Vienna 2019 Abstract Submission

Title

I want to submit an abstract for:
Conference Presentation

Corresponding Author
Emiliano Villanueva

E-Mail
villanuevae@easernct.edu

Affiliation
Eastern Connecticut State University

Co-Author/s

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<thead>
<tr>
<th>Name</th>
<th>E-Mail</th>
<th>Affiliation</th>
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<tbody>
<tr>
<td>Juan R. Ferrer</td>
<td><a href="mailto:jchofer@unizar.es">jchofer@unizar.es</a></td>
<td>University of Zaragoza</td>
</tr>
</tbody>
</table>

Keywords
Wine, Competitive Advantage, Business Strategies, Management Capabilities, Performance, Tourism

Research Question
What are the preeminent factors for wineries in Connecticut and Rhode Island to acquire their competitive advantage?

Methods
To address the research question, a survey was conducted of wineries in the states of Rhode Island and Connecticut.

Results
Management capabilities they own are more important than the strategies they follow in their pursue and achievement of a competitive advantage.

Abstract
Wine and its elaboration present elements that make it especially interesting; it is not only a product, it is a way of understanding life for both, those who produce it and those who consume it. For producers, wine contributes elements of conspicuous production (Overton and Banks, 2015) and for consumers, wine is linked to moments of enjoyment of quality of life, which can be expressed both at home and in a restaurant, or by enjoying a wine tourism activity.

In newer wine producing regions the wine industry focuses on this dual objective, on the one hand allowing the cultivation of the vineyard and wine making practices, while in the other developing a wine tourism business through the contact of producers and consumers in a natural environment (Villanueva and Moscovici, 2016).

One of the areas in which there has been a development of these characteristics is in the northeast of the United
States, specifically in the states of Connecticut and Rhode Island. In these two states there are registered only 47 wineries, and the US Alcohol and Tobacco Tax and Trade Bureau (within the US Department of Treasury) has defined two American Viticultural Areas: the South-Eastern New England AVA (parts of Connecticut, Rhode Island and Massachusetts) and the Western Connecticut Highlands AVA (Villanueva and Moscovici, 2016).

These wineries are usually small companies, which make a large part of their sales directly to the consumer after an action of attracting the customer to the winery. The winery constitutes a place of tourist visit, which has festive nuances, of celebration of a family, social event or a place to meet with neighbors or friends. The wineries hold concerts, yoga days, sporting or cultural events, a tasting or meal is included where the purchase of wine is encouraged through offers, a customer’s club or a loyalty program. With this same objective the wineries, or some of them, have opening hours adapted to weekends, holidays or seasons of special tourism activity. In the case of Connecticut and Rhode Island, the proximity to two important population centers, such as New York and Boston, facilitates the development of this wine tourism phenomenon (Villanueva and Moscovici, 2016).

This double conception of the wine business, the binomial of the wine as a consumer product and its tourism associated with the wineries, which in this area has a major component, has been developed around the world with different intensity. In settled wine-growing areas in the United States such as California or Oregon, or in Europe such as France, Italy, or Spain, wineries promote their tourism component; they prepare visits, gastronomic routes and other events, aware of the importance of bringing the customer closer to the winery to encourage purchase, but also as an element that transforms wine consumption into a unique and playful experience, a circumstance that makes the consumer loyal.

It is then of great interest to do a study of competitiveness to describe and analyze the competitive advantages of the wineries of Connecticut and Rhode Island. This should highlight key elements of their strategic intent and make it a case to a large part of wineries that seek to combine wine and tourism.

The study of the competitive advantage of companies is based on their capacity to create greater value than their competitors (Branderburger, 1996; Besanko, 2009). The way the company achieves this competitive advantage has basically two schools of thought. The first is based on the strategic position that the company adopts in the market (Porter, 1980), the second in the resources and capabilities that the company has and that differentiate it from its competitors by providing it with advantages when competing and appropriating of the rents of its prevailing position (Wernerfelt, 1984; Barney, 1991). These two approaches, one that seeks competitiveness outside the company or in the sector of business and another that does the search of competitiveness in the interior of the company and in its provision of resources, are not two incompatible approaches (Spanos and Lioukas, 2001), and numerous studies have shown that the joint analysis facilitates a better understanding of how competitive advantage is produced and achieved (Rivard et al., 2006; Rapp et al., 2010; Takata, 2016; Rosenberg and Ferlie, 2016; Chuang and Lin, 2017; Ferrer et al., 2018a).

