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Market orientation in a sample of Chilean agrifood processing firms

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1. Introduction

Agribusiness, like many industrial sectors, faces huge challenges in the new millennium. Increasing competition, globalization and fragmentation of markets ask ever greater questions of managerial decision-making in agribusiness firms. In other sectors, management and marketing theorists argue that to meet these challenges, firms should adopt a market orientation. A market orientation may be defined as 'the organizational environment that most effectively and efficiently generates the behaviors necessary for the creation of superior value for buyers' (Slater & Narver, 1995). The desire to create superior value for customers and attain sustainable competitive advantage drives a business to create and maintain the culture that will produce these behaviors. Within this environment or organizational culture, management's focus is on the development of superior skills in understanding and satisfying customers' needs (Day, 1994). Empirical studies have demonstrated that adoption of a market orientation can be positively associated with superior firm performance (e.g., Narver & Slater, 1990; Kohli & Jaworski, 1990, 1993; Greenley, 1995; Pelham, 1999). Yet despite the strong theoretical and empirical evidence that market orientation is useful and fruitful, it has rarely been studied with respect to agribusiness firms. We investigate the management and organizational behaviors of a sample of agribusiness firms in Chile, with two key questions in mind. First, given the recent success of Chilean agribusiness firms in international markets, we examine the extent to which this can be attributed to the adoption of market oriented behavior, as opposed to fortuitous circumstances. Second, given that the classic constructs of market orientation are derived

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from a North American perspective of the business and environment and culture, we explore how useful these are for understanding behavior in a Latin American context.

2. The agrifood sector in Chile

Chile has a population of about 15 million and a workforce of 5.4 million, and is one of the most open economies in the world. It exports 3,800 products to more than 177 countries. Approximately 35% of its GDP is accounted for by imports and exports, the highest GDP/trade ratio in Latin America (ECLAC, 1998). Chile has been committed to lowering its import tariffs unilaterally for most products and has conducted systematic efforts to develop trade agreements with its most important trading partners.

The agriculture and agrifood sectors have been strongholds behind this economic performance. Currently, 800,000 persons are employed in these sectors, which represents 16% of the nation's workforce (Pro-Chile, 1999a,b). The geography and climate of the country offer benefits to the agrifood industry. For example, as Chile is located in the southern hemisphere, it can export to main markets in the north when the vast majority of developing countries are not producing. This is highlighted in the destination of fresh produce exports, where during the 1997–1998 season, 67 million cases of fresh fruit were sold in NAFTA markets and 55 million in European markets from a total of 167 million cases (Asoexpo, 1999) (Fig. 1).

Furthermore, Chile crosses many latitudes, and this, combined with its sanitary, disease-free environment, means that a huge diversity of high quality fresh produce can be grown. The main fruit exports are grapes, kiwis, apples, pears and plums, while the main vegetable exports are onions, garlic, asparagus, radishes and tomatoes. In total, more than 500 types of agricultural products are exported to 120 different markets (Pro-Chile, 1999a,b). In addition to fresh produce, processed items such as juices and dehydrated, frozen and canned fruits and vegetables are an increasingly important part of the industry. In the last 15 years, this subsector has expanded at an average annual rate of 15%, with exports valued at between $900 and $1000 million (Pro-Chile, 1999a,b).

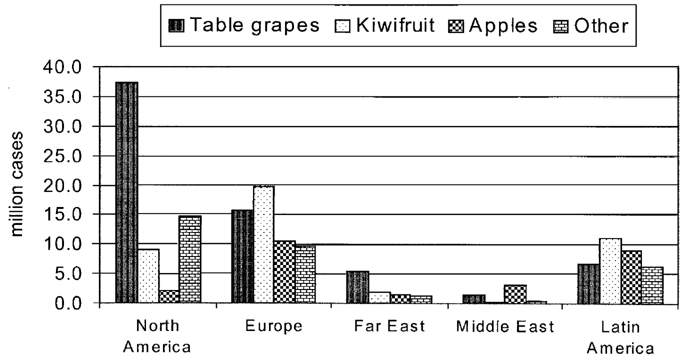

Fig. 1. Destination and composition of Chilean fresh fruit exports (season 1997–1998).

The third strong area of the agrifood exporting industry is wine. Again, geography and climate lead to favorable grapevine growing conditions. Shipments of bottled and bulk wines amounted to $424 million in 1997. Chile is the biggest wine exporter in Latin America and the third largest wine exporter to the United States, after France and Italy. However, more significant than its current importance as a wine exporting country (seventh in the world), is the impressive growth of its market share and positioning as a quality wine exporter to the fastest growing markets in the world, in particular the U.S., England and Japan. In terms of exports, these grew more than 1,100% in terms of volume and 1,600% in terms of value between 1985 and 1995 (Pro-Chile, 1999b).

