THE IMPACT OF ENTREPRENEURIAL ORIENTATION ON THE AUSTRALIAN WINE INDUSTRY

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Abstract

This study examined the entrepreneurial environment of the Australian wine industry using Lumpkin and Dess’ (1996) Entrepreneurial Orientation (EO) dimensions: innovation, risk taking, proactiveness, autonomy and competitive aggressiveness.

A review of existing literature and previous studies which used Lumpkin and Dess’ (1996) EO dimensions was conducted. A questionnaire was then developed and sent to selected companies in the Australian wine industry. Follow-up, using semi-structured interviews, was undertaken with some respondents from the first stage. This multi-method approach assisted in making the results more robust.

This study demonstrated that a strong entrepreneurial orientation within a firm in the Australian wine industry could lead to improved business performance. Though the findings were related to this industry, the EO dimensions approach appears to be a worthwhile tool in entrepreneurship research. However, further studies will be required in other industries to validate this conclusion.

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INTRODUCTION

The Australian wine industry has experienced substantial local and export growth over the past five years, with exports climbing from $596 million in 1996/97 to $2.14 billion in 2001/02 (IBIS Report, 2002). During the same period domestic demand nearly doubled. The consistent increase in export sales has enabled Australia to emerge as a major force in the world wine industry.

During the past few years two trends have emerged in the industry: first, a rationalisation program has seen many small winemakers bought out, resulting in over 80% of production now being controlled by four large companies. Second, there has been a movement within the industry from producing bulk wines and competing on the basis of price to producing premium wines based on quality, branding and distribution.

There has been little research on this industry related to its entrepreneurial activities even though it is assumed that its participants are entrepreneurial. This study examined the entrepreneurial environment of the Australian wine industry to see if this was a correct assumption. Lumpkin and Dess’ (1996) Entrepreneurial Orientation (EO) construct consisted of five dimensions: innovation, proactiveness, risk taking, competitive aggressiveness and autonomy. These dimensions were used to develop a conceptual framework to determine whether or not they have an impact on firm performance within the Australian wine industry.

LITERATURE REVIEW

For this paper, the literature review focussed on Entrepreneurial Orientation.

Miller (1983) saw Entrepreneurial Orientation (EO) as a combination of risk taking, innovation and proactiveness. He suggested that an entrepreneurial firm was one that “engages in product market innovation, undertakes somewhat risky ventures”, and is “first to formulate proactive innovations, beating competitors to the punch” (Miller, 1983, p.771). Covin and Slevin (1991) saw these key dimensions as “entrepreneurial postures” rather than Entrepreneurial Orientations.

By adding autonomy and competitive aggressiveness to risk taking, innovation and proactiveness; Lumpkin and Dess (1996) formed the EO construct, building upon the earlier work of Covin and Slevin (1991).

The five dimensions of EO were: innovation, proactiveness, competitive aggressiveness, risk taking and autonomy. These dimensions were used to build a generic profile of an organisation’s level of EO.

Hypothesis 1. All five dimensions of EO will be considered important attributes within the organisations of the Australian wine industry in terms of improving organisation performance.

EO Dimension – Innovation

Schumpeter (1934, 1942) first emphasised the role of innovation in the entrepreneurial process. By 1985 Drucker proposed that innovation was the key issue in starting an entrepreneurial venture; whether it was within an established organisation or as an independent small business. It was the means by which they exploited change as an opportunity for a different business or a different service and can be practised systematically (Drucker, 1985).
Covin and Miles (1999) suggested that without innovation entrepreneurship would not exist. Stevenson and Gumpert (1985) supported this view, stating that the “heart of entrepreneurship” was innovation. Similarly, Burns (2001) expressed the opinion that innovation was the “prime tool entrepreneurs use to create or exploit opportunity” (Burns, 2001, p.31).

Scott (1965) believed that innovativeness was closely linked with creativity. It was associated with a strong desire to introduce novel, innovative or creative solutions (Whiting, 1988). Peters (1990) added that innovativeness required creativity and obsession to see it through. Brazeal and Kruger (1994) also stressed the benefits of innovation by suggesting that creation was an integral part of the entrepreneurial process. Bolton and Thompson (2000) associated innovation closely with creativity, however they suggest that it must be linked to entrepreneurship if the innovation was to become a commercial opportunity to be exploited. Amabile et al. (1996) cautioned that even though creativity was closely linked to innovation, it may not be the motivation or driving force behind it.

Neely and Hii (1998) suggested two views on how innovation affected business performance. The first view held that the production of new products or processes strengthens a firm’s competitive position in relation to its rivals. The second view argued that the process of innovation transformed a firm fundamentally by enhancing its internal capabilities; making it more flexible and adaptable to market pressures than non-innovating firms.