In determining the preeminent factors for wineries in Connecticut and Rhode Island to acquire their competitive advantage this article follows this double approach, the Theory of Competitive Advantage (Porter, 1980) and the Theory of Resources and Capabilities or Resource Based Theory (Barney, 1991). The achievement of a competitive advantage means the creation of greater value for the winery, which is reflected in better performance indicators (Amadieu and Viviani, 2010; Simon-Elorz et al., 2015). At the same time and in terms of internal resources and capabilities, their management capabilities are studied since this resource has proven to be the most important in determining the best results of the company (Teece et al., 1997; Spanos and Lioukas, 2001; Ortega, 2010).

This article comes to cover important gaps in knowledge; the role of resources and management capabilities in obtaining a competitive advantage in the wine sector in the United States has never been studied, and there are very rare cases of studies using this approach in regional or country-level wine industries analysis. Kunc (2007) performed a study on managerial practices in the Chilean small and medium wineries. Chartes et al. (2008) completed a survey on the managerial practices in the Australian wine sector SMEs, Duarte and Bressan (2016) did the same in a study in the Italian wine sector SMEs, and Ferrer et al. (2017) studied the competitive advantage differences between firms belonging to a business group and independent wineries in the Spanish wine industry, while Ferrer et al. (2018a) analyzed the competitive advantage and general performance factors found in wineries belonging to the Spanish wine industry, and Ferrer et al. (2018b) focused their study on the application of the Miles
and Snow model in wineries of the Spanish wine sector.

The article is structured as follows: section 1 presents the theoretical framework and the literature review; section 2 explains the three hypotheses: one focuses on management capabilities, and two in the firm’s strategy and consequent performance indicators; section 3 shows the sample, variables and model used; section 4 reports the results; and lastly conclusions are presented along with the applicability of the results and its limitations.

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Rhode Island and Connecticut Wineries
Business Strategy, Performance,
and Management Capabilities:
a Survey of Managerial Practices

Emiliano C. Villanueva ‡
Eastern Connecticut State University

Juan R. Ferrer
University of Zaragoza

Abstract
The world wine sector has greatly changed in recent years, increasing the volume produced and traded, but also its competitiveness. In this new environment, many small businesses joined the industry, developing their activity in geographical regions with less wine tradition. These new wineries in less traditional wine regions have broadened the concept of the industry by linking it with tourism; perhaps with more strength than in other more traditional areas, where this change in the business model has also occurred. To know what are the factors that give a greater competitiveness to this new typology of wineries, this article has surveyed the wineries of the states of Connecticut and Rhode Island, in the northeast of the US, a new wine region in the world. Through a questionnaire, the strategies these wineries follow and their relationship with their performance, and their relevant management capabilities have been analyzed. The conclusions show how the management capabilities they own are more important than the strategies they follow in their pursue and obtention of a competitive advantage; and that it is the strategy of differentiation that facilitates a greater competitiveness. These managerial skills together with their conception of a services business, where the tourism aspect plays a fundamental role, seem evident when defining the resources and capabilities that generate their sustainable performance.

Key Words: Wine, Competitive Advantage, Business Strategies, Management Capabilities, Performance, Tourism

‡ Corresponding author: villanuevae@easternct.edu
Introduction
Wine and its elaboration present elements that make it especially interesting; it is not only a product, it is a way of understanding life for both, those who produce it and those who consume it. For producers, wine contributes elements of conspicuous production (Overton and Banks, 2015) and for consumers, wine is linked to moments of enjoyment of quality of life, which can be expressed both at home and in a restaurant, or by enjoying a wine tourism activity.

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The article is structured as follows: section 1 presents the theoretical framework and the literature review; section 2 explains the three hypotheses: one focuses on management capabilities, and two in the firm’s strategy and consequent performance indicators; section 3 shows the sample, variables and model used; section 4 reports the results; and lastly conclusions are presented along with the applicability of the results and its limitations.
1. Theoretical Framework and Literature Review

The theoretical analysis of the factors that determine the competitive advantage of wineries in Connecticut and Rhode Island is developed following the aforementioned theories: the Theory of Competitive Advantage (Porter, 1980) and the Theory of Resources and Capabilities or Resource Based Theory (Barney, 1991).