3. A natural market oriented culture?

In 1973, a free market economy was established in Chile by the military regime, with a strong emphasis on the reduction of public spending in order to make room for private enterprise, in conjunction with support and development of the exporting sector. In 1989, the country regained its democratic tradition and since 1990 has been governed by a center-left political coalition that has retained the existing economic model while trying to mend the socio-economic inequalities left by the previous administration (Catherwood & Hennenberry, 1997). In the last 15 years, the Chilean economy has grown at an average annual rate of 6%, a trend that was interrupted in 1999 due to the world financial crisis sparked in Asian economies. With inflation under control (4% in 1999), unemployment reduced, and a commitment from the current government to reduce import tariffs below 5% by the year 2000 (Frei, 1997), the Chilean approach to macroeconomic development is held up by international financial institutions as an example for developing countries to follow (see, for example, The World Bank, 1997, 1998).

Against this economic and political background, Chilean agribusiness firms have been operating and developing, with evidence of entrepreneurship. In particular, where Chilean agribusiness firms appear to have excelled has been in timely and effective responses to export market opportunities. A key example of this is found in the kiwi fruit market, whereby over a period of 15 years, from being completely unknown, Chile became one of the four largest kiwi fruit exporters in the world on the basis of a high quality/price ratio strategy. Another example is in the fresh and frozen berry market, where, in 1991, Chilean producers filled the gap in Europe left by the economic embargo of the former Yugoslavia. Chilean agribusiness firms also exploited the onion market following a drought in Tasmania, Australia's main producing region, which seriously affected their supply of fresh onions to the Japanese market.

In some of these cases, Chilean agribusiness firms have succeeded in maintaining market share after the initial exploitation. However, the question is whether Chilean producers have benefited from being fortuitously placed to take advantage of these opportunities or whether these exploitations are the result of true market oriented behavior. The distinction is an important one. Theorists argue that any firm can benefit from fortuitous circumstances from time to time: however, with market oriented management, the exploitation of opportunities is not a haphazard occurrence, but the result of planned activities which cause the firm to be 'in the right place at the right time'. As such, market oriented behavior increases the likelihood of successful opportunity exploitation regardless of how the environment changes over time.

4. The branding issue

Central to the development of sustained marketing opportunities is the creation of effective brands. Brands communicate specific attributes to target consumers, allowing for products to be differentiated from the competition. In the agribusiness context a key issue is the level of aggregation of a brand: for example, should a brand pertain to a specific product, private company, producer co-operative, or country of origin? There are potentially difficult trade-offs to be made between individual company level brands and collective or generic brands (Hamlin & Watson, 1997). In Chilean agribusiness, the traditional emphasis was on the production of generic goods branded at the national level for sale to export market firms and foreign retailers. Yet up to the 1990s, the success of this approach was mixed because of heterogeneity in product quality, for example in fresh fruit. More recently however, individual agribusinesses have sought to build up an image to their clients of high quality and reliability. Resources have been invested in activities such as inviting customers to visit plants, checking quality control procedures and complying with high standards and certificates. Wineries have also been very proactive in terms of visiting wine fairs to promote directly their products among distributors. In this sense, Chilean agribusinesses have made a strong effort to brand not the product but the manufacturer, performing a well planned strategy to become closer to their immediate clients. A knock-on effect of this, it may be argued, has been a better generic image of Chilean agrifood products, although it is perhaps only in certain specific categories such as wine and table grapes where this image is recognized and appreciated by the *final* consumer.

5. The present study

To investigate the management and organizational behavior of Chilean agribusiness firms, this study employed the model of market orientation developed by Kohli and Jaworski (1990, 1993). This model is an hypothesized construct of all the processes and activities which comprise market oriented behavior, grouped under three categories: antecedents, inner elements and consequences, with environmental factors providing a moderating influence (Fig. 2).

In the model, three sets of antecedents are proposed to relate to market oriented behavior: the attitudes and emphasis of top management, the nature of interdepartmental dynamics within the firm, and the nature of organizational systems. Broadly speaking, it is hypothesized that open, co-operative management styles and company structures which facilitate information flows and reward employees on the basis of customer satisfaction comprise the antecedents of market oriented behavior. The inner elements of market orientation are perceived to be activities relating to market information processing, that is, organization-wide generation of market intelligence, dissemination of this intelligence

