	2.53*	92.5
New winery facilities	67.6				95.0
New energy sources	38.2				65.0
New markets	82.4	2.14*	MARKET_INN	2.78*	95.0
New distributors in the foreign market	88.2				90.0
New distributors in the local market	44.1				92.5
New marketing activities	29.4	1.12*	MKTNG_INN	2.35*	95.0
New product characteristics	58.8				90.0
New services	23.5				50.0
		6.85*	INNOVATION_SCOPE	9.55*	

*p<.05

- 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 revenues 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

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

Table 4. Performance by two clusters

Performance Indicators (Likert Scale 1–5) <i>Degree of Improvement Related to Performance in the Last Three Years</i> (1 ‘Reduction’; 3 ‘Stable’; 5 ‘Increase’)	Total Sample	Cluster 1 Product Oriented		Cluster 2 Marketing Oriented	
	Mean	Mean	Overall Performance	Mean	Overall Performance
Sales	3.50	3.15	3.02*	3.80	3.39*
Profit	2.97	2.88		3.05	
Cash flow	2.81	2.65		2.95	
Technical training	3.45	3.26		3.60	
Managerial training	3.36	3.18		3.53	

*p<.05

Innovation Scope and the Performance of the Firm

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.

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.

Table 5. Social Interactions developed by two clusters

Social Interactions Indicators (Likert Scale: 1 'Fully Disagree' to 5 'Fully Agree')	Total Sample	Cluster 1 Product-Oriented		Cluster 2 Market-Oriented	
	Mean	Mean	Overall Social Interactions	Mean	Overall Social Interactions
People from my company spend a considerable amount of time at industry's events with people from other firms	4.35	4.24	3.48*	4.45	4.00*
People from my company spend a considerable amount of time on social events organized by the local community	3.23	2.76		3.63	
The local origin and common background of employees at local firms allow social interactions to take place	3.34	3.32		3.35	
There is an informal network among customers, suppliers, and competitors	3.46	3.15		3.73	
I talk to an external contact person very often (more than once per week)	4.05	3.65		4.40	
I feel comfortable talking to the contact person responsible for getting me the information that allowed my company's performance to improve	4.14	3.76		4.45	

*p<.05

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 cooptation, 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

This study is a part of a wider research project supported by the University of Trieste (Italy) under the FRA 2012 Program.

REFERENCES

- Aaker, D. A. (1992). The value of brand equity. *The Journal of Business Strategy*, 13(4), 27–32. doi:10.1108/eb039503
- Adams, J. D., & Jaffe, A. B. (1996). Bounding the effects of R&D: An investigation using matched establishment-firm data. *The Rand Journal of Economics*, 27(4), 700–721. doi:10.2307/2555878
- Amit, R., & Schoemaker, P. (1993). Strategic assets and organizational rent. *Strategic Management Journal*, 14(1), 33–46. doi:10.1002/smj.4250140105
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. doi:10.1177/014920639101700108
- Bergkvist, L., & Rossiter, J. R. (2007). The Predictive Validity of Multiple-Item versus Single-Item Measures of the Same Constructs. *Journal of Marketing Research*, 44(2), 175–184. doi:10.1509/jmkr.44.2.175
- Brannon, D. L. (2011). Identifying innovation in business models: A wine industry study. *Frontiers of Entrepreneurship Research*, 31(12).
- Brown, S. L., & Eisenhardt, K. M. (1998). *Competing on the Edge: Strategy as Structured Chaos*. Boston: Harvard Business School Press.
- Burgstone, J., & Murphy, W. (2012). *Squeeze More Juice Out of Your Business Model*. Retrieved on January 13, 2014, from <http://www.inc.com/jon-burgstone/cameron-hughes-wine-innovative-business-model.html>
- Camagni, R., & Cappello, R. (1997). *Innovation and performance of SMEs in Italy: The relevance of spatial aspects* (ESCR Working Paper No. 60). Cambridge, UK: ESRC Centre for Business Research.
- Castaldi, R. M., Cholette, S., & Frederick, A. (2005). Globalization And The Emergence Of New Business Models In The Wine Industry. *International Business and Economics Research Journal*, 4(3), 21–30.
- Chesbrough, H. (2007). Business model innovation: It's not just about technology anymore. *Strategy and Leadership*, 35(6), 12–17. doi:10.1108/10878570710833714
- Cooke, P. (2001). Regional innovation systems, clusters and the knowledge economy. *Industrial and Corporate Change*, 10(4), 945–974. doi:10.1093/icc/10.4.945
- Damanpour, F. (1991). Organizational innovation: A meta-analysis of effects of determinants and moderators. *Academy of Management Journal*, 34(3), 555–590. doi:10.2307/256406
- De Marchi, V., & Grandinetti, R. (2014). Industrial Districts and the Collapse of the Marshallian Model: Looking at the Italian Experience. *Competition & Change*, 18(1), 70–87. doi:10.1179/1024529413Z.00000000049
- Dervitsiotis, K. N. (2010). Developing full-spectrum innovation capability for survival and success in the global economy. *Total Quality Management*, 21(2), 159–170. doi:10.1080/14783360903549865
- Doz, Y., & Kosonen, M. (2008). The dynamics of strategic agility: Nokia's rollercoaster experience. *California Management Review*, 50(3), 95–118. doi:10.2307/41166447
- Doz, Y. L., & Kosonen, M. (2010). Embedding Strategic Agility. *Long Range Planning*, 43(2-3), 370–382. doi:10.1016/j.lrp.2009.07.006