Porter (1980) argues that the company that can obtain a competitive advantage is one that is able to find a position within the sector by developing a strategy that allows it to defend of their competitors. To determine this position, the company must perform the strategic planning process. There are only two main generic strategies, benefit leadership or cost leadership: benefit leadership implies that the company’s products can be sell with a price premium relative to competitors, and cost leadership is when the company’s products can be produced at lower cost per unit than competitors (Besanko, 2009). The focus on one of them in a certain segment draws the third option, cost or differentiation in the whole market or in a segment. The company must flee from the "stuck in the middle" intermediate positions that inevitably move it away from obtaining a competitive advantage (Porter, 1980 and 1985).

The Theory of Resources and Capabilities or Resource Based View (RBV) focuses on the resources and capabilities available to the company as a key to achieving competitive advantage (Barney, 1991). Resources are all available factors that the company controls, and which become final products or services using a wide range of other assets and mechanisms available to the company. Capabilities emerge as the elements that make possible the use of resources through organizational processes. Capabilities are developed over time based on complex interactions between the resources available to the company (Amit and Schoemaker, 1993).

The resources and capabilities available to the company are not in themselves a strategic and fundamental element that ensures the achievement of competitive advantage. Three conditions must be fulfilled to obtain it: establishing and maintaining the competitive advantage and appropriating the benefits that arise from it. Resources must be scarce and relevant to satisfy these three conditions, and they must be durable, nontransferable, and not replicable (Grant, 2010).

2. Hypotheses

**Competitive Strategy and Business Performance**

The strategies that the company adopts, and following the Theory of Competitive Advantage (Porter, 1980), are leadership in costs or differentiation, or some of the previous two but focused in a segment of the market. The analysis of the strategic activities of the company contemplates the whole series of competitive decisions that the company adopts in the search for competitive advantage and that shapes its strategy (Ortega, 2010; Barney, 2011). To study the competitive advantages of the Connecticut and Rhode Island wineries the strategies adopted by the company are analyzed through the methodology of Robinson and Pearce (1988), analyzing their orientation towards cost leadership or differentiation (Dess and Davis, 1984).
In the effort to achieve survival and success, the company is projected outwardly defining its strategy, which products to offer, and in what market (Ansoff, 1965). The vision, mission and values of the company determine their objectives which will involve the definition of their place in the market (Brenes et al., 2014).

Although there has been extensive research written about strategy in terms of business, Porter’s perspective (1980 and 1985) continues to be the one that receives the greatest consensus in articles, textbooks (Campbell, 2000) and empirical studies (Campbell, 2000; Spanos and Lioukas, 2001; Camisón, 2004; Ortega, 2010; Brenes et al., 2014). Porter conceives the determination of the strategy as the analysis of the competitive behavior, and the choice between two generic strategies, leadership in cost or differentiation and the third as the projection of any of the two on a certain segment. The scheme leads to an increase in the value created by the company either by increasing the perceived profit or by reducing production costs and thus improving its competitiveness (Besanko, 2009).

This article analyzes the different types of strategies for wine companies: (leadership in) cost and differentiation. According to this, the following first (A) and second (B) hypotheses are formulated:

**Hypothesis A:**
The wineries tending towards a cost leadership strategy will have a better performance.

**Hypothesis B:**
The wineries tending towards a differentiation strategy will have a better performance.

**Management Capabilities**
The establishment of the following third hypotheses is done with the objective of confirming that the Theory of Resources and Capabilities or Resource Based View (RBV) (Barney, 1991), together with the Theory of Competitive Advantage (Porter, 1980), jointly explain the competitive advantage achieved by wineries in the states of Connecticut and Rhode Island, and ultimately the performance of these companies (Spanos and Lioukas, 2001; Ortega, 2010).

The analysis of resources and capabilities will focus on management capabilities, because of the importance they have in the company's results; it is the way in which the manager projects his strategy and his objectives to the rest of the organization. As Teece et al. (1997) mentioned "in short, strategic, organizational, and human resource decisions made by management lie at the heart of enterprise performance".