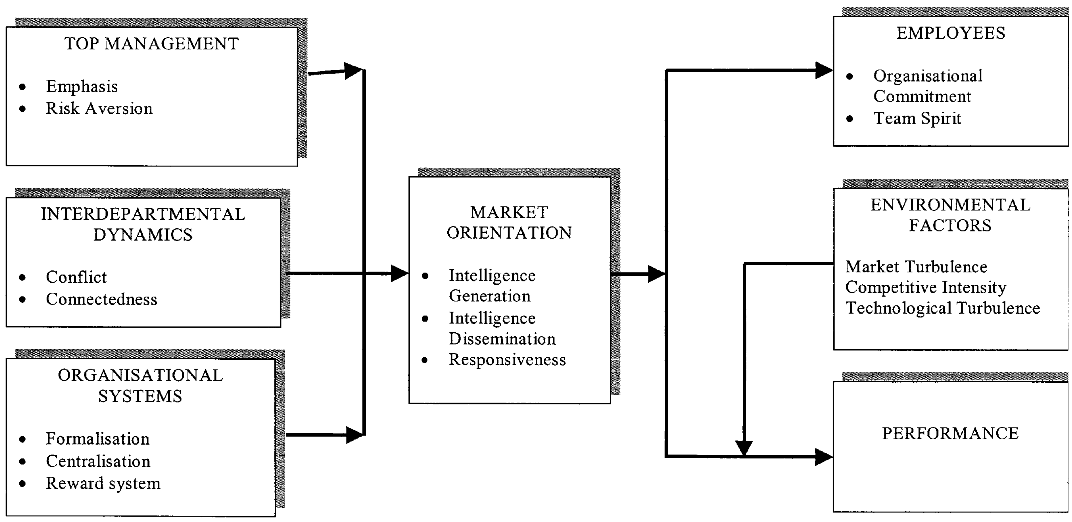

Fig. 2.

across departments, and organization-wide responsiveness to it. Finally, the model proposes that market orientation is related to two sets of consequences: employee attitude/team spirit and performance, with the hypothesis that market orientation leads to committed employees and ultimately improved firm performance. In terms of environmental moderating effects, these are categorized as market turbulence, competitive intensity and technological turbulence, with highly turbulent and competitive markets increasing the need for a market orientation in the firm, whereas performance in hi-tech industries is less affected by a market oriented culture. Following empirical examination of the validity of this construct among a sample of North American firms, the authors conclude that this is a coherent, robust model of market orientation. This implies that for a firm to be truly market oriented, all the various behaviors and activities listed within the construct need to be performed.

For this study, we take this latter assertion as the starting point for the investigation of market orientation in Chilean agribusiness firms. Following the methodological procedure adopted by Kohli and Jaworski, a questionnaire was developed comprising many series of carefully chosen statements or 'items' relating to the various components of the hypothesized construct of market orientation. The response format involved indication, on a five point Likert scale, of the extent to which these statements reflected attitudes and practices found in the respondents' own firm. All responses were rated on a scale from 'strongly agree' to 'strongly disagree', except for measures of performance which were rated from 'excellent' to 'poor'. This original questionnaire, which included 17 sections and 106 items, was then pretested among a small sample of Chilean agroindustry managers to test for contextual relevance and linguistic accuracy of the translation to Spanish. As a result, the final questionnaire was modified to 65 items categorized under 17 sections, with antecedents comprising seven sections (top management emphasis and risk aversion, interdepartmental conflict and connectedness, organizational systems formalization, centralization and reward system); inner elements comprising four sections (intelligence generation, dissemination, response design and implementation); consequences comprising three sections (organizational commitment, team spirit, performance); and environmental moderators comprising the remaining three sections (market turbulence, competitive intensity and technological turbulence) (Appendix A). The following sections gives a summary of how each of these components was broken down into the 65 items of the questionnaire.

5.1. Antecedents of a market orientation

For *Top management*, 'Emphasis' was investigated through four items relating to the verbal reinforcement top managers provided for market oriented activities. 'Risk aversion' was investigated through four items related to top managers' dispositions toward innovative actions in the face of risk and uncertainty. For *Interdepartmental dynamics*, each element was also investigated through four items, with 'Conflict' interpreted as incompatible goals between departments, and 'Connectedness' referring to the extent to which individuals networked within various levels of the firm hierarchy in different departments. For *Organizational systems*, 'Formalization' was measured through four items, and was interpreted as the extent to which jobs within the firm are codified and rules are observed. 'Centralization' included three items assessing the degree of hierarchical authority within the organization. 'Reward system orientation' was measured through four items that assessed the extent to which managers were rewarded based on relationship with customers, customer satisfaction and market oriented behaviors.

5.2. Inner elements of market orientation

Market orientation was measured by 16 items, four pertaining to *Market Intelligence Generation*, four to *Intelligence Dissemination*, and eight to *Responsiveness* (four related to intelligence response capabilities and four related to intelligence response implementation).