Innovation was highly regarded in the literature as a major base for entrepreneurial behaviour, therefore:

Hypothesis 2. Innovation will be more positively related to organisation performance compared to other EO constructs within the Australian wine industry.

**EO Dimension – Proactiveness**


Entrepreneurship centred on the recognition of opportunities (Kirzner, 1973, 1979, 1985). Kotey and Harker (1998) suggested that many businesses will reveal consistent proactive strategies to address these opportunities. However, they also identified that consistent reactive strategies could be employed in many areas of business operations. Such strategies may be characterised by reactions to certain events in the environment.

Knight (1997) argued the emphasis of proactiveness should be on “aggressive execution and follow through, driving towards the achievement of the firm’s objectives by whatever means are necessary” (Knight, 1997, p.214). Based on these views, it can be said that entrepreneurial firms should successfully match their competitive strategy to their external environment, and that the fit between proactiveness and competitive aggressiveness could ultimately determine firm performance.

**EO Dimension – Competitive Aggressiveness**

The intensity of a firm’s efforts to outperform industry rivals and taking them head on at every opportunity was defined as competitive aggressiveness. It was characterised by a strong offensive posture, directed at overcoming competitors (Lumpkin & Dess, 1997, p.2).

In entrepreneurship literature there has been a tendency to link proactiveness with competitive aggressiveness. Prior research has often regarded the constructs of proactiveness and competitive aggressiveness as synonymous. However, Lumpkin and Dess (1997) believed that there is an important distinction between the two dimensions. They argued that proactiveness and competitive aggressiveness are distinct concepts that may not co-vary and are differentially related.
to firm performance. They suggested that proactiveness was “a response to opportunities whereas competitive aggressiveness is a response to threats” (p.2). Chen and Hambrick (1995, p.457) stated that “proactiveness involves taking the initiative in an effort to shape the environment to one’s own advantage; responsiveness involves being adaptive to competitors challenges”. In other words, although it is possible for a particular firm to exhibit both competitive aggressiveness and proactiveness, their presence may vary in strength.

Hypothesis 3. Proactiveness and competitive aggressiveness are differentially related to organisation performance within the industry.

**EO Dimension Risk Taking**

The concept of risk taking has been associated with entrepreneurship, along with innovativeness, proactiveness and competitive aggressiveness. Early definitions of entrepreneurship centred on the willingness of entrepreneurs to engage in calculated business risks (Brockhaus, 1980). It may be conceptualised as an individual orientation towards taking chances in a decision-making situation (Sexton & Bowman, 1984). In a similar vein, Osborne (1995) argued that in entrepreneurship studies it was necessary to assess both personal and business risks.

Baird and Thomas (1985), suggested there were three types of risk taking: venturing into the unknown, committing substantial assets and borrowing heavily. “Venturing into the unknown” was especially difficult to quantify as it encompassed psychological and social risk as well as monetary risk (Gasse, 1982; Lumpkin & Dess, 1996). Some research found it unclear as to whether there was a high propensity to risk taking in entrepreneurs (Brockhaus, 1980; Low & MacMillan, 1988). Recent research indicated that entrepreneurs score higher on risk taking in tests than do non-entrepreneurs (Falbe and Larwood, 1995).

Studies undertaken by Saravathy, Simon and Lave (1996) suggested that entrepreneurs were more prone to accept risk as a given. These authors found that entrepreneurs were focussed on gaining control over the possible outcomes of investments rather than reducing the risk of project. This was supported by Morris (1998) who found that entrepreneurs tended to be moderate or calculated risk-takers.

Hypothesis 4. Entrepreneurial firms will be identified as calculated risk-takers and this construct will have a positive effect on organisation performance.

**EO Dimension – Autonomy**

Autonomy related to the freedom granted to teams and individuals, encouraging them to exercise their creativity in bringing forth an idea and being able to follow it through to completion (Lumpkin & Dess, 1996).

According to Mintzberg and Waters (1985), a strong and decisive leader has the autonomy to make decisive and risky decisions. Some authors reported that top management in high performing firms encouraged employee interaction and suggested that employees’ ideas at all levels were valued (Kanter, 1983; Nadler & Tushman, 1990). According to these authors, employees were energised by the orientation of the firm and new ideas were routinely generated and embraced by employees who felt they belonged and their contributions were valued.

An alternative view of autonomy can be found in the management literature. Since the turn of the century the classical management school of thought, with emphasis on formal structure, autocratic leadership, and control by superiors, has been dominant. These leaders depended on their authority and their power coming from being an owner of the business or occupying a high position. According to Schrivastava and Grant (1985), autonomy may be regarded as autocratic. Miller (1983) found that most entrepreneurial firms had autonomous leaders. This could lead to the
conclusion that small entrepreneurial firms will more than likely have an autocratic structure whereby most of the entrepreneurial aspects of the organisation are driven by one person.

