Desperately Seeking Serendipity: Exploring the Impact of Country Location on Innovation in the Wine Industry

Prof. Armand Gilinsky
School of Business and Economics
Sonoma State University
1801 E. Cotati Avenue
Rohnert Park, CA 94928-3609
armand.gilinsky@sonoma.edu
Tel. 707.664.2709 Fax. 707.664.4009

Cristina Santini
PHD Economics and Management
of Enterprises and Local Systems
University of Florence, Italy
Via delle Pandette, 9 – 50127 Firenze
Tel. 055 4374736 Fax 055 4374910
cristina.santini@unifi.it

Prof. Luciana Lazzeretti
School of Business Administration
University of Florence, Italy
Via delle Pandette, 9 – 50127 Firenze
Tel. 055 4374697/8 Fax 055 4374911
luciana.lazzeretti@unifi.it

Prof. Robert Eyler
School of Business and Economics
Sonoma State University
1801 East Cotati Ave.
Rohnert Park, CA 94928-3609
(707) 664-4256
eyler@sonoma.edu

The paper is the result of the joint efforts of the Authors. In particular Cristina Santini has realized the two Swot Analysis and has written the following paragraphs: Relevant research orientation; Findings.

Desperately Seeking Serendipity: Exploring the Impact of Country Location on Innovation in the Wine Industry

Abstract

The innovation practice of small family firms is an important and growing field of study. Top management teams' styles, their strategic orientations, and perceptions of external environment promote or deter innovation. This exploratory research proposes a model depicting the extent to which location impacts these variables. Ten Tuscan and ten Californian family wineries are investigated via questionnaire and in-person interviews to develop longitudinal case studies describing barriers or incentives to innovate. Changes in processes, products, or market orientations are subordinated to how top managers perceive internal and external pressure to implement innovation.

Key Words: Strategy, Innovation, Location, Wine Business

Desperately Seeking Serendipity: Exploring the Impact of Country Location on Innovation in the Wine Industry

There is no strategy without surprise, no surprise without creativity, and true surprise and creativity are rare. Seeking strategic insight is the first key to obtaining these rare commodities, recognizing the importance of those insights when they arise is the second. Looking backward, many strategic insights sound trivial; looking forward, they are an incredible challenge to develop, recognize, and implement. The relentless search for insights is what keeps innovative companies and courageous entrepreneurs busy day and night.
— Bolko von Oetinger (2001). The renaissance strategist. *The Journal of Business Strategy*, *22*(6), 38-42.

INTRODUCTION

Wine businesses might well be characterized, to paraphrase former Sony CEO Akio Morita (1986), "[as] inheritors of a rich agrarian cultural tradition and philosophy, which are influenced by nature and change of the seasons," i.e., by analog thinking and slow motion. While the wine industry has heretofore experienced slow evolution (Cooper, 2007), recently some players have pursued innovative strategies. Some innovations include: sustainable farming techniques such as organic and biodynamic agriculture; specific varietal (vs. blended) products; packaging other than glass bottles and closures other than corks; market re-segmentation from two major price tiers to multiple tiers and into emerging demographic or lifestyle categories such as "GenX" or the "Millennials;" new marketing approaches such as 'lifestyle' brand names, wine clubs, fair trade and organic product labeling, use of the Internet to promote information and in some instances, direct sales; and, in selected cases, the emergence of new organization structures i.e., 'virtual' wineries (Thomas and Pickering, 2005). Yet most players in the wine industry have not yet adopted these innovations, either in total or in part, nor do they have plans to do so in the near future (Jordan, Zidda, and Lockshin, 2007).

This is indeed puzzling, since the purpose of strategy is to increase shareholder value. The preponderance of evidence suggests that firms owe their success to rapid deployment of new technology as well as other innovations to better meet emerging customer needs. Speed

itself can become a source of competitive advantage. Failure to change rapidly can lead to loss of market share, lower profits and returns on investment, and missed opportunity. Apple Inc. learned this lesson as a pioneer in the personal computer market and watched its market share shrink, from over 20% in the 1970s to about 2% in the 1990s. While it not a pioneer, or even a fast follower in the MP3 player market, as of this writing Apple's iPod and iTunes software had undergone seven generations of product development — from the original 5G iPod to the 32G WiFi capable iPod Touch — in the five years since their introduction in 2003, sustaining an estimated 80% market share of the MP3 player market despite rivals' attempts to attack this market leadership.

Unlike start-ups, incumbent firms tend to evolve slowly through relatively long periods of stability in their basic patterns of activity, occasionally punctuated by relatively short bursts of fundamental change (Gersick, 1988; Cooke and Lazzerretti, 2007). Process technology, product improvements, and market knowledge innovations are incremental, i.e. simply building on what is already there, requiring modifications to existing products, services, functions, and practices. Sporadic "breakthrough" innovations — such as the development of the laser or the microprocessor — change the entire order, making the old ways of doing things obsolete (Tushman and Anderson, 1986; Van de Ven, Polley, Garud and Venkataraman, 1999). The strategy process literature is rife with examples of successful innovations emerging as a result of luck (and the recognition of the opportunities associated with discovery), rather than as the result of a deliberate search process (Denrell, Fang, and Winter, 2003).

Success or failure to innovate has usually been attributed to the knowledge base of the firm (Leonard-Barton, 1992). To succeed, visionary leaders must foster serendipity to serve customers with new technologies, products, or services. Organizational competence, cognitive framing, strategic orientation, and customer orientation and willingness to cannibalize existing assets to develop new ones drive success or failure in innovation (Tellis, 2006). Entrepreneurs must have the knowledge of disparate values, cultures, and attitudes when pursuing innovations in different nations (Wilkins and Ouchi, 1983).

The critical missing element in prior innovation studies is the impact of country location on a firm's propensity to innovate, although prominent management theorists have proposed that such a relationship is strong (Porter and Stern, 2001). Are innovations by incumbents, i.e., the development of new processes, the creation of new products, or the identification of new markets, advanced or deterred by firm location?

The focus of this exploratory research is to begin to answer this question. The next section discusses the relevant research orientations regarding innovation barriers in greater detail. We then briefly discuss the characteristics of the focal industry — the wine industry — in selected country locations. We describe a convenience sample and compare longitudinal case studies of wine businesses in Northern California and the Tuscany region of Italy. We close with several testable propositions regarding the impact of country location on why some small firms are predisposed to innovate, others to adopt after careful review, while many have no intention of doing so, and present a methodology for testing these propositions.