5.3. Consequences of a market orientation

For *Employees*, investigation focused on 'organizational commitment' and 'team spirit', each through four items. Organizational commitment tapped the extent to which employees were fond of the organization, saw their future tied to it, and were willing to make personal sacrifices for the organization. Team spirit assessed the extent to which a team spirit prevailed in the organization. *Business performance* meanwhile was measured by a judgmental approach, that is, through the subjective opinion of managers. This measure included two items asking informants for their assessment of the overall performance of the business and its overall performance relative to major competitors.

5.4. Environmental moderators

For the environmental moderators *market turbulence*, *competitive intensity* and *technological turbulence*, each was measured by four items. Items for market turbulence assessed the extent to which the composition of an organization's customers tended to

Table 1
Sample profile

Type of industry	Number of respondents	%	Markets					
			<10	10–50	>50	National	International	Both
Processed fruits and vegetables	15	54	–	5	10	2	2	11
Fresh fruit exporters	6	21	–	2	4	–	2	4
Wineries	3	11	2	–	1	–	–	3
Dairy products	4	14	–	–	4	4	–	–
Total	28	100	2	7	19	6	4	18

change over time. Competitive intensity items assessed the behavior, resources and ability of competitors to differentiate their products. Technological turbulence items tapped the extent to which technology in the firm's sector was in a state of flux.

6. The sample

Prior to execution of the survey, sponsorship for the research was gained from the Federation of Chilean Agroindustries (FEPACH) which is recognized as the main trade association for the sector of food and vegetables processors. This gave access to the database of 78 FEPACH members, who are involved primarily in frozen, canned, dehydrated, and fruit and vegetable juices. In addition, a second database of Chilean agroindustrial firms (Chilnet-Internet) was used to identify a further 79 companies from the dairy, winery and fresh and processed fruit and vegetable industries, to give a total sampling frame of 157 agribusiness firms. A questionnaire was sent out to the top manager or CEO in each of these firms, together with a personalized covering letter explaining the objectives, context and sponsors of the research.

Out of 157 firms, 28 questionnaires were returned, representing a response rate of 18%. Although postal surveys may normally expect lower response rates than telephone or face-to-face surveys (rates of 20% to 25% are considered acceptable), this total was disappointing particularly in view of the sponsorship of FEPACH, a fact clearly stated in the letter accompanying each questionnaire (50% of the firms in the database were members of this organization). Table 1 shows the profile of the research sample. It may be seen that respondents came from a diverse set of backgrounds in the agrifood industry, but that most were employed in larger enterprises which supply both the domestic and export markets.

7. Results

The low number of responses meant that this study was unable to replicate the more sophisticated analytical procedures of Kohli and Jaworski's research, therefore the results presented here are descriptive in nature. Nevertheless, they do give interesting insights into how these agribusiness managers perceived their firms' behavior, and the extent to which these behaviors correspond to the theoretically 'ideal' model. Fig. 3 shows, for each of the 17 components of market orientation, the average rating given to that component by all managers in the sample. Ratings are also shown according to whether managers were in 'high' or 'low' performing firms, calculated on the basis of their response to the 'performance' items on the questionnaire. On the scale, '5' indicates the 'best' possible market oriented behavior as hypothesized by Kohli and Jaworski, and '1' means the opposite.

It may be seen from Fig. 3 that, overall, managers in this study held quite positive perceptions of their firms' market orientation behaviors. In fact, in only one behavior (OS-reward system) did the average response rating total less than '3'. Respondents perceived, therefore, that in the majority of behaviors, their firms performed closer than average to the 'ideal' market oriented performance. Within this generally positive result, the three components which were rated highest on the scale by respondents were the ability to immediately implement a response to market intelligence (MO-response implementation), the emphasis that top management puts on market oriented behaviors (TM-emphasis), and the level of connectivity between units and individuals within the organization (ID-connectedness). Despite these generally positive results however, Fig. 3 shows that at the level of antecedents, inner elements and consequences of a market orientation, there are some variations in the average ratings given to individual behaviors. Respondents clearly perceived that these individual behaviors were being carried out with varying degrees of effectiveness. There are also some variations according to the managers' situation in a high or low performing firm. The following sections explore these variations further, drawing from the conclusions of Kohli and Jaworski to support the comments. Reflections are also made on the impact of cultural differences on the relevance of conclusions.

7.1. The antecedents of a market orientation

The antecedents of a market orientation relate to processes and activities such as top management emphasis and attitudes to risk taking; empathy among departments and employees and networking abilities; and organizational systems such as the level of centralization, ordinance and reward systems within the company. In terms of top management emphasis and risk taking, Kohli and Jaworski found that a market orientation is facilitated by the emphasis a top manager places on market orientation through continual reminders to employees that it is critical for them to be sensitive and responsive to market developments. In addition, they found that a market orientation appears to require a certain level of risk taking on the part of senior managers and a willingness to accept that occasional failures of new products and services are a normal part of business life.