- Filiputti, W. (1997). *Il Friuli-Venezia Giulia e i suoi grandi vini. Storie di uomini e vigneti*. Udine, Italy: Gianfranco Angelico Benvenuto Editore.
- Garcia, R., & Calantone, R. (2002). A Critical Look at Technological Innovation Typology and Innovativeness Terminology: A Literature Review. *Journal of Product Innovation Management*, 19(2), 110–132. doi:10.1016/S0737-6782(01)00132-1
- Hall, B. H., & Mairesse, J. (1995). Exploring the relationship between R&D and productivity in French manufacturing firms. *Journal of Econometrics*, 65(1), 263–293. doi:10.1016/0304-4076(94)01604-X
- Hamel, G., & Prahalad, C. (1990). The core competencies of the corporation. *Harvard Business Review*, 68(3), 79–91.
- Hansen, M. T., Nohria, N., & Tierney, T. (1999). What's your strategy for managing knowledge? *Harvard Business Review*, 77(2), 106–116. PMID:10387767
- Heijbroek, A. (2003). *Major Drivers Reshaping the Wine Industry: A Global Perspective*. Paper presented at the Wine Industry Symposium. Napa, CA.
- Hii, J., & Neely, A. (2012). The innovative capacity of firms. *Nang Yan Business Journal*, 1(7), 47–53.
- Intangible Business. (2014). *The Power 100: The World's Most Powerful Spirits & Wine Brands*. Author.
- ISTAT. (2013). *Rapporto Annuale 2013: La situazione del Paese*. Rom: Istat.
- Johnson, J. D., Meyer, M. E., Berkowitz, J. M., Ethington, C. T., & Miller, V. D. (1997). Testing two contrasting structural models of innovativeness in a contractual network. *Human Communication Research*, 24(2), 320–348. doi:10.1111/j.1468-2958.1997.tb00417.x
- Kafouros, M. I., Buckley, P. J., Sharp, J. A., & Wang, C. (2008). The role of internationalization in explaining innovation performance. *Technovation*, 28(1-2), 63–74. doi:10.1016/j.technovation.2007.07.009
- Lawson, B., & Samson, D. (2001). Developing innovation capability in organisations: A dynamic capabilities approach. *International Journal of Innovation Management*, 5(03), 377–400. doi:10.1142/S1363919601000427
- Lazzeri, F., & Piccaluga, A. (2011). *Le imprese spin-off della ricerca pubblica: convinzioni, realtà e prospettive future*. Pisa: Istituto di Management, Scuola Superiore Sant'Anna, Working Paper.
- Malmberg, A., & Power, D. (2005). (How) do (firms in) clusters create knowledge? *Industry and Innovation*, 12(4), 409–431. doi:10.1080/13662710500381583
- Molina-Morales, F., & Martínez-Fernández, M. (2009). Too much love in the neighborhood can hurt: How an excess of intensity and trust in relationships may produce negative effects on firms. *Strategic Management Journal*, 30(9), 1013–1023. doi:10.1002/smj.766
- Molina-Morales, F., & Martínez-Fernández, M. (2010). Social networks: Effects of social capital on firm innovation. *Journal of Small Business Management*, 48(2), 258–279. doi:10.1111/j.1540-627X.2010.00294.x
- Murphy, G. B., Trailer, J. W., & Hill, R. C. (1996). Measuring performance in entrepreneurship research. *Journal of Business Research*, 36(1), 15–23. doi:10.1016/0148-2963(95)00159-X
- OECD. (2005). *Oslo Manual: Guidelines for collecting and interpreting innovation data (3rd ed.)*. Paris: OECD and Eurostat.
- OIV. (2013). *Statistical Report on World Vitivini-culture*. Paris: OIV - International Organization of Vine and Wine.