RELEVANT RESEARCH ORIENTATIONS

There is a growing body of knowledge about innovation practices of small firms, family firms, as well as within clusters of such firms (Bell, 2005; Craig and Moores, 2006; Giuliani 2005). Prior researchers into the firm strategy have evinced divergent paths to success and failure in capitalizing upon process, product, and market orientation innovations (Miller and Friesen, 1982; Teece, Pisano and Shuen, 1997; Han, Kim, and Srivastava, 1998). Barriers to such innovations have also been well documented by Leonard-Barton (1992), and

can be grouped into three major categories: (1) Style of leader and top management team, as evidenced by managerial background and organizational norms; (2) Strategic orientation, as demonstrated by the degree of industry knowledge and complexity of organizational structure, and (3) Situation assessment or perceptions of the task (external) environment as being benign or hostile (Szulanski and Jensen, 2006). See **Table 1.**

Table 1: Summary of Prior Literature on Variables Impacting Innovation

Prior Research into Innovation	**Variables under Study**
Style of leadership and organization culture	
Albert & Whetten, 1985; Fiol, 1991, 2000; Hoang & Gimeno, 2007	Culture, background, and beliefs
Herbig, 1994; Hausman, 2003; Shaker et al., 2004; Collis, 1994	Role of personality
Miller & Freisen, 1982; Hayes & Clark, 1985; Katz & Allen, 1982; Szulanski, 2003	Conservativeness as barrier
Lieberman & Montgomery, 1988; Leonard-Barton, 1992	Institutionalization of values
Dierickx & Cool, 1989; Pelham, 1999	Corporate culture
Vallini, 1990; March, 1991; Martin, 1994; Harper, 1996; Hall & Martin, 2005	Entrepreneurial attitudes towards risk and ambiguity
Strategic orientation and firm configuration	
Utterback, 1971; Pelham, 1999; Teece et al. 1997	Organization flexibility
Damanpour, 1991; Kahn & Manopichetwattana, 1989	Organization structure
Gudmundson et al., 2003; Ortega Argilés et al., 2005;	Ownership structure
Han et al, 1998	Market orientation
Hitt et al., 1994	International expansion and product diversification
Porter and Stern, 2001; Bell, 2005; Giuliani, 2005.	Location
Situation perception of task environment	
Levitt, 1965; Moore & Tushman, 1980; Abernathy & Utterback, 1978; Capon et al. 1992	Product life cycle
Von Hippel, 1988; Hambrick & MacMillan, 1985; Miller & Freisen, 1984	Market conditions and growth rate
Parkin, et al. 1997; Waarts, 2002	Degree of competition
Hoffman & Ventresca, 2002	External institutional pressures
Szulanski and Jensen, 2006	Turbulence v. placidity in the task environment

Style of leadership and organization culture

Education and entrepreneurial experience of the founder and top management team (TMT) are important predictors of innovation behaviors (Cooper and Gimeno-Gascon, 1992; Robinson and Sexton, 1994). Managerial skills and reputation are also strong contributors to organizational cultures that foster innovations, particularly in "lifestyle" manufacturing businesses or service industries (Haber and Reichel, 2007).

Personality is seen as what determines a certain behavior. Managers of the firm make decisions using a set of beliefs, or identities (Albert and Whetten, 1985; Fiol, 1991, 2000; Hoang and Gimeno, 2007). Researchers have underlined the role played by personality traits in the way people manage relationships within the organization: individualism, a typical entrepreneurial characteristic, has been recognized to affect managers' willingness in delegating, with serious consequences in limiting product and process innovation (Herbig,

1994; Hausman, 2003; Zahra et al., 2004; Vallini, 1990). Myopic managers tend to ignore internal and external pressures for innovation (Miller and Friesen, 1982). Conservativeness and individualism tend to increase management's reluctance to develop and produce any new product or process not invented by the firm – the "Not Invented Here" Syndrome (Hayes and Clark, 1985; Katz and Allen, 1982; Szulanski, 2003) – inhibiting its capability to compete (Lieberman and Montgomery, 1988). Personal history, beliefs, and background of the founder and/or top management team (TMT) in turn influence corporate culture in such a way that rival firms in the same industry may find that behavior so idiosyncratic that it cannot be readily imitated (Carroll and Hoy, 1984; Schein, 1992). Culture is a strategic resource for a company, an input that cannot be purchased (Dierickx and Cool, 1989). Dierickx and Cool (1989) and later, Pelham (1999) posit that corporate culture is causally linked with firm innovativeness and performance. Studies of the impact of country location on leadership style and corporate culture have proven inconclusive (Elenkov and Manev, 2005).

Strategic orientation and firm configuration

The above drivers influence how firms develop resources and capabilities and in turn, position themselves i.e. fostering innovations in support of achieving lowest cost or differentiation, either to mass or focused customer-markets (Han, Kim, and Srivastava, 1998; Wernerfelt, 2005). While TMT frequently adhere to the motto of being "first to market," many pioneers fail, yet most current industry leaders, such as Apple Inc. (see the earlier example) are not pioneers but imitators (Tellis and Golder, 1996). Incumbent firms may choose to pursue either innovation or imitation in order to drive returns on investment (Lieberman and Asaba, 2006). Know-how has been recognized as crucial for innovation, and is seen as a determinant of the opportunities that companies have for innovating (von Hippel, 1988, 1994). The specific knowledge required by a certain industry influences a firm's form of ownership (public v. private) and capacity to adopt new technologies (Mitchell and Hamilton, 1982). Access to information depends on the place where the company is located: clusters tend to positively affect knowledge and innovation diffusion (Becattini, 1990), while the degree of improvement depends on a particular firm's position within its cluster or network (Bell, 2005).

In order to achieve higher levels of profitability, a firm's governance and structure must be compatible with the industry to be entered (Robinson and McDougall, 2001). Industries perceived as those in which having moderate degrees of differentiation may require simpler and less formal organizational configurations than those characterized by low cost or high degrees of differentiation, that tend to require more complex and formal structures (Robinson and McDougall, 2001). Industries characterized by low degrees of product differentiation or homogeneous products are unattractive for new entrants, i.e., start-ups that are characterized by simple structures and low levels of formalization, because these firms would have to spend heavily to establish highly efficient systems and lean productive capacity in order to compete on cost (Porter, 1980). High levels of differentiation are also deterrents to entry, as new entrants must adopt costly expenditures to develop product lines and divisional structures to manage those lines, in order to overcome the brand name recognition and customer loyalty enjoyed by incumbent firms (Yip, 1982).

Situation perception of task environment

Competitive moves in any industry are seldom made without assessment of the external environment, e.g., rivals' defensive capabilities and probable responses (Chen, 1996). Turbulent market environments promote innovations while placid environments tend to deter innovations (Hambrick and MacMillan, 1985). Product innovation is related to product life cycle (Abernathy and Utterback, 1978; Capon et al., 1992; Moore and Tushman,

1980), and the degree of firm's innovative attitude is influenced by the rapidity of market growth (Miller and Friesen, 1984).