Management and organizational capabilities are developed at the top of the organizational chart through three functions: coordination and integration, learning, and reconfiguration (Teece et al., 1997). These capabilities are part of the routines learned and may differentiate a company, explaining why some of them present a more efficient management than others, and may become a source of competitive advantage (Teece et al., 1997).
The importance of managerial skills is based on the manager’s vision and leadership (Pickett, 1998), integrating this with the strategy (Westley and Mintzberg, 1989). The management competencies include the definition of the strategy and the organizational structure at the level of design and implementation. Managers must provide a high degree of commitment, clear definition of objectives and financial resources (Pickett, 1998), and guide employees towards the shaping of business resources and competencies (Kor and Mesko, 2013).

Management resources reflect the capabilities of managers and are precursors to competitive advantage and revenue. The managerial skills are not easily exportable to other companies. Therefore, the hiring of external managers does not always have a positive effect. It is through human capital that the manager generates income by implementing the strategy and making operational decisions (Castanias and Helfat, 2001; Helfat and Martin, 2015).

Managers use their management capacity to guide the company towards cost reduction, product differentiation or a combination of both, looking for competitive advantage. Their responsibility and management include strategic business vision, internal communication, strategic management of human resources (recruitment, job analysis, development, training, performance and compensation), the acquisition of resources and their transformation into products and services. Through these managerial steps, they create value for the partners and owners of the company, thus being a generator of revenues and their appropriation, and a key element for the maintenance of the competitive advantage (Lado and Wilson, 1994).

The analysis of management capabilities and their connection with strategy and performance has been analyzed finding a positive relation (Spanos and Lioukas, 2001; Ortega, 2010; Welter et al., 2013), and that relates to the establishment of the third (C) hypothesis:

**Hypothesis C:**

In Connecticut and Rhode Island wineries, the management capabilities owned by the firm are positively related to the firm’s performance.

3. Sample, Variables, and Model

To address the research hypotheses, and a gap in data for these two states, a survey was conducted of wineries in the states of Rhode Island and Connecticut using lists from each department of agriculture’s winery websites as our survey universe. The states of Rhode Island and Connecticut listed 11 wineries and 36 wineries respectively (RI Department of Agriculture, 2018; CT Department of Agriculture, 2018).

All 47 wineries were contacted by e-mail introducing the project and asking them to send their responses to the digital survey. Initial contacts were followed-up with a personal visit, e-mails and phone calls to request participation for the survey. The process extended for 4 months, from July to October 2018. The final response included 3 wineries for the State of RI, a 27% response rate, and 12 wineries for the State of
CT, a 33% response rate. This corresponds to an 32% response between the two states, a high and representative value, and over the 14% as the order of magnitude reported by Baruch and Holtom (2008) for industrial sectors.

The analysis of the competitive advantage, its business strategy intent and the performance associated, and management capabilities of the Connecticut and Rhode Island wineries was conducted using questions and scales that had been used and validated in previous studies (Spanos and Lioukas, 2001; Ortega 2010; Ferrer et al., 2018a).

The digital survey covers a series of questions in these three content areas: business strategy, performance, and management capabilities. The scale in which the business strategy is captured consists of a Likert scale with five levels; RI and CT wineries evaluate themselves with respect to different business development efforts where 1 is "not utilized" and 5 is "primary, constantly utilized". There are 22 competitive methods that Robinson and Pearce (1988) enumerate (see Table 1 below) and that were asked to every one of the CT and RI interviewed; the wineries used the mentioned Likert scale to give their answers respective to their strategic intent regarding these competitive methods.