Innovation Scope and the Performance of the Firm

Punj, G., & Stewart, D. W. (1983). Cluster analysis in marketing research: Review and suggestions for application. *JMR, Journal of Marketing Research*, 20(2), 134–148. doi:10.2307/3151680

Rink, D. R., & Swan, J. E. (1979). Product Life Cycle Research: A Literature Review. *Journal of Business Research*, 7(3), 219–242. doi:10.1016/0148-2963(79)90030-4

Rosenbusch, N., Brinckmann, J., & Bausch, A. (2011). Is innovation always beneficial? A meta-analysis of the relationship between innovation and performance in SMEs. *Journal of Business Venturing*, 26(4), 441–457. doi:10.1016/j.jbusvent.2009.12.002

Sawhney, M., Wolcott, R. C., & Arroniz, I. (2006). The 12 different ways for companies to innovate. *Sloan Management Review*, 47(3), 1–28.

Schumpeter, J. A. (1942). *Capitalism, socialism and democracy*. New York: Harper & Brothers Publishers.

Simpson, P., Siguaw, J., &ENZ, C. (2006). Innovation orientation outcomes: The good and the bad. *Journal of Business Research*, 59(10-11), 1133–1141. doi:10.1016/j.jbusres.2006.08.001

Tagliolini, E. (2012). *Strategic Management: South African Wine Industry*. (PhD Dissertation in Management). University of Milan-Bicocca, Milan, Italy.

Thornhill, S. (2006). Knowledge, innovation and firm performance in high- and low-technology regimes. *Journal of Business Venturing*, 21(5), 687–703. doi:10.1016/j.jbusvent.2005.06.001

Tidd, J., & Bessant, J. (2009). *Managing innovation. Integrating Technological, Market and Organizational Change* (4th ed.). Chichester, UK: Wiley.

Tsai, W., & Ghoshal, S. (1998). Social capital and value creation: The role of intrafirm networks. *Academy of Management Journal*, 41(4), 464–474. doi:10.2307/257085

Venier, F. (2013). Il Friuli Wine Cluster: Struttura, governance e performance del cluster del vino del Friuli Venezia Giulia. In S. Torcivia (Ed.), *Modelli di Family Business nel Settore Vitivinicolo* (pp. 119–164). Milano: Franco Angeli.

Vlachvei, A. (2011). Factors Influencing Consumers' Behavior on Wine Consumption: A Literature Review. *Journal of European Economy*, 10(4), 425–443.

Weerawardena, J., O' Cass, A., & Craig, J. (2006). Does industry matter? Examining the role of industry structure and organizational learning in innovation and brand performance. *Journal of Business Research*, 59(1), 37–45. doi:10.1016/j.jbusres.2005.02.004

Wright, M., Pruthi, S., & Lockett, A. (2005). International venture capital research: From cross-country comparisons to crossing borders. *International Journal of Management Reviews*, 7(3), 135–165. doi:10.1111/j.1468-2370.2005.00113.x

Zampi, V. (2003). Wine Management. Strategie e aspetti gestionali delle imprese vitivinicole quality oriented: *Evoluzione degli scenari e delle strategie d'impresa*. Firenze, Italy: Centrostampa il Prato.

ADDITIONAL READING

Anderson, K. (2001). *The globalization (and regionalization) of wine*. Adelaide: University of Adelaide, CIES, Discussion Paper 0125.

- Anderson, K., & Berger, N. (1999). Australia's re-emergence as a wine exporter: The first decade in international perspective. *Australian and New Zealand Wine Industry Journal*, 14(6), 26–38.
- Benson-Rea, M., Little, V., & Dufour, Y. (2010). Enterprise diversity in the business of wine: what is a business case study? *International journal of wine business research*, 22(2), 90-101.
- Bouzdine-Chameeva, T. (2006). How wine sector SMEs approach strategic questions - Some comparative lessons representation of distinctive competencies. *British Food Journal*, 108(4), 273–289.
- Brémond, J. (2014). Rioja: A specific and efficient economic model for wine region organization. *Journal of Wine Research*, 25(1), 19–31.
- Brostrom, J., & Brostrom, G. (2009). *The Business of Wine: An Encyclopedia*. Westport, CT: Greenwood Press.
- Castaldi, R. M., Cholette, S., & Frederick, A. (2005). Globalization and the Emergence of New Business Models in the Wine Industry. *International Business and Economics Research Journal*, 4(3), 21–30.
- Chong, S. (2007). Business process management for SMEs: an exploratory study of implementation factors for the Australian wine industry (Report). *Journal of Information Systems and Small Business* (1-2), 41.
- Coralie, H., Serge, A., Regis, M., & Stephane, B. (2012). Business Intelligence and Absorptive Capacity of Information by Wineries in the Provence Wine Industry. *International Business Research* (2).
- Dapiran, G. P., & Estampe, D. (2010). The Wine Supply Chain. Supply Chain Forum. *International Journal (Toronto, Ont.)*, 11(1), 2–3.
- Di Vita, G., Bellia, C., Pappalardo, G., & D'Amico, M. (2013). The Role of Innovation and Organization in Small Size Wineries: The Case of Malvasia delle Lipari PDO Wine. *Quality - Access to Success*, 14(137), 107-112.
- Doloreux, D., & Lord-Tarte, E. (2013). The organisation of innovation in the wine industry: Open innovation, external sources of knowledge and proximity. *European Journal of Innovation Management*, 16(2), 171–189.
- Dufour, Y., & Steane, P. (2010). Building a good solid family wine business: Casella Wines. *International journal of wine business research*, 22(2), 122-132.
- Fernanda, A. G., Martin, G. M., Mauricio, C., Laure, M., & Raymundo, Q. F. (2012). A framework for measuring logistics performance in the wine industry. *International Journal of Production Economics*, 135(1), 284–298.
- Gallucci, C., & D'Amato, A. (2013). Exploring nonlinear effects of family power on the performance of Italian wine businesses. *International Journal of Wine Business Research*, 25(3), 185–202.
- Giuliani, E., Morrison, A., & Rebellotti, R. (2011). *Innovation and Technological Catch-Up. The Changing Geography of Wine Production*. London: Edward Elgar Publishing.
- Heijbroek, A. (2003). *Major Drivers Reshaping the Wine Industry: A Global Perspective*. Wine Industry Symposium, September 25-26, Napa, California.
- Jenster, P. V. (2008). *The business of wine: a global perspective*. Copenhagen: Copenhagen Business School Press.