Environment tends to influence a firm's posture towards innovation: in turbulent environments, being located into an industry cluster has some positive effects on product and process innovation (Bell, 2005). Butler (1991) suggests that turbulent environments encourage entrepreneurial innovations because under those conditions the price signal becomes confused, giving rise to differentiation strategies by aggressive rivals. On the other hand, benign environments due to their placidity tend to limit process and product innovation (Miller and Friesen, 1984).

WINE INDUSTRY OVERVIEW

Wine is a global business (Orth et al., 2007). An estimated 64% of the export market share is concentrated in the hands of "Old World" countries e.g. Italy, France, Spain, Portugal and Germany, while US wine businesses own an estimated 5 percent share of the world market (USDA, 2007). Growth in global demand is mainly being driven by a shift in consumers' preferences and lifestyles in some key markets, such as the US and UK, or by new consumers in emerging markets, such as China or Russia. Consumption in traditional wine countries, such as Italy or France, is decreasing. California and Tuscany can be considered as the heart of the wine business respectively in US and in Italy. California has a leading role in the US wine industry: 43 percent of the wineries are settled in California, holding an estimated 63 percent of the US wine market share (Wine Institute, 2007). Some favourable market conditions, together with the latest efforts in setting bilateral and multilateral trade negotiation for reducing export barriers, are creating opportunities for a further internationalization of the California wine industry (see **Table 2a**). On the other hand, Italy, a leading wine producer, has the greatest number of wineries and among the highest per capita consumption rates in the world (FAO, 2005). Italy can also be described as an export-oriented country: over the last ten years, Italy has increased the percentage of its premium wine production to 40 percent of its entire wine production, accompanied by rapid growth of the number of Italian wine appellations (see **Table 2b**). Tuscany is a leading region for premium wine production, as it produces 10 percent of Italian premium wines (ISTAT, 2004).

Table 2a, Situation Analysis: Northern California Wine Industry

Strengths	**Weaknesses**
Presence of an efficient network of services and companies in every wine region	Growing fragmentation at high end
Low degree of bureaucracy	Consolidating ownership across price segments
Varietal diversification	Three-tier distribution system
Continuous effort to improve quality	Interstate shipment strictly regulated
Increasing exports	Price competition in medium/lower end of the market
Benefits of a leading brands' strategy	
Information availability/exchange among producers	
Economies of scale	
Industry adaptability to change	
Attention to educating consumers	
Opportunities	**Threats**
Trade services development	Retail consolidation
Tourism development	Non-US producers' growing presence in US market
US commercial agreements	Old World wines competing in high price segments
Growing global interest in US wines	Entry of low cost imports from New World
Increasing domestic consumption	Low per capita consumption relative to other beverages
Declining $/€ exchange rate	Perceived image of US wines by foreign consumers
Mergers, JV and strategic alliances	

Table 2b, Situation Analysis: Tuscan Wine Industry (adapted from ISMEA, 2005)

Strengths	Weaknesses
Many varietals	Fragmented production
Rising percentage share of DOC and DOCG production	Bureaucracy
Production with high value added	High bargaining power of retailers on mark-ups
Importance of *terroir* influences hedonic consumption	Low degree of cooperation for promoting products
Strong presence in the world wine market	
Positive commercial trade	
Opportunities	**Threats**
Entry of large drinks conglomerates	Domestic consumption is decreasing
Policies for promoting the 'Made in Italy' production	Exchange rate pressure to reduce prices
Capital market is getting interested in the wine business	HORECA mark-ups
WW Commercial agreement for protecting appellations	Vintage uncertainty
Commercial partnerships with foreign retailers	New World wine producers growing competition
Tourism development	Unfair usage on national appellation
Trade services development	

METHODOLOGY AND SAMPLE

The following variables are designated independent: Age of firm, Size, Ownership (public v. private), Management (family v. professional), Location (country of origin), Degree of vertical integration, and the Degree of market diversification (local vs. national vs. international). Dependent variables to be measured are the extent of *process* and *new product* innovations, and the extent of *market* innovations. Process innovation refers to the adoption of new technologies in growing or winemaking. New varietals, as well as closures or new packaging materials are designated new product innovation. Market innovation includes programs and practices intended to identify, target, and sell product to new or emerging customer segments.

The following journals were surveyed to obtain information about innovations that occurred in the wine industry from 2000-2006: *Wines & Vines* (US); *Wine Business Monthly* (US); *Wine Business Insider* (US); *Practical Winery & Vineyard Management* (US); *VQ* (Italy); *L'Informatore Agrario* (Italy); *Agrisole* (Italy). Using those sources, a list of innovative practices was generated, ranked according to the degree of newness, and classified as change practices, e.g. *in the vineyard* (sustainable agriculture, organic and biodynamic grapes, mechanical harvest, new varietals), *in the cellar* (chips, fermentation software, bottling and filling machines, sensory analysis), *package* (RDIF, sensory analysis, screw cap, natural cork, natural cork with silicon, silicon cork, glass top, aluminium and plastic bottle, tetra pack, tetra brick, bag in box, can, half bottle), *operation* (logistic and inventory software, waste recycling and energy conservation), and *marketing* (tasting room and/or hospitality facilities, website, newsletter, wine club, wine events, wine education, telemarketing).

Survey design

To provide some standardization to compare single case studies for theory building (cf. Eisenhardt and Graebner, 2007; Yin, 1994), a web-based survey was adapted from the questionnaire developed by Gilinsky et al. (2001). Five point Likert scales (1 = not important; 5 = very important) were developed for each section; some of the sections were reverse coded to prevent a "halo" effect from respondents rating every item as "low" or "high." Web surveys reduce bias errors (Frankfort-Nachmias and Nachmias, 1996) and tend to be less costly than mail surveys. Web surveys also guarantee a high degree of anonymity of the respondent being self-administered (Alreck and Settle, 1995). The survey was structured in

different sections per Alreck and Settle (1995). Before submitting the survey it was pilot tested via in-person interviews with two wine industry leaders in each country; once the e-mail with the link was sent to the survey respondents, an e-mail reminder was sent after two weeks. After the responses were received, we contacted each respondent for follow-up in-person interviews to review the responses and fill in any incomplete responses due to problems of translation or confusion over the questions being asked. We also were able to measure consistency of answers to the questions.

The initial section of the survey asked respondents to report about management structure, such as the degree of "familiness" in the business (i.e. is the founder working in the winery? Are there any members of the Top Management related to the founders? If yes, in what area do they work), the level of professionalism in top management (years of experience in the industry) together with other information about the firm (size in terms of bottles produced acreage and employees, age of the firm, generation), wineries were asked to rate their degree of interest in changing in the long or short run their practices.

