The effects of entrepreneurial orientation, market orientation, and marketing subunit influence on firm performance

Omar Merlo · Seigvoung Auh

Published online: 25 March 2009

© Springer Science + Business Media, LLC 2009

Abstract The study investigates how an organization's entrepreneurial orientation moderates the interplay between market orientation and marketing subunit influence on firm performance. The hypothesized model predicts that the positive interaction between market orientation and marketing subunit influence has a weaker effect on firm performance under conditions of high entrepreneurial orientation. The regression and supplementary analyses provide support for most predictions and, most importantly, for a negative three-way interaction effect: At higher levels of entrepreneurial orientation, the positive moderating effect of marketing subunit influence on the market orientation—business performance relationship is reduced. The authors discuss the managerial and theoretical implications of their findings and provide a number of directions for further research.

Keywords Marketing influence · Entrepreneurial orientation · Market orientation · Marketing department · Marketing organization · Business performance

Over the past few decades, we have witnessed a change in perspective in studies concerned with marketing's influence, away from considering marketing's role as an organizational function or department and more towards viewing it as a set of values or culture (Webster et al. 2005). Testament to this shift in perspective is the large body of empirical literature focusing on the link between market orientation and business performance, generally supporting the performance benefits that may be gained from being market oriented (see Langerak 2003; Kirca et al. 2005 for a

O. Merlo (🖂)

Judge Business School, University of Cambridge, Trumpington Street, Cambridge CB21AG, UK

e-mail: o.merlo@jbs.cam.ac.uk

S. Auh

Thunderbird School of Global Management, 1 Global Place, Glendale, AZ 85306-6000, USA e-mail: seigyoungauh@gmail.com



review). Recently, scholars have also started to focus on the interplay between marketing as an orientation and marketing as a department. Notably, Moorman and Rust (1999) suggest that the two are not mutually exclusive means through which marketing exercises influence within organizations, but rather, while a market orientation is certainly important, an influential marketing department can also play a number of key roles that contribute to business performance.

Yet, while the marketing literature has argued that marketing can exercise influence within the firm in at least two fundamentally different ways—as an orientation or as a distinct function—the interplay between these two dimensions, and the resulting impact on performance, have hitherto been largely neglected. Workman et al. (1998), for example, are concerned that relevant studies tend to be descriptive rather than normative in nature and do not focus on the performance implications of how marketing is organized within the firm. One notable exception is the recent study by Verhoef and Leeflang (2009) which concludes that marketing departments should strive to retain their influence, particularly under conditions of low market orientation.

Another body of literature that has developed parallel to the market orientation literature, and in some cases intersected it (e.g., Matsuno et al. 2002), concerns the entrepreneurial orientation of a business or the extent to which a firm relies on entrepreneurial management processes. This literature has shown that an entrepreneurial proclivity is associated with improved business outcomes (e.g., Barringer and Bluedorn 1999; Lumpkin and Dess 1996). Of particular interest to marketing researchers has been the interplay between an entrepreneurial orientation and a market orientation. Some observers have hinted to incompatibilities between the two constructs (Christensen 1997), while others have argued that they are mutually beneficial (Matsuno et al. 2002). Hence, calls have been made for further studies that examine the effects of market orientation and entrepreneurial orientation together (e.g., Atuahene-Gima and Ko 2001; Hamel and Prahalad 1994; Matsuno et al. 2002; Slater and Narver 1995). Furthermore, the role of the marketing function in an entrepreneurially orientated firm is also of significant research interest because the key tasks of marketing departments include focusing on the market, generating new creative insights, and identifying new opportunities and sources of innovation (e.g., Moorman and Rust 1999). Hence, the interactions between market orientation, marketing subunit influence, and the entrepreneurial profile of a firm, as well as their resulting impact on business performance, are key research issues in need of further study. However, most studies have looked at the performance outcomes of these constructs either in isolation or, in rarer circumstances, in pairs.

In order to fill this research gap, and to respond to calls for further research into the potential moderating variables of the relationships among marketing subunit influence, market orientation, and business performance (Verhoef and Leeflang 2009), we address how the entrepreneurial orientation of the firm moderates the interplay between market orientation and marketing subunit influence on firm performance. In other words, our model examines a three-way interaction effect between market orientation, marketing subunit influence, and entrepreneurial orientation on performance by investigating how high and low levels of entrepreneurial orientation affect the interaction between market orientation and marketing subunit influence on performance.