Fig. 3 shows that respondents assessed themselves quite highly with respect to their emphasis on market oriented behaviors within their organizations (TM-emphasis). At the same time however, they declared themselves relatively averse to innovative actions that might involve certain financial risk (TM-risk aversion). Following Kohli and Jaworski's work, this has important implications for performance. Since market needs are constantly changing, those companies that do not experiment and introduce new products are less likely

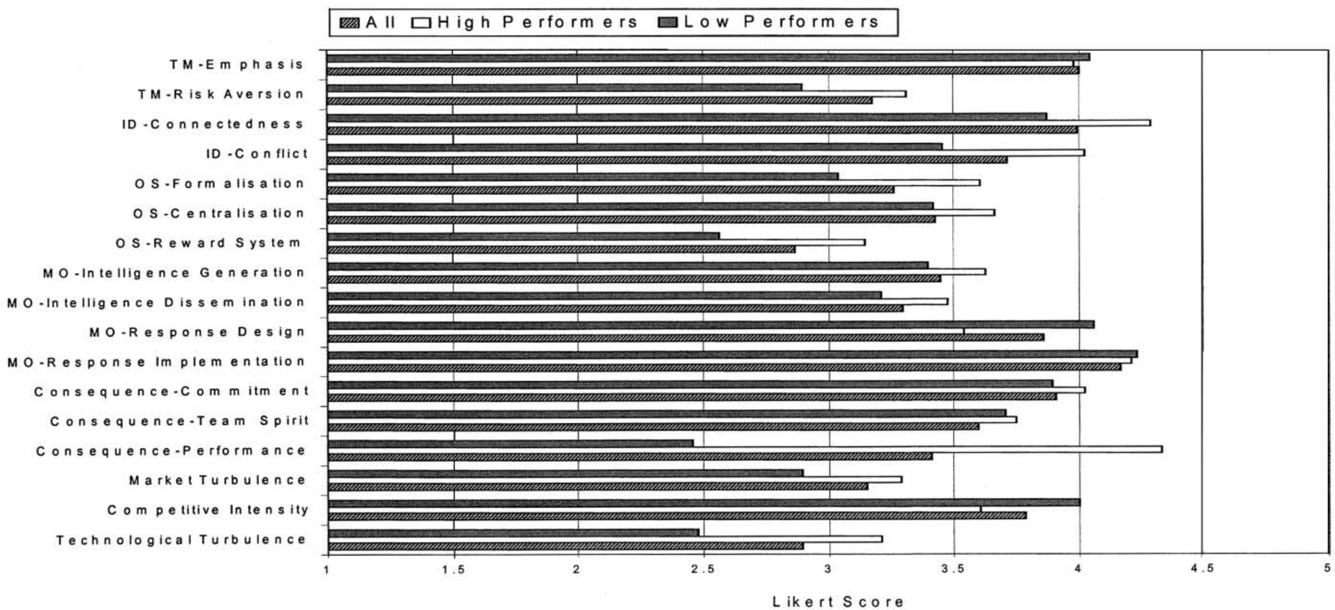

Fig. 3. Average rating of market oriented behaviors in a sample of Chilean agrifood processing firms.

to succeed in the long-term. Moreover, if junior managers and employees perceive this risk-averse attitude coming from senior management, it is possible that they will reproduce this behavior and become less enthusiastic about proposing new ideas and products which are essential to innovation. Nevertheless, such an aversion to financial risk may be construed as culturally logical given the past turbulence of the political and economic environment these respondents have faced.

With respect to interdepartmental dynamics, Kohli and Jaworski argue that conflicts between departments have a negative impact on two of the main elements of market orientation: intelligence dissemination and concerted response by the departments to market needs. Accordingly, they propose that there should be a high degree of formal and informal direct contact among employees in different departments in order to fully exchange market intelligence and respond to it in a co-ordinated way. In this study, it was found that managers perceive quite low levels of conflict between departments (ID-conflict), and also consider networking levels to be good (ID-connectedness).

With respect to organizational systems, Kohli and Jaworski argue that strict definitions of roles, authority relations, communications and norms make an organization less flexible to rapidly respond to market changes. They also suggest that it may be useful to empower employees to make decisions at lower levels in the organizations rather than concentrate decision-making in the upper levels of the organization. In this study, managers perceived average levels of centralization and formalization (OS-centralization, OS-formalization). However, what is surprising is the strikingly low rating of ‘reward systems’ (OS-reward system). Kohli and Jaworski argue that employees need to be incentivized on the basis of long-term customer satisfaction rather than being evaluated under short-term profitability or sales criteria. In fact, they conclude that a firm’s reward system is perhaps the single most influential factor affecting a market orientation. In this study, managers rated reward systems the lowest of all market orientation components. In other words, they felt strongly that rather than being rewarded on customer satisfaction or relationship building, managers and employees are rewarded on the basis of other financial indicators. This contrasts markedly with the expected behavior of a market oriented firm, and could be construed as a manifestation of cultural difference between North American and Latin American organizational styles.