To determine the extent and source of the knowledge base, respondents were asked to report if and how consultants were hired, as well as for what purpose(s), i.e. vineyard, winemaking, marketing, strategy, finance, sales. Regarding market orientation, respondents were asked to rate the relative importance they gave to each price segment (*Rabobank*, 2003) for their business now and in the future, the relevance of each customer segment (silent generation, baby boomers, Gen x, millennials) and sales channel (winery sales, volume retailers, web sales, restaurant and specialised wine shops) both currently and in the future (Thach and Cuellar, 2007; Nowak and Newton, 2008). Respondents provided 2006 export sales (as a percentage of total wine sales) and estimated export sales for 2010.

In the final section respondents were asked to rate the importance of changes in strategy during the most recent five year period or forecasted for the next five year planning cycle, e.g. developing new lines of products and services; changes in the organizational design and/or reporting relationships; changes in management style, staff, and/or skills. Respondents were also asked to report if their strategy was carefully planned or emerged over time, if they preannounce forthcoming products or not, and if any changes in company structure (new divisions or changes of ownership control) had occurred. Respondents rated how they perceived their relative competitive position to rivals in terms of product quality, company brand reputation, product price, company flexibility, management culture, ability in managing market change, financial strength, newness in marketing approach, and product characteristics (Taylor, Gilinsky, Hilmi, Hahn, and Grab, 1990).

Sample

A convenience sample of wine businesses was developed to permit exploratory research (Emory and Cooper, 1991). We obtained permission from 20 wineries listed in *Adams/Jobson Wine Handbook 2006*: 10 in Tuscany, and 10 in northern California (Napa and Sonoma counties) to develop longitudinal case studies in return for guaranteeing anonymity to respondents; each was given a number. The Tuscany and California regions were chosen as representative of the two countries, each region boasted the highest population of premium (and higher) priced wine producers in Italy and the US, respectively. Individual respondents included the founder or chief operating officer (President). **Table 3** shows the characteristics of the sample by year founded, number of employees, and production as reported.

Table 3: Characteristics of the Tuscan and Northern California Sample

Winery	Year Founded	Employees, 2006	Production in Bottles, 2006
Tus 1	1435	41	300.000 – 600.000
Tus 2	804	35	300.000 – 600.000
Tus 3	1961	9	600.000 – 1.200.000
Tus 4	1967	45	1.200.000 – 6.000.000
Tus 5	1980	1	< 60.000
Tus 6	1987	3	< 60.000
Tus 7	1970	48	120.000 – 300.000
Tus 8	2002	5	60.000 – 120.000
Tus 9	1992	3	< 60.000
Tus 10	1981	2	< 60.000
Cal 1	1902	50	300.000 – 600.000
Cal 2	1999	7	60.000 – 120.000
Cal 3	1972	30	300.000 – 600.000
Cal 4	2001	9	60.000 – 120.000
Cal 5	1997	3	< 60.000
Cal 6	1896	20	300.000 – 600.000
Cal 7	1927	15	300.000 – 600.000
Cal 8	1988	2	< 60.000
Cal 9	late 80s	40	300.000 – 600.000
Cal 10	1980	2	60.000 - 120.000

Tus = Tuscan wineries, Cal =Northern California wineries

FINDINGS

All respondents in both country subsamples defined themselves as wineries, and all were private, independently owned companies. Of ten Tuscan wineries (Tus), six were members of an *azienda agricola.*[1] Most of the ten Tuscan respondents (Tus 6, 9, 10 and 8) could be defined as micro-small, and reported involvement in a wide range of activities (from direct sales, to farming, to winemaking, to marketing). Unlike all of the firms in the California subsample, a few of the Tuscan wineries (Tus 1, 2, 7) mainly focused on marketing. Propensities towards (or *contra*) innovation were rated by evaluating wineries' willingness to introduce any change in what or how they where doing and how rapidly they thought they could implement this change (see **Table 4**).

Style and culture

All respondents in California and Tuscany evinced a high degree of individualism, stemming from an entrepreneurial form of governance. While individualism did not seem to have a significant influence on the overall company change orientation (i.e. considering the global degree of changes that wineries could adopt in all the areas), it had a somewhat strong influence on changing marketing programs of Tuscan wineries. Regarding the role that tradition has in corporate culture, Italian respondents conceived tradition more as a constraint

[1] In Italy the companies classified as *azienda agricola*, are not obliged to do any reporting activity; this confers ambiguity to the information companies release, as they cannot be properly tested. Such a difficult drove us in not including in this research any information coming from reporting.

to rather than as a driver of innovation. Among the Californian respondents there appeared to be a strong orientation in dissemination within the organization a set of beliefs, norms, and values from family history and traditions; for Tuscan respondents, tradition appeared to be already institutionalized.

Table 4: Change orientation among respondent wineries

	Cal										Tus									
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Change in Price Segment	*2*	*1*	*2*	*1*	*1*	*1*	*4*	*1*	*2*	*2*	*1*	*2*	*3*	*1*	*1*	*2*	*1*	*5*	*2*	*3*
Change in Target Consumer	*1*	*1*	*2*	*1*	*1*	*4*	*4*	*2*	*5*	*1*	*1*	*4*	*4*	*2*	*3*	*5*	*5*	*6*	*4*	*4*
Change in Marketing Channel	*4*	*4*	*2*	*4*	*2*	*4*	*2*	*4*	*2*	*4*	*4*	*4*	*4*	*1*	*1*	*2*	*2*	*4*	*2*	*4*
Change in Export	*5*	*1*	*5*	*1*	*5*	*5*	*1*	*5*	*1*	*1*	*1*	*1*	*4*	*1*	*4*	*1*	*1*	*1*	*1*	*5*
Change in the Vineyard	*4*	*5*	*1*	*1*	*1*	*1*	*5*	*6*	*1*	*1*	*3*	*4*	*4*	*3*	*6*	*4*	*4*	*1*	*1*	*3*
Change in the Cellar	*1*	*3*	*4*	*1*	*1*	*1*	*4*	*7*	*4*	*1*	*2*	*6*	*4*	*4*	*3*	*4*	*2*	*6*	*5*	*3*
Change in the Package	*2*	*2*	*1*	*1*	*2*	*2*	*5*	*3*	*1*	*1*	*3*	*4*	*4*	*4*	*4*	*3*	*2*	*2*	*2*	*2*
Change in Operation	*1*	*5*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*3*	*4*	*4*	*4*	*4*	*3*	*2*	*2*	*2*	*2*
Change in Marketing Tools	*2*	*2*	*4*	*1*	*1*	*2*	*1*	*4*	*1*	*1*	*2*	*4*	*4*	*4*	*4*	*2*	*2*	*3*	*4*	*4*
Change in Structure (organization, products & scope)	*4*	*6*	*1*	*5*	*5*	*3*	*4*	*7*	*5*	*1*	*1*	*7*	*1*	*4*	*4*	*4*	*4*	*4*	*4*	*4*