1 Theoretical background

Separate literatures examine marketing's impact on business performance. First, there is research that assesses the impact of marketing as an organizational philosophy or culture on performance, confirming the positive outcomes of the adoption of market-oriented approaches (e.g., Day 1994; Jaworski and Kohli 1993; Slater and Narver 2000). A second stream of research analyzes the influence of the marketing department vis-à-vis other functional areas. Homburg et al. (1999) conclude that an influential marketing department is desirable for performance and that activities designed to increase such influence should be encouraged. They define marketing's influence as "the exercised power of the marketing subunit within a business unit, relative to other subunits, over activities important to the success of the business unit" (p. 2), a definition which we also adopt.

Although the extant literature has tended to separate the two approaches to studying marketing's role and influence within the firm, more recently, the two perspectives have also been integrated. Verhoef and Leeflang (2009) highlight a connection between marketing's influence within the firm and a market orientation, which is beneficial to firm performance. Similarly, Moorman and Rust (1999) argue that marketing subunits contribute to financial performance, customer relationship performance, and new product performance beyond the contribution of an organization-wide market orientation.

We posit that strategic considerations determine the performance outcomes of different configurations of market orientation and marketing influence. One of such strategic considerations is the level of entrepreneurial orientation. We define entrepreneurial orientation as the "organization's predisposition to accept entrepreneurial processes, practices, and decision making, characterized by its preference for innovativeness, risk taking, and proactiveness" (Matsuno et al. 2002, p. 19). Miller (1983) was among the first to suggest that entrepreneurial firms display three dimensions of innovativeness, risk taking, and proactiveness. Many subsequent characterizations of entrepreneurial orientation have employed this view (e.g., Barringer and Bluedorn 1999; Morris and Paul 1987; Naman and Slevin 1993). Innovativeness reflects the tendency of a firm to engage in, and support, new ideas and creative processes which may result in new products, services, or processes (Lumpkin and Dess 1996). Risk taking refers to the willingness of management to make large and risky resource commitments and hence face potentially costly failures (Miller and Friesen 1982). Proactiveness is about seeking new opportunities (Venkatraman 1989) and aiming to be leaders rather than followers due to a desire to seize new opportunities (Lumpkin and Dess 1996) and shape the environment (Miller and Friesen 1982).

¹ Some of the topics discussed within this stream of research include the impact of changes in organizational forms on the role of the marketing function (e.g., Day 1997; Webster 1997), the level and determinants of the marketing department's influence (e.g., Homburg et al. 1999), how the organization and role of marketing varies across business contexts (e.g., Workman et al. 1998), and the role and performance outcomes of the marketing function alongside and beyond a strong market orientation (Moorman and Rust 1999).



2 Research hypotheses

Our model (depicted in Fig. 1) posits that there is a positive interaction effect between market orientation and marketing subunit influence. It also hypothesizes a negative three-way interaction effect, whereby when entrepreneurial orientation is high, the positive interaction between market orientation and marketing subunit influence has a weaker effect on performance. We explain our rationale below.

2.1 Market orientation and performance

The arguments in support of a positive relationship between market orientation and business performance are well documented in the marketing literature (see Langerak 2003). The positive outcomes of being market-oriented include firm consequences, customer consequences, innovation consequences, and employee consequences (Jaworski and Kohli 1996). The marketing strategy literature has also shown that a market orientation provides firms with market-sensing and customer-linking capabilities that lead to superior business performance (Day 1994). A meta-analytical study by Kirca et al. (2005) aggregates empirical findings from the extensive market orientation literature, concluding that market orientation has a positive impact on organizational performance. This finding is consistent with several seminal studies in the market orientation literature (e.g., Jaworski and Kohli 1993; Narver and Slater 1990). Hence, we predict that:

 H_1 : The higher the level of market orientation, the stronger the business performance.