Table 1. Robinson and Pearce (1988) Twenty-Two Competitive Methods

1) Pricing below competitors,
2) New product development,
3) Broad product range,
4) Customer service,
5) Specific efforts to ensure a pool of highly trained experienced personnel,
6) Extremely strict quality control procedures,
7) Emphasis on improving cost per unit,
8) Maintaining high inventory levels (disregarding the derivative of aging the product),
9) Narrow, limited range of products,
10) Brand identification,
11) Developing and refining existing products,
12) Strong influence over distribution channels,
13) Major efforts to ensure availability of raw materials,
14) Increased investment in process efficiency-oriented R&D,
15) Only serving specific geographic markets,
16) Above average advertising, publicity and/or communication expenditures,
17) Emphasis on the manufacturing of speciality products,
18) Reputation building efforts within industry,
19) Innovation in manufacturing processes,
20) Products in higher priced market segments,
21) Products in lower priced market segments, and
22) Innovation in marketing techniques and methods.
These 22 questions capture the business strategies used (Dess and Davis, 1980; Robinson and Pearce, 1988) and allows to know what the competitive options for these RI and CT wineries are: costs or differentiation. The company also projects through these competitive methods one of the generic strategies of the four main strategies defined by Robinson and Pearce (1988): efficiency, service / high price, innovation and development, and marketing. The analysis of the strategies of Robinson and Pearce adds more information, detail and clarification of how Porter's generic strategies are developed in the company (Spanos and Lioukas, 2001; Camisón et al., 2007; Ortega, 2010; Ferrer et al., 2018a; among others).

Following Spanos and Lioukas (2001) and Ortega (2010), business performance has been evaluated along eight dimensions (see Table 2), grouped in two major areas of interest (market position and profitability in the last three years). RI and CT wineries evaluate their position with respect to the competition using a Likert scale with five levels, where 1 is "much weaker than the competition" and 5 "is much stronger than the competition".

Table 2. Spanos and Lioukas (2001) and Ortega (2010) Eight Business Dimensions

| 1) Market position. Sales volume in dollars, |
| 2) Market position. Growth in sales volume in dollars, |
| 3) Market position. Market share in %, |
| 4) Market position. Growth in market share in %, |
| 5) Market position. Number of visitors to the winery in comparison, |
| 6) Profitability. Profit margin in comparison, |
| 7) Profitability. Return on own capital in comparison, and |
| 8) Profitability. Net profits in comparison. |

Regarding management capabilities, RI and CT wineries evaluate their position with respect to their competition in seven capabilities (see Table 3) and using a 5-point Likert scale, where 1 is "much weaker than the competition" and 5 "is much stronger than the competition".

Table 3. Seven Management Capabilities

| 1) Managerial competencies, |
| 2) Knowledge and skills of employees, |
| 3) Work climate, |
| 4) Efficient organizational structure, |
| 5) Coordination, |
| 6) Strategic planning, and |
| 7) Ability to attract creative employees. |

The model developed can test the three hypotheses, whether generic strategies, cost or differentiation, and/or management capabilities explain CT and RI wineries' business performance.
The proposed model of analysis is as follows:

\[ Y_i = \beta_0 + \beta_1 S_i + \beta_2 MC_i + \epsilon_i \]

Where, \( Y_i \) is the performance value for the company "i"; \( \beta_0 \) is the constant; \( \beta_1 \), the coefficient of the company strategy; \( \beta_2 \), is the coefficient of management capability; and \( \epsilon_i \) is the error or the residual of the proposed model.

The dependent variable is Business Performance. To avoid collinearity and being able to work with one variable, a factor analysis has been carried out, extracting a component that determines how each company conceives its performance. The extracted factor explains 62.72% of the variance, with a KMO = 0.731, and Cronbach's alpha = 0.914, as Table 4 illustrates.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Alpha without item</th>
<th>Component</th>
<th>Communality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales volume, in dollars</td>
<td>.886</td>
<td>.932</td>
<td>.878</td>
</tr>
<tr>
<td>Growth in market share, over sales in</td>
<td>.901</td>
<td>.822</td>
<td>.913</td>
</tr>
<tr>
<td>Return on own capital</td>
<td>.900</td>
<td>.792</td>
<td>.962</td>
</tr>
<tr>
<td>Growth in sales volume, in dollars</td>
<td>.904</td>
<td>.787</td>
<td>.699</td>
</tr>
<tr>
<td>Profit margin</td>
<td>.902</td>
<td>.779</td>
<td>.819</td>
</tr>
<tr>
<td>Number of visitors to the winery</td>
<td>.905</td>
<td>.770</td>
<td>.599</td>
</tr>
<tr>
<td>Market share, % over sales in dollars</td>
<td>.909</td>
<td>.737</td>
<td>.894</td>
</tr>
<tr>
<td>Net profits</td>
<td>.910</td>
<td>.696</td>
<td>.803</td>
</tr>
<tr>
<td><strong>Barlett Test:</strong></td>
<td>( \chi^2 )</td>
<td>gl</td>
<td>sig</td>
</tr>
<tr>
<td><strong>77.462</strong></td>
<td>28</td>
<td>0.000</td>
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Cost and Differentiation strategies, and Management Capabilities have been set as independent variables.