Innovation Scope and the Performance of the Firm

- Kidwell, R. E., & Fish, A. J. (2006). High-performance human resource practices in Australian family businesses: Preliminary evidence from the wine industry. *The International Entrepreneurship and Management Journal*, (1): 1–14.
- Malorgio, G., Grazia, C., & De Rosa, C. (2011). Forme organizzative e scelte strategiche per la valorizzazione dei vini a Denominazione di Origine. *Economia Agro-Alimentare*, 1/2, 367–390.
- Mancino, A., & Lo Presti, O. (2012). Wine tourism: A business opportunity for winemakers. *International Journal of Business and Globalisation*, 8(1), 153–169.
- Meissenheimer, J., Karaan, A. S. M., & Vink, N. (2004). *Sources of Transaction costs in the South African Wine Supply Chain: Implications for enhancing chain competitiveness*. South Africa: Department of Agricultural Economics, University of Stellenbosch.
- Monday, A., & Wood-Harper, T. (2010). Exploring the supply chain of small and medium-sized South Australian wine producers. *Supply Chain Forum: International Journal*, 11(1), 16–26.
- Ponte, S. (2009). Governing through Quality: Conventions and Supply Relations in the Value Chain for South African Wine. *Sociologia Ruralis*, 49(3), 236–257.
- Ras, P. J., & Vermeulen, W. J. V. (2012). Innovative Business Cases in the South Africa Table Grape and Wine Industries: Developing the Concept of Empowerment Entrepreneurship. *World Review of Entrepreneurship, Management and Sustainable Development*, 8(4), 456–477.
- Remaud, H., & Couderc, J. P. (2006). Wine Business Practices: A New versus Old Wine World Perspective. *Agribusiness*, 22(3), 405–416.
- Rossi, M., Vrontis, D., & Thrassou, A. (2012). Wine business in a changing competitive environment: strategic and financial choices of Campania wine firms. *International journal of business and globalisation*, 8(1), 112–130.
- Rossi, M., Vrontis, D., & Thrassou, A. (2012). Wine business in a changing competitive environment – strategic and financial choices of Campania wine firms. *International Journal of Business and Globalisation*, 8(1), 112–130.
- Roy, R. N., & Cordery, N. (2010). Comparing and improving value chain-supply chain in the three most important wine regions of New Zealand. *International Journal of Value Chain Management*, 4(3), 288–303.
- Santini, C., & Rabino, S. (2012). Internationalisation drivers in the wine business: A RBV perspective. *International Journal of Business and Globalisation*, 8(1), 7–19.
- Tagliolini, E. (2012). *Strategic Management: South African Wine Industry*. PhD Dissertation in Management. University of Milano-Bicocca, Milan.
- Turner, S. (2010). Networks of Learning within the English wine industry. *Journal of Economic Geography*, 10, 685–715.
- Zampi, V. (2003). *Wine Management. Strategie e aspetti gestionali delle imprese vitivinicole quality-oriented*. Firenze: Centro Stampa Il Prato.

Zanni, L. (2004). *Leading Firms and Wine Clusters. Understanding the evolution of the Tuscan wine business through an international comparative analysis*. Milano: Franco Angeli.

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.