1= no change; 9 = radical change

"Familiness "was seen as an important element of differentiation, as well as tradition, especially for some of the Californian respondents (Cal 8,7,6,5 and 1) that were competing with a product that reflected somehow the family and its tradition especially in the choice of varietals and branding strategy. Those wineries showed a greater propensity to innovate in their marketing programs rather than develop new production techniques The degree of familiness among the Italian respondents was very high for company 1, 2, 7 and 8. For wineries such as Tus 1, 7 or 8, the active role played by the family into the development of the area created a concordance between wineries strategies and the local wine industry strategy. Of greatest significance, Tus2 reported a recent change in direction, introducing changes into the cellar and into the range of marketing tools, despite the fact that it had a very long history in the business (about 1200 years!) and had played an active role in the development of its regional wine industry, Chianti Classico. Tus 2, in particular, made a significant investment in updating its cellar facilities and building a brand new winery representing a radical departure in design away from the traditional cellars of neighboring wineries, in order to pursue market differentiation. This was unusual, as it appeared that an individual Tuscan winery's role was seen to promote the regional wine industry, and this, together with the importance given to upholding traditions within the winery, made it very difficult for Tuscan respondents to say that they had adopted any practices that could be considered divergent from the strategies adopted by the rest of the group.

Strategic orientation and firm configuration

Respondents in both countries appeared to face market challenges and problems as they arose. In terms of the degree of planned strategy, Tuscan respondents differed from Californians: 90 percent of the Tuscan Wineries interviewed disagreed with the statement "Our strategy is carefully planned." Conversely, among the US sample, 30 percent said that they "Planned carefully," though the rest tended to agree with the statement "Our business strategy is not planned in advance, but rather emerges over time." California respondents (40

percent) reported that they were more apt to preannounce forthcoming products, goals and achievements, and proposed structural changes than did their Tuscan counterparts (none).

We investigated if the way companies conceived strategy had an impact on how they faced market challenges, by relating a firm's strategic planning orientation to its use of consultants (e.g. utilising external, rather than internal resources). The smaller Tuscan wineries hired consultants more often than their larger rivals; whereas among the Californian respondents, exactly the opposite was true (Larger wineries hired consultants more often than smaller ones). As to the type of consultants hired, Tuscan wineries hired cellar and winemaking consultants more frequently than marketing, strategy and finance consultants; only the larger Tuscan wineries appeared to be hiring marketing consultants, for example. Californian wineries were in general less apt to hire consultants (and those that did hired mainly vineyard and winemaking consultants).

It appeared that the role of consultants in the Tuscan wineries was not related to the age of the company or to the experience level of top management. Instead, the Tuscan respondents only hired consultants to solve temporary and specific problems that they had encountered in vineyard management and winemaking. One possible explanation for this finding is that Tuscan respondents reported that they spent less time educating and training their staff than did their Californian counterparts. From the interviews we learned that Tuscan firms preferred a stable consultancy in vineyard and winemaking because the cost was lower, compared to hiring a full time winemaker; in most small Tuscan wineries the owner is also in charge of winemaking. Consultancy usage by Tuscan and Californian wineries is apparently not related to size, but it is rather connected to the perception that top managers have of their skills and competences and on top managers' degree of individualism.

The sole Tuscan winery that said it carefully planned a strategy was more likely to hire consultants in the cellar than the other nine respondents that did not carefully plan their strategy. An overwhelming majority of Tuscan respondents showed no interest in obtaining consultant help in marketing or finance; still, Tuscan respondents tended to hire sales consultants on an *ad hoc* basis, far more often than Californian respondents. So, for the Tuscan respondents, consultancy could at best be said to be a useful tool for helping wineries solve problems immediately as they arose, rather than to help achieve goals set by the strategic planning process, unlike the Californian respondents, who viewed consultants as a means to that end.

Situation perception

Beyond competition, pressures towards internationalization of markets and changing market demographics appeared to play key roles in driving innovation. In contrast to the California sample, the Tuscan respondents already had a high degree of internationalization in terms of sales and markets served. That said, pressure for innovation to serve export markets was not equally perceived by all the respondents. Tus2 was the only winery that reported thinking about introducing package innovations and offering a wide range of package solutions according to market needs. Tus2, in fact, had a very strong presence in key export markets and had chosen to more slowly adapted its products, over time, in order to meet local customers' needs. Other Tuscan respondents, conversely, chose not to follow the market demand, but reported that they'd rather compete on the market by offering a traditional product, driven by "images of a 0,75lt bottle of Chianti Classico with a natural cork and with a classical label."

The degree of vertical integration, especially regarding the percentage of outsourced grapes, influences if companies can introduce new products. Among the Tuscan respondents the degree of vertical integration in wine production appeared to be higher than among Californian wineries, which tended to expand their range of products by introducing different

labels of the same varietals, rather than by introducing new wines. Cal 5 was a typical example of this trend: its aim was to become known as the outstanding producer of a specific varietal wine, and although it was very small, it was producing several different types of the same wine rather than introducing new varietals, new brand names, or even new packaging into the market.

Tus1 introduced a new wine in its product portfolio, choosing to diversify the range of wine offered under the same company brand. Tus 10, had a singular productive strategy: its micro dimension, confer the company a high degree of flexibility, and through an efficient network with the local wineries that ensure the company the chance of purchasing specific grapes, the company can realize a very small production of different varietals that characterize the area.

Being located in certain area influenced certain productive decisions (what and how to produce); Tus9 and Cal9 decided to differentiate their production via biodynamic and organic growing practices, and market their wines accordingly. The decision of Tus9 to adopt sustainable growing practices was driven not only by its founder's personal values, but also after realizing that the area was characterized by a high concentration of wineries that were intending to copy the same strategy.

In contrast to their California counterparts, Tuscan wineries appeared to be influenced in their product decisions by locally institutionalized knowledge Tuscan wineries were unable to determine if customers in export markets valued a wine's appellation more highly than proven brand strength, varietal grape used, or some other variable (e.g. blend or packaging).

Regarding changes in market orientation, Tus wineries appeared to show a growing interest in serving Baby Boomers and Millennials, rather than Gen X, yet Californian wineries reported higher interest in serving Gen X than any other market segment. Tuscan wineries reported only a modest interest in development of web sales. Web sites were considered by Tuscan respondents to be a means of maintaining a long-distance relationship with foreign visitors instead of as a conduit for generating incremental sales. Californian wineries perceive Web Sales very important for their future revenues, thanks also to the presence of a highly developed wine club system and the continuous evolution of interstate shipment agreements.