7.2. The inner elements of a market orientation

These components concern the creation of market intelligence and the processing of this information within the firm. In relation to these elements, Kohli and Jaworski affirm that market intelligence generation—the gathering and analysis of data regarding customers and competitors—is the starting point of a market orientation. The correct definition of customers, the appropriate means of information gathering, together with the involvement of all departmental functions in the process, are considered to be key factors here. To respond effectively to this information, it is argued that market intelligence should be communicated, disseminated, and even sold to relevant departments and individuals in an organization. Effective dissemination of market intelligence is important because it provides a shared basis for concerted action by different departments. The third element of the inner components of a market orientation is responsiveness itself. Examples of responses are activities such as selecting target markets or designing products that match identified needs.

In this study, managers scored poorly on the items relating to market intelligence generation (MO-intelligence generation). This could imply that these firms lacked a structured internal system for information gathering, resulting in reliance upon outside sources of market information. Respondents' ratings of activities related to information dissemination (MO-intelligence dissemination) were also quite low, suggesting that information flows between departments lacked openness and fluidity. However, respondents did rate their firms highly in terms of response implementation, indicating that once information has reached the appropriate department, effective action takes place. These results raise concerns because a firm's response to market information can only be as good as the information available. It is uncertain whether culture influences the low rating of these items, however, it may be argued that the response behaviors of these firms could be even more effective if information generation and dissemination behaviors were improved.

7.3. Consequences of a market orientation: employee commitment and team spirit

In terms of consequences of a market orientation, composite elements include employee commitment to the organization and team spirit. The results from Kohli and Jaworski's study suggest that a market orientation does have a strong influence on the level of employee commitment through feelings of pride in belonging to an organization that satisfies and exceeds customer needs. In this study, both facets were rated quite well (EM-team spirit, EM-commitment), though commitment was rated higher than team spirit.

7.4. Consequences of a market orientation: performance

So far, these results have focused on describing and reflecting upon the ratings managers gave to market orientation behaviors in their firms. In their study, Kohli and Jaworski investigate whether market orientation ratings are associated with firm performance. They show, as do (Narver & Slater, 1990) and (Greenley, 1995), that a market orientation is positively related to performance either as a direct or an indirect effect, although there is some debate regarding the moderating effect of the environment on the relationship, as well as debates over the most effective measure of performance. In this study, notwithstanding the small sample size, significant differences were found between high and low performing firms in the ratings they gave to employee reward systems. This is consistent with the notion that managers and employees from high performing firms are more likely to be rewarded by customer satisfaction, rather than financial, criteria.

7.5. Environmental moderators

Finally, Kohli and Jaworski propose that a number of environmental factors will have a moderating influence on market orientation, namely, levels of market turbulence, competitive intensity and technological turbulence. However, in their study, they conclude that the market orientation of a business is an important determinant of that business, regardless of the market turbulence, competitive intensity, or the technological turbulence of the environment in which it operates. Therefore, it appears that managers should strive to improve the market orientation of their business regardless of the temporary or longer-term effect of any particular environmental factor on the business environment. In this study, managers perceived competition to be the most important environmental factor affecting the profitability of their businesses. There were also significant differences in the way managers from high and low performing firms perceived the influence of technological change. Managers from high performing firms regarded technological factors as being more influential in the development of the business environment than managers in low performing firms ($p = 0.071$).

8. Conclusions

This study has investigated market orientation among Chilean agribusiness firms, following the construct of market orientation developed and tested by Kohli and Jaworski. The empirical component reported here is limited by a small sample size, which means that the results should be interpreted with caution. Also, results are based on managers' subjective interpretations of the items comprising the questionnaire, and therefore different individuals may have interpreted the statements in slightly different ways. Overall however, the main finding is that managers in this study rated their firms' performance in market orientation processes and activities quite highly. In particular, we found that the most market oriented behaviors of Chilean agrifood processing firms were their ability to rapidly respond to changes in their relevant market, the desire of top managers to make their firms more market oriented and the efficiency of information flows between individuals and departments. In contrast, the least market oriented behaviors were found to be the absence of an employee reward system based on a closer relationship with the customer, top managers' aversion to risk, a relatively high degree of job codification and observance of the 'rules' and relatively weak intelligence dissemination activities. The most important environmental factor affecting profitability of business as perceived by managers was competition, followed by market and technological turbulence. Some of these behaviors vary if firms are separated into low and high performers, the most significant difference between the two sets being their systems of rewarding managers and employees.