Cost leadership strategy is the strategy that is followed by the wineries that answered the “products in lower priced market segments” question with a considerable emphasis or major, constant emphasis. Differentiation strategy or Benefit leadership is the strategy which is followed by the wineries that answered the question about “products in higher priced market segments” with considerable emphasis or a major, constant emphasis.

Regarding Management Capabilities, a factor analysis has been carried out extracting a component that determines how each company perceives its performance. The extracted factor explains 63.61% of the variance, with a KMO = 0.625, and Cronbach's alpha = 0.902, as Table 5 illustrates.
Table 5. Factor Analysis: Management Capabilities

<table>
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<th>Variables</th>
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<th>Component</th>
<th>Communality</th>
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</thead>
<tbody>
<tr>
<td>Strategic planning</td>
<td>.877</td>
<td>.854</td>
<td>.730</td>
</tr>
<tr>
<td>Managerial competencies</td>
<td>.885</td>
<td>.826</td>
<td>.683</td>
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<tr>
<td>Efficient organisational structure</td>
<td>.882</td>
<td>.824</td>
<td>.680</td>
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<tr>
<td>Coordination</td>
<td>.888</td>
<td>.802</td>
<td>.644</td>
</tr>
<tr>
<td>Knowledge and skills of employees</td>
<td>.889</td>
<td>.780</td>
<td>.608</td>
</tr>
<tr>
<td>Work climate</td>
<td>.892</td>
<td>.760</td>
<td>.577</td>
</tr>
<tr>
<td>Ability to attract creative employees</td>
<td>.895</td>
<td>.729</td>
<td>.532</td>
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Barlett Test: \( \chi^2 \) gl sig

<table>
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<tr>
<th></th>
<th>( \chi^2 )</th>
<th>gl</th>
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<tr>
<td></td>
<td>69.803</td>
<td>21</td>
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4. Results

The process of analysis of the proposed hypotheses is carried out in two phases; first, a linear regression is performed for the two types of generic Porter Strategies (Low-Cost and Differentiation) and the Management Capabilities. Subsequently and following the Strategies defined by Robinson and Pearce (1988) (see Table 6), a Mann-Whitney U Test is performed defining which of these Strategies are associated to the best performance, defining two independent samples, wineries that perform better than their competitors (Sample A), and wineries that do not perform better than their competitors (Sample B). Through another non-parametric Mann-Whitney U Test, the characteristics of the Management Capabilities is determined by defining the same two independent samples, wineries that perform better than their competitors (Sample A), and wineries that do not perform better than their competitors (Sample B).

Table 6. Robinson and Pearce (1988) Strategies Pattern of Classification

<table>
<thead>
<tr>
<th>Pattern Classification</th>
<th>Competitive methods associated with each pattern of strategic behavior. Questions of the scale.</th>
<th>Comments and interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency</td>
<td>Seek to insure trained personnel</td>
<td>Each competitive method is consistent with an effort to ensure efficient, cost-effective operations</td>
</tr>
<tr>
<td></td>
<td>Pursue strict quality control</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Emphasize lowest cost per unit</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Push innovation in manufacturing processes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Innovation in marketing techniques</td>
<td></td>
</tr>
<tr>
<td>Service</td>
<td>No concern for pricing below competitors (negative load)</td>
<td>Consistent concern with extensive service to customers in higher-priced markets with the development of an industry reputation</td>
</tr>
<tr>
<td></td>
<td>Extensive customer service</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Build reputation in industry</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Serve high-priced market segments</td>
<td></td>
</tr>
</tbody>
</table>
Avoid low-priced market segments (negative load)

Product innovation and development
- New product development
- Develop and refine existing products
- Emphasize speciality products
- Process-oriented R&D

Seeks to emphasize specialized products and new developments or refinements based in part on process R&D

Brand /channel influence (Marketing)
- Build brand identification
- Influence channels of distribution
- New product development
- Innovation in marketing techniques

Focus on brand recognition and strong influence over channels through efforts like product development and new marketing techniques

The analysis was run with the SSPSv20. The results of the regression for the two models are shown in Table 7 (below). The adjusted $R^2$ has a value of 0.644 in the first model and 0.507 in the second. Thus, the model infers that the Management Capabilities have greater impact on Business Performance than Strategies and only the Differentiation Strategy (Benefit Leadership) has an impact in the Business Performance, with a higher value than 0.05 (0.075). The Low-Price Strategy cannot be related to the winery’s performance. Thus, this is the confirmation of Hypotheses B (“The wineries tending towards a differentiation strategy will have a better performance”) and C (“In Connecticut and Rhode Island wineries, the management capabilities owned by the firm are positively related to the firm’s performance”), and the rejection of Hypothesis A.