Hypothesis 5. Companies within the Australian wine industry practice a high level of autonomy and this has a positive impact on organisation performance.

METHOD

Research Approach

The research used a two part, multi-method study involving qualitative and quantitative methods. An advantage of this multi-method approach was the ability to collect various types of data (Brewer & Hunter, 1989). A second advantage of using multi-method was that it enabled triangulation to take place.

Stage one consisted of an explanatory study through a self-administered mail survey. An explanatory approach was used as the researcher wanted to establish correlations between a number of variables, such as the relationship between EO dimensions and firm performance (Lekvall & Wahlbin, 1993). The variables used were the five EO dimensions, firm performance and firm size.

The questionnaire had two parts: the first part collected background information, including demographic and financial facts. The second part focussed on the EO dimensions through a five point Likert Scale response, with an open-ended question concluding the questionnaire. Summated scaling was used for a majority of the questions in the survey. The score for each question relating to a particular dimension was then added together to provide each respondent with an overall score for that set of questions. This score was then taken to indicate a person’s position on the EO dimension (De Vaus, 2002).

The second stage was a descriptive qualitative approach through telephone interviews with respondents who indicated on the questionnaire that they would be happy to participate. According to Lekvall and Wahlbin (1993), the descriptive approach is primarily used when the researcher was interested in describing the characteristics of a specified problem area. The primary aim of this stage was to clarify issues raised in stage one and seek explanations to initial findings.

Hussey and Hussey (1997) suggested that an industry focus can be advantageous and therefore the Australian wine industry was selected. An industry was also chosen due to the previous research on the topic being industry based (Loos, 2002; Nelson, 2001; Alexopoulos, 1996). Hussey and Hussey (1997) also suggested that this approach enabled meaningful conclusions to be developed from the sample and their general relevance applied to the chosen population.

The Sample

The target population was organisations in the Australian wine industry, in particular those wineries listed in the 2002 Australian and New Zealand Wine Industry Directory. Due to budgetary and time constraints a random sample of 185 of the 418 addresses in the State of Victoria were selected.

The most senior manager was chosen in all cases as most of the organisations surveyed were relatively small. It was expected that these managers could deal with demographic data of the firm, the entrepreneurial dimensions and the financial data during the last three years.

It was expected that approximately 20% of the sample would participate in the mail questionnaire. According to Freedman, Pisani and Purves (1998), a response rate of 25% is considered typical for mail questionnaires. The researcher felt that the response rate would be lower due to the high level of surveys currently being sent to the wine industry from both academic and commercial
sources. Furthermore, Baruch (1999) explained that response rates were getting lower in studies where senior management were respondents.

Six telephone interviews were conducted as it was thought that this was sufficient to clarify issues raised after analysis of the results obtained from the mail questionnaire. Respondents from the mail survey who indicated a willingness to be interviewed were selected.

RESULTS

Presence of EO

The results below show that respondents considered all EO dimensions important in improving firm performance.

Figure 1: Importance of each EO dimension in terms of improving performance

![Importance of each EO dimension in terms of improving performance](image)

From Figure 1 it can be seen that autonomy was rated the highest with an average score of 4.17. Innovation with an average of 3.94 was the second most important dimension. Proactiveness and competitive aggressiveness were ranked third and forth with mean scores of 3.68 and 3.11 respectively. Risk taking was the lowest ranked dimension with an average score of 2.53, yet still between slightly important (2) and somewhat important (3).

On average, because respondents rated all EO dimensions at least at the slightly important mark of (2), the results support Hypothesis 1.

All five dimensions of EO are considered important attributes within the firms of the Australian wine industry in terms of improving firm performance.
Correlation Analysis

To test hypotheses 2, 3, 4, and 5, correlation analysis was used to identify significant relationships between dependent and independent variables.

Figure 2: Correlation Matrix for Key Variables

<table>
<thead>
<tr>
<th></th>
<th>Firm Performance</th>
<th>Firm Size</th>
<th>Innovation</th>
<th>Proactiveness</th>
<th>Competitive Aggressiveness</th>
<th>Risk Taking</th>
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<tr>
<td>Firm Performance</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Firm Size</td>
<td>.174</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Innovation</td>
<td>.365**</td>
<td>-0.42</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proactiveness</td>
<td>.247</td>
<td>.199</td>
<td>.658**</td>
<td>.190</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competitive Aggressiveness</td>
<td>.333*</td>
<td>.203</td>
<td>.072</td>
<td>.471**</td>
<td>-.027</td>
<td></td>
</tr>
<tr>
<td>Risk Taking</td>
<td>.054</td>
<td>.061</td>
<td>.512**</td>
<td>.553**</td>
<td>-.151</td>
<td>.340**</td>
</tr>
<tr>
<td>Autonomy</td>
<td>.256</td>
<td>.146</td>
<td>.693**</td>
<td>.553**</td>
<td>-.151</td>
<td></td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed)
** Correlation is significant at the 0.01 level (2-tailed)

Innovation

Innovation was found to be fundamental in improving firm performance ranking a very close second to autonomy. Qualitative analysis found that intimate knowledge about customers and access to industry research and development were also important in enhancing a firm’s capacity to innovate in the Australian wine industry.