Regarding the relative importance given to price segment and future strategies, Californian wineries reported that they do not anticipate major changes in strategies, and showed homogeneous behavior with respect to a focus on the high end of the market. Similarly, the Tuscan respondents stated categorically that they competed solely in the Superpremium and Premium segments, and had no plans to develop future product lines in lower price segments.

CONCLUSIONS AND FUTURE DIRECTIONS

Managers' orientations towards strategy have been characterized by Mintzberg (1973) as either emergent or planned. Strategic intent may be directed towards satisfying existing customers' needs or seeking new customers and developing innovative products and services to meet their needs (Daily and Dollinger, 1994). A firm's predisposition towards innovation is contingent upon leaders with the propensity (*style*) the potential (*strategy*) to develop them, and reflective of their perceptions of the external environment or *situation* (Covin, Slevin, and Shultz, 1997). Theory building from multiple cases typically yields more robust, generalizable, and testable theory than single-case research (Eisenhardt and Graebner, 2007). Six propositions are presented for testing in a future large-scale research investigation, using perhaps a shortened version of the survey instrument to increase response rates:

Proposition 1a: Country location is positively associated with styles of leadership that promote *innovation.*

Proposition 1b: Country location is positively associated with styles of leadership that inhibit *innovation.*

Proposition 2: Country location is positively associated with strategic orientations that promote *innovation.*

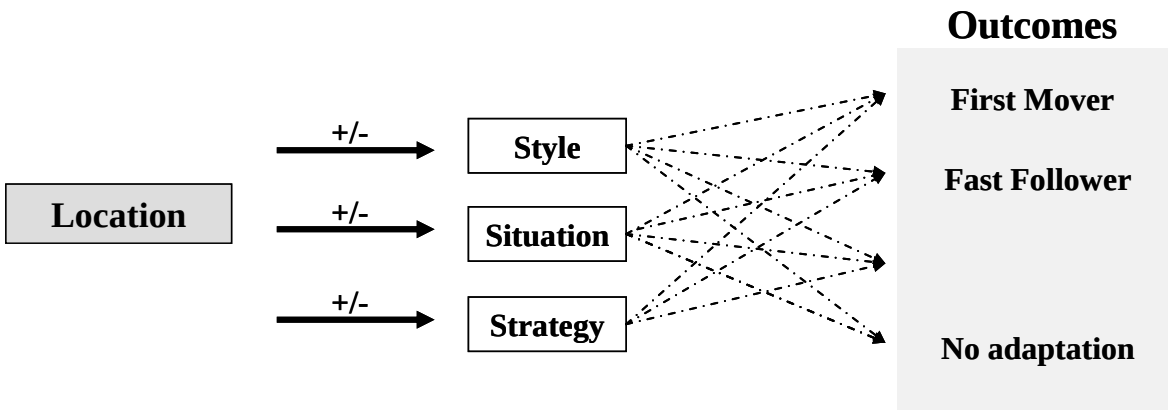
Proposition 2b: Country location is positively associated with strategic orientations that inhibit *innovation.*

Proposition 3: Country location is positively associated with perceptions of the environment that promote *innovation.*

Proposition 3b: Country location is positively associated with perceptions of the environment that inhibit *innovation.*

These proposed relationships are summarized in **Figure 1**.

Figure 1: Proposed relationships between location and styles of leadership, situation perceptions, and strategic orientations



While among the subsamples there were larger firms that had successfully pursued innovation, sometimes revolutionizing the industry, this proved to be the exception rather than the rule. Leaders of wine business eventually best served their interests via centralized control, standardized operations, formal rules and procedures, or other "mechanistic" tools designed to promote internal efficiency in an uncertain trading environment.

The unprecedented and rapidly changing dynamics of the wine industry in recent years have generated a desperate need for a comprehensive understanding of wine business innovation practices. Citing those wine business leaders who responded anecdotally to our survey, the following suggestions for practitioners appear to apply, regardless of company size or situation:

- Top management teams must observe similar regional firms competing in global industries in order to ascertain how to manage the innovation process successfully.

- Top management teams need to develop long-term financial and marketing planning tools (surprisingly this is not being done).

- Top management teams need to invest in and learn how to use cutting-edge technology.

- Implementing and promoting sustainability in viticulture and process operations appear to be increasingly critical for long-term advantage.

- Top managers that are production oriented need to "learn" how to develop promotional skills.

The results should be interpreted with caution in terms of their applicability to other mature industries. Because the study was exploratory in nature, no causal relationships are implied. Further research should explore the differential impact of innovative behaviors on company growth rates. Future research should also be designed to overcome some of the limitations of this study. The relatively small sample of firms and executives included in the field study may have led to some instability in the preliminary findings obtained about changes in practices. For example, the negative response to carefully planned strategies was somewhat surprising. One would expect that since the industry is highly fragmented and mature, and ownership of many wine businesses in both countries appears to be nearing the succession stage, plans for succession would be in place (Ibrahim,Angelides, and Parsa, 2008). Succession planning in order to forestall the necessity of selling the business to a larger entity ought to have been contemplated in order to preserve the individual uniqueness of "brands." Longitudinal research with larger sample sizes is also needed to determine the nature and impact of location on succession planning and other long-term choices that would perpetuate in a family business. Researchers might expect to uncover some innovative practices with respect to company organization to permit a more smooth succession from one generation of ownership to another.

Competitive imitation — or perhaps even *serendipity*, the ability to make fortunate discoveries through accident — may be a requirement to overcome internal resistance to change (Aldrich, 1979; Stinchcombe, 1965). In the words of Sigglekow (2007: 21), "An open mind is good; an empty mind is not. It is true that one wants to retain the capacity to be surprised, but it seems useful (and inevitable) that our observations be guided and influenced by some initial hunches and frames of reference." Prior to commencing this exploratory investigation, we anticipated that there would be major differences in how wine business owners in Tuscany and northern California perceived the need for, and implemented innovations, i.e., that there would be no perceived need for nor implementation of innovation in Tuscany, and that the inverse would be true for the California companies. An unexpected finding from the comparisons of the case studies was that within the Tuscan and California subsamples and between the subsamples, respondents did not evince any homogeneous tendencies towards innovation, as their willingness to make changes in processes, products, or market orientation tended to be subordinated to how an individual company perceived the internal and external pressures, i.e., the task environment, to implement any change.

References

Abernathy, W. & Utterback, J. M. (1978). Patterns of industrial innovation. *Technology Review*, *6*, 41-47.

Adams/Jobson's Wine Handbook, 2006. New York: Adams/Jobson's Publishing Corp.

Albert, S. & Whetten, D. A. (1985). Organizational identity. *Research in Organizational Behavior, 7*, 263-295.

Aldrich, H. (1979). *Organizations and Environments*. Englewood Cliffs, New Jersey: Prentice Hall.