2.2 Two-way interaction: Market orientation and marketing subunit influence

The marketing literature provides numerous theoretical reasons for a positive interaction between marketing subunit influence and a market orientation. First, a marketing department may be the "keeper of the faith" of a market orientation (Achrol and Kotler 1999, p. 150). The more the marketing subunit is able to influence other actors and functions, the more the firm can expect to reap the benefits of a market orientation. Second, the contemporary tendency of organizations

Fig. 1 Conceptual model

Marketing Subunit Influence

H₂:+

Market

Orientation

H₁:+

Business

Performance



to prioritize customers has caused even non-marketing subunits to learn more about managing the market, and people throughout the firm have become more marketing-minded (Greyser 1997). This marketing-mindedness may translate into more positive views of everything that is "marketing" and, hence, also marketing professionals. With such a captive audience, the marketing function may be in a better position to provide guidance on how to listen to and serve the market and, hence, create value for both the customer and the firm. Third, there may be performance benefits associated with having functional structures alongside a strong market orientation, such as enhanced efficiency, the development of specialized capabilities, growth, and innovation (Moorman and Rust 1999). Fourth, effective marketing execution requires the coordination and integration of all marketing instruments, the management of customer connections and knowledge, and the existence of an influential customer advocate (Verhoef and Leeflang 2009).

Thus, a strong marketing department can be important to ensure that the positive performance effects of market orientation processes eventuate. Indeed, some empirical support exists for the view that to be profitable, businesses must complement a strong market orientation with an influential marketing department (Moorman and Rust 1999). In the marketing literature, there is also some evidence of a positive interaction between market orientation and marketing subunit influence. For example, Verhoef and Leeflang (2009) report this correlation to be 0.30, while Moorman and Rust (1999) find marketing influence to be significantly correlated to each of six components of market orientation, with correlations ranging from 0.183 to 0.345.

Based on the above considerations, we make the following prediction:

 H_2 : The higher the level of marketing subunit influence, the stronger the positive effect of market orientation on performance.

2.3 Three-way interaction: Market orientation, subunit influence, and entrepreneurial orientation

Firms characterized by a high degree of entrepreneurial orientation tend to explore new markets and anticipate needs. The approach that these organizations take to innovation is experimental; they try to maximize the opportunities to uncover the random discoveries that occur when all firm members play an active role. Under such conditions, an influential marketing subunit may not be particularly beneficial to business performance, while a dispersion of marketing knowledge and skills may be desirable (see Workman et al. 1998). Although marketing departments can still play an important role (e.g., at the tactical level), a high degree of functional influence may not be required because entrepreneurial firms are in a better position to maximize the performance benefits of market orientation if they share information about customers and disperse marketing activities across subunits rather than concentrating on the responsibility for marketing activities within a group of specialists. The integrated knowledge and skills associated with a dispersion of marketing activities may be crucial in entrepreneurial firms, as they can lead to improved communication and information sharing (see Moorman and Rust 1999). In contrast, strong functional orientations may reduce information sharing (Fisher et al. 1997).



The very concept of entrepreneurship requires some autonomy and freedom to foster creativity and the discovery of new ideas (Lumpkin and Dess 1996). Matsuno et al. (2002, p. 20) argue that autonomy refers to "action taken free of structural constraints that stifle risk taking, exploration, and out-of-the-box thinking." High levels of departmentalization, formalization, and centralization are largely inconsistent with an entrepreneurial orientation (Matsuno et al. 2002). This suggests that for an entrepreneurially oriented organization to reap the positive performance effects of a market orientation, the role and influence of an individual function such as the marketing department should be diluted. Responsibility for many marketing tasks, such as exploring new opportunities and anticipating customer needs, may be less centralized, and every organizational function and actor is encouraged to contribute.

In contrast, in firms with low levels of entrepreneurial orientation, innovation tends to be more incremental and the focus is on responding to existing needs better than the competition. To be good performers, these firms may need to make incremental decisions and follow established patterns of behavior derived from experience and repeat interaction (see Schumpeter 1934). In these "routine-oriented" firms, marketing creates value by meeting customers' expressed needs rather than latent needs. Marketing's contribution to performance may be primarily through centralized market research, a focus on defending and extending current sources of cash flow, and some incremental innovation. Thus, firms with low levels of entrepreneurial orientation may need to concentrate a large share of marketing activities within a group of specialists responsible for incremental market research and the application of routines to deal with market-related issues. In organizations where the focus is more on established routines rather than on being entrepreneurial, performance may be improved by letting the marketing function foster a market orientation and solve market-related problems (Moorman and Rust 1999).

Therefore, based on the preceding arguments, we predict the following:

 H_3 : The positive moderating effect of marketing subunit influence on the market orientation-performance relationship will be weaker at high (vs. low) levels of entrepreneurial orientation.