Table 7. Regression Analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Differentiation Model</th>
<th>Low-Cost Model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>t</td>
</tr>
<tr>
<td>Differentiation Strategy</td>
<td>.387</td>
<td>1.988</td>
</tr>
<tr>
<td>Low-Cost Strategy</td>
<td>-0.068</td>
<td>-0.301</td>
</tr>
<tr>
<td>Managerial Capabilities</td>
<td>.616</td>
<td>3.164</td>
</tr>
<tr>
<td>R²</td>
<td>0.802</td>
<td></td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.644</td>
<td></td>
</tr>
<tr>
<td>Collinearity FIV</td>
<td>1.062</td>
<td></td>
</tr>
<tr>
<td>Collinearity Condition Index</td>
<td>1.980</td>
<td></td>
</tr>
</tbody>
</table>
In table 8 (below), Mann-Whitney U Test results for the four types of Robinson and Pearce strategies are presented, and for the two defined samples, wineries that perform better than their competitors (Sample A), and wineries that do not perform better than their competitors (Sample B).

Table 8. U Mann-Whitney U Test for Robinson and Pearce Strategies

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean Rank</th>
<th>Sig Asymptotic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sample A</td>
<td>Sample B</td>
</tr>
<tr>
<td>Efficiency Strategy</td>
<td>9.25</td>
<td>7.55</td>
</tr>
<tr>
<td>Service Strategy</td>
<td>11.88</td>
<td>6.59</td>
</tr>
<tr>
<td>Product Innovation Strategy</td>
<td>10.62</td>
<td>7.05</td>
</tr>
<tr>
<td>Marketing Strategy</td>
<td>10.62</td>
<td>7.05</td>
</tr>
</tbody>
</table>

Table 8 shows how the Service Strategy is highly related to the better performance of the wineries, with a significance below 0.05 (0.039 sig asymptotic). However, it is also observed that the Product Innovation Strategy and Marketing Strategy have a certain degree of impact to the performance of CT and RI wineries, although it is not statistically significant (value greater than 0.1).

To determine which management capabilities are related to a better performance of CT and RI wineries, the Mann-Whitney U Test is done for the independent samples, wineries that perform better than their competitors (Sample A), and wineries that do not perform better than their competitors (Sample B). The Mann-Whitney U Test reflects which management capabilities characterize the wineries with better performance (see table 9 below). The following management capabilities have resulted key elements in their better performance and present values with a high level of statistical significance: efficient organizational structure (value is lower than 0.05: 0.011 sig asymptotic), medium level of statistical significance: ability to attract creative employees (value is lower than 0.10: 0.067 sig asymptotic) and coordination (value is lower than 0.10: 0.074 sig asymptotic). These three management capabilities (efficient organizational structure, ability to attract creative employees, and coordination) are the performance drivers of the wineries of RI and CT.

Table 9. Mann-Whitney U Test for Management Capabilities

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean Rank</th>
<th>Sig Asymptotic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sample A</td>
<td>Sample B</td>
</tr>
<tr>
<td>Strategic planning</td>
<td>8.29</td>
<td>5.50</td>
</tr>
<tr>
<td>Managerial competencies</td>
<td>7.86</td>
<td>6.00</td>
</tr>
<tr>
<td>Efficient organizational structure</td>
<td>9.36</td>
<td>4.25</td>
</tr>
<tr>
<td>Coordination</td>
<td>8.64</td>
<td>5.08</td>
</tr>
<tr>
<td>Knowledge and skills of employees</td>
<td>7.57</td>
<td>6.33</td>
</tr>
<tr>
<td>Work climate</td>
<td>8.07</td>
<td>5.75</td>
</tr>
<tr>
<td>Ability to attract creative employees</td>
<td>8.71</td>
<td>5.00</td>
</tr>
</tbody>
</table>
Conclusion

This article analyzes the factors that explain the competitive advantage of companies in an industry where two business objectives, the development of a food product and the creation of a service contribute to generate loyalty to their customers. The article examines wineries in the states of Connecticut and Rhode Island, in the northeastern US, a New World area of the development of the wine industry. The small wineries present in these states develop a double model of wine and tourism, favored by their proximity to big cities like New York and Boston (Villanueva and Moscovici, 2016).