Alreck, P.L. & Settle, R.B. (1995). *Survey Research Handbook*, McGraw-Hill.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, *17*(1), 99-120.

Becattini G. (1990). The Marshallian industrial district as a socio-economic notion. In Pyke F., Becattini G., Sengenberger W. (eds) *Industrial Districts and Inter-firm Co-operation in Italy*.

Bell, G. G. (2005). Clusters, networks, and firm innovativeness. *Strategic Management Journal*, *26*, 287-295.

Butler, J. E. (1991). A process-model expansion of the strategic management framework: The entrepreneurial influence. *Advances In Strategic Management, 7*, 247-275.

Capon, N., Farley, J. U., Lehmann, D. R., & Hulbert J. M. (1992). Profiles of product innovators among large U.S. manufacturers. *Management Science*, *38*(2), 157-169.

Chen, M. (1996). Competitor analysis and inter-firm rivalry: toward a theoretical integration. *Academy of Management Review*, *21*(1), 100-134.

Collis, D. J. (1994). Research note: how valuable are organizational capabilities? *Strategic Management Journal*, *15*, 143-152.

Cooke P. & Lazzeretti L. (2007), (eds). *Creative Regions, Cultural Clusters and Local Economic Development*, Cheltenham (UK), Edward Elgar.

Cooper, A. C. & Gimeno-Gascon, F. J. (1992). Entrepreneurs, processes of founding, and new firm performance. In D. L. Sexton & J. D. Kasarda, eds, *The State of the Art of Entrepreneurship*, PWS-Kent: Boston, 301-340.

Cooper, B. (2007, December). *Just-drinks' Review of 2007: Management Briefing: Wine*, 10-16.

Covin, J. G., & Slevin, D. P., & Schultz, R. L. (1997). Top management decision sharing and adherence to plans. *Journal of Business Research*, *40*, 211-237.

Craig, J. B. L. & Moores, K. (2006). A 10-year longitudinal investigation of strategy, systems, and environment on innovation in family firms. *Family Business Review, 19*(1), 1-10.

Daily, C. M. & M. J. Dollinger. (1994). An empirical examination of ownership structure in family and professionally-managed firms. *Family Business Review, 5*(2), 117-136.

Damanpour, F. (1991). Organizational innovation: A meta-analysis of effects of determinants and moderators. *Academy of Management Journal*, 34 (3), 555 – 590.

Denrell, J., Fang, C., & Winter, S.G. (2003). The economics of strategic opportunity. *Strategic Management Journal*, *24*(10), 977-990.

Dierickx, I. & Cool, K. (1989). Asset stock accumulation and sustainability of competitive advantage. *Management Science*, 35, 1504-1511.

Eisenhardt, K. M. & Graebner, M. E. (2007). Theory building from cases: opportunities and challenges. *Academy of Management Journal, 50(*1), 25-32.

Elenkov, D. S. & Manev, I. M. (2005). Top management leadership and influence on innovation: the role of sociocultural context. *Journal of Management*, 31, 381-402.

Fiol, M. C. (1991). Managing culture as a competitive resource: an identity-based view of sustainable competitive advantage. *Journal of Management, 17*(1), 191-211.

Fiol, M.C. (2000). Revisiting an identity-based view of sustainable competitive advantage. *Journal of Management*, 27, 691-699.

Frankfort-Nachmias, C. & Nachmias, D. (1996). *Research Methods in the Social Sciences*. London: Routledge.

Gersick, C. J. (1988). Time and transition in work teams: toward a new model of group development. *Academy of Management Journal, 31,* 9-41.

Gilinsky, A., Stanny, E., McCline, R.L., & Eyler, R. (2001). "Does size matter? An empirical investigation into the competitive strategies of the small firm," *Journal of Small Business Strategy*, *12*(2), 1-13.

Giuliani, E. (2007). The selective nature of knowledge networks in clusters: evidence from the wine industry. *Journal of Economic Geography, 7*, 139-168.

Gudmundson, D., Tower, C. B., & Hartman, E. A. (2003). Innovation in small businesses: culture and ownership structure do matter. *Journal of Developmental Entrepreneurship*, 8(1), 1–17.

Haber, S. & Reichel, A. (2007). The cumulative nature of the entrepreneurial process: the contribution of human capital, planning and environment resources to small venture performance. *Journal of Business Venturing*, *22*(1), 119-145.

Hall, J. & Martin, M. (2005). Disruptive technologies, stakeholders and the innovation value-added chain: a framework for evaluating radical technology development, *R&D Management Journal, 35*(3), 273-284.

Hambrick, D. C. & MacMillan, I. C. (1985). Efficiency of product of R&D in business units: the role of strategic context. *Academy of Management Journal, 28,* 527-547.

Han, J. K., Kim, N., Srivastava, R. K. (1998). Market orientation and organizational performance: is innovation a missing link? *Journal of Marketing*, *62*(4), 30-45.

Harper, D. (1996). *Entrepreneurship and the Market Process*, London: Routledge.

Hausman, A. (2005). Innovativeness among small businesses: theory and propositions for future research, *Industrial Marketing Management, 34*(8), 773-782.

Hayes, R. H. & Clark, K. B. (1985). *Exploring the Sources of Productivity Differences at the Factory Level.* New York: Wiley.

Heijbroek, A. (2003). Wine is business – shifting demand and distribution: major drivers reshaping the wine industry. *Rabobank International*: *Food and Agribusiness Research*.

Herbig, P. A. (1994). *The Innovation Matrix: culture and structure prerequisites to innovation.* Westport, CT: Quorum Books.

Hitt, M., Hoskisson, R., & Ireland, R. D. (1994). A mid-range theory of the interactive effects of international and product diversification on innovation and performance. *Journal of Management*, 20 (2), 297-327

Hoang, H. T. & Gimeno, J. (2007). *Becoming a Founder: how founder role-identity affects entrepreneurial transitions and persistence in founding*. INSEAD Business School Research Paper No. 2007/46/EFE/S.

Hoffman, A. J. & Ventresca, M. J. (eds) (2002). *Organizations, Policy, and the Natural Environment, Institutional and Strategic Perspectives.* Stanford: Stanford University Press.

Ibrahim, N. A., Angelidis, J. A., & Parsa, F., (2008). Strategic management of family businesses: current directions and future research. *International Journal of Management*, *25*(1), March, 95-110.

Jordan, R., Zidda, P., & Lockshin, L. (2007). Beyond the Australian wine industry's success. Does environment matter? *International Journal of Wine Business Research, 19*(1), 14-32.

Kahn, A. M. & Manopichetwattana, V. (1989). Innovative and noninnovative small firms: types and characteristics. *Management Science*, *35*, 597-606.