With respect to the question of whether Chilean agribusiness firms are truly market oriented or have benefited rather from fortuitous circumstances, there is evidence from this study to suggest that in practice, Chilean firms do perform market oriented behaviors. That is, managers of these firms possess certain perceptions and goals, and prioritise specific activities which are conducive to market orientation. The results, in this regard, are broadly consistent with earlier observations that Chilean firms have taken a more proactive and relational approach to dealing with intermediaries and clients in recent years. Yet the results of this study have also revealed some interesting anomalies. In particular, although top managers are perceived to have a market oriented emphasis, the basis on which employee and managerial performances are rewarded is financial rather than development of customer relations. Another anomaly found is respondents' perception that their firms are significantly better at designing and implementing a response to market changes than generating and disseminating that information across departments for a concerted action. Finally, even though the channels of communication among departments and individuals seem to work well, the content of the messages do not seem to include market information. In summary then, it may be argued that for the managers in this study, problems in some of the employee and managerial motivation systems and market information sharing among departments threaten to undermine the areas in which the firms are perceived to be highly market oriented.

With respect to the issue of cultural differences between North America and Latin America, which could influence the applicability of the Kohli and Jaworski construct, this study has reflected on areas of economic context or management style which could be relevant. Indeed the low response rate to the empirical study could, in part, have been due to managers' lack of connection with the items of the construct (notwithstanding efforts to translate appropriately). Differences in business culture certainly exist between North and Latin America. Yet, it is also important to point out that within the Chilean agribusiness community, North American ideas and training have been expanding and developing. It may be therefore that complex cultural issues are taking place *within* firms, for example, between managers and employees (as discussed by Harris & Ogbonna, 2000), and it is at this level that culture may have the most significant impact on the market orientation of firms. Future studies could adopt more qualitative approaches to explore such issues in more depth.

Appendix A. Questionnaire summary (Adapted from Kohli and Jaworski, 1993)

Topic	Statement
Top management: emphasis	1. Top managers repeatedly tell employees that this business unit's survival depends on its adapting to market trends 2. Top managers often tell employees to be sensitive to the activities of our competitors 3. Top managers keep telling people around here that they must gear up now to meet customers' future needs 4. According to top managers here, serving customers is the most important thing our business unit does.
Top management: risk aversion	1. Top managers in this business unit believe that higher financial risks are worth taking for higher rewards[a] 2. Top managers here accept occasional new product failures as being normal 3. Top managers here encourage the development of innovative marketing strategies, knowing well that some will fail 4. Top managers around here like to implement plans only if they are very certain that they will work

Appendix A. (*Continued*)

Topic	Statement
Inter-departmental dynamics: conflict	1. When members of several departments get together, tension frequently run high 2. People in one department generally dislike interacting with those from other departments 3. Employees from different departments feel that the goals of their respective departments are in harmony with each other 4. There is little or no interdepartmental conflict in this business unit
Inter-departmental dynamics: connectedness	1. In this business unit, it is easy to talk with virtually anyone you need to, regardless of rank or position 2. In this business unit, employees from different departments feel comfortable calling each other when the need arises 3. Managers here discourages employees from discussing work related matters with those who are not their immediate superiors or subordinates 4. Communications from one department to another are expected to be routed through ''proper channels''
Organizational systems: formalization	1. How things are done around here is left up to the person doing the work[a] 2. People here are allowed to do almost as they please[a] 3. The employees are constantly being checked on for rule violations 4. People here feel as though they are constantly being watched to see that they obey all the rules
Organizational systems: centralization	1. There can be little action taken here until a supervisor approves a decision 2. A person who wants to make his own decision would be quickly discouraged here 3. Even small matters have to be referred to someone higher up for a final answer
Organizational systems: reward system	1. Customer satisfaction assessments influence senior managers' pay in this business unit[a] 2. Formal rewards (i.e., pay raise, promotion) are forthcoming to anyone who consistently provides good market intelligence[a] 3. Salespeople's performance in this business unit is measured by the strength of relationships they build with customers

Appendix A. (*Continued*)