The article assumes that the competitive advantage is reached by those companies that have a better performance than their competitors (Amadieu and Viviani, 2010; Simon-Elorz et al., 2015) and that this competitive advantage may be found following the analysis of two theories, the Theory of the Competitive Advantage of Porter (1980) and the Theory of Resources and Capabilities of Barney (1991). The article also assumes that these theories are not two opposed options but that both together better explain business excellence (Rivard et al., 2006; Rapp et al. al., 2010; Takata, 2016; Rosenberg and Ferlie, 2016; Chuang and Lin, 2017; Ferrer et al., 2018a).

In terms of business strategy, the model by Robinson and Pearce (1988) has been used; the analysis of business behaviors is done through 22 competitive methods that assess the orientation of the company towards the two generic strategies of Porter (1980), leadership in differentiation and leadership in costs. At the same time the model defines the existence of four derived strategies linked with the previous two: efficiency, service, innovation, and marketing (Robinson and Pearce, 1988).

To study the resources and managerial skills the article focuses on management capabilities, due to the importance they have in the management of wineries (Kunc, 2007; Charles et al., 2008; Duarte and Bresnan, 2016; Ferrer et al., 2018a). The article uses seven management capabilities evaluated in previous studies (Spanos and Lioukas, 2001; Ortega, 2010; Ferrer et al., 2018a): strategic planning, managerial competencies, efficient organizational structure, coordination, knowledge and skills of employees, work climate, and ability to attract creative employees.

To capture the reality of the environment in which the wineries of CT and RI compete, and their business strategies, performance associated, management capabilities and then the determination of their competitive advantage, a survey directed to all the wineries was designed, and a third of these wineries responded.

The article reaffirms the existence of the synergistic effect between strategies and resources and capabilities in the explanation of the competitive advantage. The results show that management capabilities are more important than the strategic intent in the explanation of performance, and that only the strategy of differentiation is linked to better business performance. The fact that the differentiation strategy is the one linked to performance has already been highlighted by D’Aveni et al. (2010) and Brenes et al. (2014) who defend the existence of a single business success strategy in sectors with high competitiveness, such as the wine sector. Among the different strategies linked and cited by Robinson and Pearce (1988), the service strategy stands out, with the greatest statistical significance. These small wineries draw attention through
differentiation policies very linked to the development of the product-tourism service strategy. This certainly characterizes the wine sector in CT and RI where wineries base their offering on a unique experience connected to the tasting experience and the rustic territory, more than in a differentiation strategy based in wine branding or varietal wines (Kune, 2007; Villanueva and Moscovici, 2016).

The article shows that a better performance may be achieved with a strategy of differentiation based on a coordinated, creative, and touristic-oriented service; this results to be a fundamental element in the strategic design of wineries in small and less traditional wine regions. In the development of this strategy it is even more important than the strategy itself the role played by the management of the entrepreneur's own abilities to lead the company, defining what aspects should be promoted, such as defining an organizational structure and being able to attract creative employees. The article presents some limitations, the most important being the size of the sample; even though an important percentage of the CT and RI wineries replied to the survey, definitive conclusions are difficult to be drawn. In addition, the use of subjective scales in the definition of performance is another element that may limit the article conclusions. However, these scales have been used in various studies that demonstrated their convergence with objective scales (Wall et al., 2004; Sirmon et al., 2010), they were used in numerous empirical studies (Spanos and Lioukas, 2001; Ortega, 2010; Camisón and Villar-López, 2014; Pragarjo, 2016; Ferrer et al., 2018a). The article, at the same time, opens the door to analyze the competitiveness of other wineries in other US states, and to make a map of the competitiveness of the wine sector in a wine country of the importance of the US.

References