Katz, R. & Allen, J. (1982). Investigating the not invented here (NIH) Syndrome: a look at the performance, tenure, and communication patterns of 50 R&D project groups. *R&D Management*, *12*(1), 7-19.

Leonard-Barton, D. (1992). Core capabilities and core rigidities: a paradox in managing new product development. *Strategic Management Journal*, *13*, 111-125.

Levitt, T. (1965). Exploit the product life cycle. *Harvard Business Review*, *43*, 81-94.

Lieberman, M. B. & Asaba, S. (2006). Why do firms imitate each other? *Academy of Management Review*, *36*(2), 366-385.

Lieberman, M. B. & Montgomery, D. B. (1988). First-mover advantages. *Strategic Management Journal*, *9*, 41-58.

March, J. G. (1991). Exploration and exploitation in organisational learning. *Organization Science*, *2*(1), 71–87.

Martin, M. (1994). *Managing Innovation and Entrepreneurship in Technology-based Firms*, NY: John Wiley & Sons.

Miller, D. & Friesen, P. H. (1982). Innovation in conservative and entrepreneurial firms: two models of strategic momentum. *Strategic Management Journal*, *3*(1), 1 – 25.

Miller, D. & Friesen, P. H. (1984). A longitudinal study of the corporate life cycle. *Management Science*, *30*, 1161-1183.

Mintzberg, H. (1973). Strategy-making in three modes. *California Management Review*, *16*, 44-53.

Mitchell, G. & Hamilton, W. (1988). Managing R&D as a strategic option. *Research Technology Management*, *31*, 15-24.

Moore, W. L. & Tushman, M. L. (1988). Managing innovation over the product life cycle. In M. L. Tushman & W. L. Moore (Eds.), *Readings in the Management of Innovation*. 2/E, Cambridge, Mass.: Ballinger.

Morita, A. & Reingold, R. (1986). *Made in Japan*, E. P. Dutton & Company, 279.

Nowak, L . I. & Newton, S. (2008) Using winery web sites to launch relationships with Millennials, *International Journal of Wine Business Research*, *20*(1), 22-37.

Ortega Argilés, R., Morena, R. & Carale J. S. (2005). Ownership structure and innovation: is there a real link? *Annual Regional Science*, *39*, 637-662.

Orth, U., Lockshin, L. & d'Hauteville, F. (2007). The global wine business as a research field. *International Journal of Wine Business Research*, *19*(1), 5-13.

Parkin, M., Powell, M., & Matthews, K. (1997). *Economics*. 3/E Harlow: Addison-Wesley.

Pelham, A. M. (1999). Influence of environment, strategy, and market orientation on performance in small manufacturing firms. *Journal of Business Research*, *45*(1), 33-46.

Porter, M. E. (1980). *Competitive Strategy: techniques for analyzing industries and competitors*, New York: Free Press.

Porter, M. E. & Stern, S. (2001). Innovation: location matters. *MIT Sloan Management Review*. *42*(4), 28-36.

Robinson, K. C. & McDougall, P. P. (2001). Entry barriers and new venture performance: a comparison of universal and contingency approaches, *Strategic Management Journal*, *22*, 659-685.

Robinson, P. B. & Sexton, E. A. (1994). The effect of education and experience on self-employment success. *Journal of Business Venturing*, *9*(2), 141-156.

Romanelli, E. & Tushman, M. L. (1994) Organizational transformation as punctuated equilibrium: an empirical test. *Academy of Management Journal*, *37*(5), 1141-1166.

Schein, E. (1992). *Organizational Culture and Leadership*. San Francisco: Jossey-Bass.

Sigglekow, N. (2007). Theory building from cases: opportunities and challenges. *Academy of Management Journal, 50(*1), 20-24.

Stinchcombe, A. (1965). Social structure and organizations. In March, J. G. (Ed). *Handbook of Organizations*, Chicago: Rank McNally, 142-193.

Szulanski, G. (2003). *Sticky Knowledge: barriers to knowing in the firm.* London, GBR: Sage Publications.

Szulanski, G. & Jensen, R. J. (2006). Presumptive adaptation and the effectiveness of knowledge transfer. *Strategic Management Journal, 27*(10), 10.

Taylor, B., Gilinsky, A., Hilmi, A., Hahn, D., & Grab, U. (1990). Strategy and leadership in growth companies. *Long Range Planning, 23*(3), 66-75.

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal, 18*(7), 509-533.

Tellis, G. J. & Golder, P. N. (1996). First to market, first to fail? Real causes of enduring market leadership, *Sloan Management Review*, Winter, 65-75.

Tellis, G. J. (2006). Disruptive technology or visionary leadership? *Journal of Product Innovation Management, 23*, 34-38.

Thach, E. & Cuellar, S. (2007). Trends and implications for Spanish wine sales in the US market. *International Journal of Wine Business Research, 19*(1), 63-78.

Thomas, A. & Pickering G. (2005). X-it: Gen-X and older wine drinker comparisons in New Zealand. *International Journal of Wine Marketing*, *17*(2), 30-48.

Tushman, M. L. & Anderson, P. (1986). Technological discontinuities and organizational environments. *Administrative Science Quarterly*, *31*, 439-465.

Utterback, J. M. (1971). The process of technological innovation within the firm. *Academy of Management Journal*, 14(1), 75–89.

Vallini, C. (1991). *Fondamenti di governo e direzione d'impresa.* Torino: Giappichelli.

Van de Ven, A. H., Polley, D. E., Garud, R., & Venkataraman, S. (1999). *The Innovation Journey*. New York, NY: Oxford University Press.

Von Hippel E. (1988). *The source of innovation*, New York: Oxford University Press.

Von Hippel, E. (1994). Sticky information and the locus of problem solving: implications for innovation. *Management Science, 40* (4), 429-439.

von Oetinger, B. (2001). The renaissance strategist. *The Journal of Business Strategy, 22*(6), 38-42.

Waarts, E., van Everdingen, Y. M, van Hillegersberg, J. (2002). The dynamics of factors affecting the adoption of innovations. *The Journal of Product Innovation Management, 19*, 412–423.

Wernerfelt, B. (2005). Product development resources and the scope of the firm. *Journal of Marketing*, *69*(2), 15-23.

Wilkins, A. L. & Ouchi, W. G. (1983). Efficient cultures: exploring the relationship between culture and organizational performance. *Administrative Science Quarterly*, *28*, 468-481.

Yin, R. K. (1994). *Case Study Research: design & methods*. California: Sage Publications

Yip, G. S. (1982). *Barriers to Entry: a corporate perspective*. Lexington Books: Lexington, MA.

Zahra, S. A., Hayton, J. C., & Salvato, C. (2004). Entrepreneurship in family vs. non-family firms: a resource-based analysis of the effect of organizational culture, *Entrepreneurship Theory and Practice*, Summer, 363-381.