Topic	Statement
	4. Salespeople's monetary compensation is almost entirely based on their sales volume
Market orientation: intelligence generation	1. In this business unit, we do a lot of in-house market research 2. We poll end-users at least once a month to assess the quality of our products and services 3. We collect industry information through informal means (e.g., lunch with industry friends, talks with trade partners) 4. We are slow to detect fundamental shifts in our industry (e.g., competition, technology, regulation)[a]
Market orientation: intelligence dissemination	1. A lot of informal "hall talk" in this business unit concerns our competitors' tactics or strategies[a] 2. We have interdepartmental meetings at least once a quarter to discuss market trends and developments 3. Marketing personnel in our business unit spend time discussing customers' future needs with other functional departments 4. There is minimal communication between marketing and manufacturing departments concerning market developments
Market orientation: response design	1. It takes us forever to decide how to respond to our competitors' price changes 2. Principles of market segmentation drive new product development efforts in this business unit[b] 3. For one reason or another we tend to ignore changes in our customers' products or service needs 4. The product lines we sell depend more on internal politics than real market needs
Market orientation: response implementation	1. Customer complaints fall on deaf ears in this business unit 2. Even if we came up with a great marketing plan, we probably would not be able to implement it in a timely fashion[b] 3. We are quick to respond to significant changes in our competitors' pricing structures 4. When we find out that customers are unhappy with the quality of our service, we take corrective action immediately
Consequence: employee response organizational commitment	1. Employees would be happy to make personal sacrifices if it were important for the business unit's well being 2. The bonds between this organization and its employees are weak

Appendix A. (*Continued*)

Topic	Statement
	3. In general, employees are proud to work for this business unit 4. Our people have little or no commitment to this business unit
Consequence: employee response team spirit	1. People in this business unit are genuinely concerned about the needs and problems of each other 2. A team spirit pervades all ranks in this business unit 3. This business unit lacks and "esprit de corps" 4. People in this business unit view themselves as independent individuals who have to tolerate others around them
Consequence: performance	1. Overall performance of the business unit last year 2. Overall performance relative to major competitors last year
Environmental factors: market turbulence	1. Our customers tend to look for new product all the time 2. Sometimes our customers are very price-sensitive, but on other occasions, price is relatively unimportant 3. We are witnessing demand for our products and services from customers who never bought them before 4. We cater to many of the same customers that we used to in the past
Environmental factors: competitive intensity	1. Competition in our industry is cut-throat 2. Anything that one competitor can offer, others can match readily 3. Price competition is a hallmark of our industry 4. One hears of a new competitive move almost every day
Environmental factors: technological turbulence	1. The technology in our industry is changing rapidly[a] 2. Technological changes provide big opportunities in our industry 3. A large number of new product ideas have been made possible through technological breakthroughs in our industry 4. Technological developments in our industry are rather minor

[a] Significant difference between high and low performers (5% significance level) consistent with the hypotheses.

[b] Significant difference between high and low performers (5% significance level) going against the hypotheses.

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References

Asoexpo (1999). *Fresh Fruit Exports Annual Statistics*. Santiago, Chile: Fresh Fruit Exporters' Association.

Day, G. (1994). The capabilities of market-driven organizations. *Journal of Marketing*, *61*(October), 37–52.

Catherwood, K., & Hennenberry, D. (1997). The NAFTA wheat import market: Implications of Chilean accession into the agreement. *Journal of International Food and Agribusiness Marketing*, *9*(2), 35–55.

ECLAC (1998). Annual Economic and Social Report of the United Nation's Economic Council for Latin America and the Caribbean. Available: http://www.eclac.cl/espanol/Publicaciones/bal98/indice.htm

Frei, E. (1997). President's Annual Report to Congress, May 21st. Government of Chile. www.presidencia.cl/

Greenley, G. E. (1995). Forms of market orientation in UK companies. *Journal of Management Studies*, *32*(1), 47–66.

Hamlin, R., & Watson, V. (1997). The role of appellation in wine marketing-does the New Zealand wine industry know what it's getting? *International Journal of Wine Marketing*, *9*(2/3), 52–69.

Harris, L. C., & Ogbonna, E. (2000). The response of front-line employees to market oriented culture change. *European Journal of Marketing*, *34*(3/4), 318–340.

Kohli, A., & Jaworski, B. (1990). Market orientation: The construct, research propositions, and managerial implications. *Journal of Marketing*, *54*(April), 1–18.

Kohli, A., & Jaworski, B. (1993). Market orientation: Antecedents and consequences. *Journal of Marketing*, *57*(July), 53–70.

Narver, J., & Slater, S. (1990). The effect of market orientation on business profitability. *Journal of Marketing*, *54*(October), 20–35.

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

Pro-Chile (1999a). Chile Facts: Agriculture. Exports Promotion Bureau. www.prochile.cl/

Pro-Chile (1999b). Chile Facts: Agroindustry. Exports Promotion Bureau. www.prochile.cl/

Slater, S., & Narver, J. (1995). Market orientation and the learning organization. *Journal of Marketing*, *59*(July), 65–74.

World Bank (1997). World Report. www.worldbank.org/html/exdr/offrep/lac/c12.htm

World Bank (1998). World Report. www.worldbank.org/html/exdr/offrep/lac/c12.htm