Therefore:

Hypothesis 2. Innovation will be more positively related to firm performance compared to other EO dimensions within the industry was generally proven.

Proactiveness and Competitive aggressiveness

Lumpkin and Dess (1997) suggested that proactiveness and competitive aggressiveness are distinct concepts that may not co-vary and were differentially related to firm performance.

Proactiveness was found to be positively related to firm performance, though not strongly in the wine industry. Developing a brand appeared to be a key proactive, success factor. Most respondents identified more with reactive marketing strategies rather than the expected proactive strategies. Their strategies focused on price reductions and efficiency gains rather than first mover advantage, which was not considered to be important.

Competitive aggressiveness did not appear to be overly common in this industry, although quantitative analysis suggested there was a moderate correlation with performance. Generally, competition was found to operate more on an industry-wide basis rather than local or regional level. In fact most interviewees stressed the importance of collaboration and regional alliances.

It was found that a firm may exhibit both competitive aggressiveness and proactiveness, but their presence may vary over time. Statistical analysis indicated that proactiveness and competitive aggressiveness were correlated at a level of .190; this represented a small degree of correlation.
However, this also indicated that these two dimensions exhibited quite a reasonable degree of independent variance - in line with findings by Lumpkin and Dess, (1997).

Therefore:

Hypothesis 3. Proactiveness and competitive aggressiveness are differentially related to performance within the industry was proven to be correct.

**Risk taking**

Entrepreneurial organisational behaviour is characterised by moderate or calculated risk takers (Morris, 1998). Hypothesis 4 posited that entrepreneurial firms would be identified as calculated risk takers and the dimension will have a positive effect on firm performance.

The quantitative analysis found risk taking had the weakest impact on firm performance. Respondents generally considered themselves as risk adverse and felt that bold acts had negative effects on firm performance. However, qualitative analysis found that respondents often undertook calculated risk decisions when developing business. These risks, planned and moderated, were considered positive actions in regards to performance. This contradiction appeared more to do with respondents’ cultural attitudes rather than the reality of their actions.

Therefore:

Hypothesis 4. Entrepreneurial firms will be identified as calculated risk takers and this dimension will have a positive effect on firm performance did not appear to be supported by the statistical findings of this study but was in the interview stage.

**Autonomy**

Autonomy was perceived by the respondents to be the most important dimension in improving performance; however, there was no significant statistical support for this position. Respondents suggested autonomy in decision-making was encouraged throughout their organisations and that a democratic leadership style was practiced. The research found that, in some cases, upper management controls on large financial decisions, and organisational size restricted autonomy. It was also found that both autocratic and democratic elements of autonomy were displayed in the Australian wine industry. Overall, it was difficult to assess the value of this dimension in terms of contributing to business success.

Therefore:

Hypothesis 5. Companies within the Australian wine industry practice a high level of autonomy and this has a positive impact on firm performance was proven correct, with some reservations.

**CONCLUSION**

The key finding of this study was that all five EO dimensions had an impact on performance in the Australian wine industry to a greater or lesser extent.

Autonomy in decision-making was regarded by respondents as the most important dimension in improving performance. However, there was difficulty in assessing the value of this construct in terms of contributing to business success when comparing perception with the statistical analysis.

Innovation was fundamental in terms of improving firm performance as hypothesised in this study. Knowing the customer base and having access to research and development were important contributors to enhancing a firm’s innovative capacity in the Australian wine industry.
Proactiveness also appeared to be an important dimension. Differentiation particularly through brand, identifying new opportunities and improving efficiency through cost-reducing strategies were all part of being proactive.

Competitive aggressiveness appeared not to be overly common within this industry. Competition was intense industry wide however at a regional level it appeared to be more collaborative.

Risk taking had the lowest impact on firm performance. Respondents considered themselves to be risk adverse yet qualitative analysis did find that calculated risk taking was common.

The limitations in this research included the limited sample, only from Victoria, and the number of small scale firms compared to larger firms who responded to the mail survey.

Further avenues for research include the consideration of other influences on business performance such as quality and productivity and their relationship to the EO dimensions. While the EO construct appears to be valuable tool in studying business performance and entrepreneurial activity it is also possible that a dimension involving relationships and collaboration could be explored, especially in the Australian wine industry.
REFERENCES