3 Method

3.1 Sample and data collection

The sample frame comes from an Australian mailing list consisting of a random selection of 600 contacts in medium and large organizations (50 employees or more) in a variety of manufacturing industries.² The sampled industries include food and

² The manufacturing sector was chosen primarily for two reasons. First, because it was sampled in similar studies of marketing's influence (e.g., Homburg et al. 1999). Second, because manufacturing firms represent a good test case: such firms are more likely to have a stronger production orientation, and thus, their principal concern may be with production-related activities rather than marketing (Keith 1960). The assumption is that if marketing is influential in organizations expected to have a strong product orientation, it may be even more influential in the services industries.



kindred products (12.9%), chemicals and allied products (11%), fabricated metal products (9.7%), industrial machinery and computer equipment (9.7%), electronic and other electrical equipment (7.3%), printing and publishing industries (6.4%), miscellaneous rubber and plastics products (6%), and others. The unit of analysis was the strategic business unit (SBU), and data were collected employing a selfadministered field survey questionnaire distributed by mail. A key informant methodology was employed (Seidler 1974), requiring one respondent from each SBU. Potential information bias and random error problems (Kumar et al. 1993) were minimized in a number of ways. First, respondents come from a uniform managerial level. Given the focus of the study, the most appropriate key informants were organizational members who could provide retrospective data on the input and performance of members of different subunits. Because participants in a decisionmaking process tend to overstate their own influence (Atuahene-Gima and Evangelista 2000; Yukl et al. 1996), key informants were senior managers (Managing Directors, CEOs, and people in equivalent positions) to whom staff from different areas within a business unit report.³ Second, the questionnaire contained a confidence item asking respondents to assess the extent to which they believed their knowledge and expertise had allowed them to complete the survey confidently. This was measured using a seven-point Likert scale, with response anchors "not at all confident" and "extremely confident." All surveys with a confidence score of 3 or less were eliminated (16 surveys in total), and the final mean of the confidence measure was 6.05.

To minimize the intrinsic limitations of self-administered questionnaires, a number of further steps were taken. First, the questionnaire was limited to three pages. Second, prior to the mailing of the survey, all key informants were contacted by mail and then by telephone to encourage participation and to ensure that the questionnaire was not forwarded to someone else. Finally, an extensive drafting process and two pretests were undertaken. These refinements led to a more accurate and reliable mailing list and reduced the sample frame from 600 to 535 contacts. The final sample consisted of 112 usable questionnaires, for a response rate of 21%. Absence of non-response bias was confirmed by comparing early and late respondents on each variable using a t test (Armstrong and Overton 1977).

Initial findings revealed the following demographic characteristics of the data: (1) The average size of the SBU was 514 full-time employees; (2) the average size of the entire firm was 4,244 full-time employees; (3) CEOs possessed diverse functional backgrounds in areas such as marketing (13.4%), finance/accounting (12.6%), sales (15.7%), operations (23.6%), production/manufacturing (25.2%), human resource (0.8%), and others (8.7%).

4 Measures

All the measures employed were adopted from existing scales. *Marketing subunit influence* was operationalized following the lead of Homburg et al. (1999) by

³ Specific job titles included Managing Director (67.1%), Chief Executive Officer (15.3%), General Manager (8.4%), Director (4.9%), and others.



multiplying the importance score given to each of 11 strategic factors⁴ by the influence scores allocated to marketing on each of the 11 dimensions. The result was then divided by the number of areas for which answers were provided to correct for missing data. This final number reflects the extent to which marketing has influence on decisions that are important for the success of the business unit. Market orientation was measured based on Narver and Slater (1990). The magnitude of a firm's market orientation was the average of its score on the three dimensions: customer orientation, competitor orientation, and interfunctional coordination (Slater and Narver 1994). Entrepreneurial orientation was adopted from Matsuno et al (2002) and Miller (1983). The degree of entrepreneurial orientation was the average of a firm's score on the three dimensions of innovativeness, risk-taking, and proactiveness. SBU performance was measured with five items ranging from cash flow, sales volume, market share, and revenue to profitability. Respondents were asked to rate their SBU performance compared to their direct competitor (1-much worse; 7—much better). Several studies show that managerial evaluations of financial and market performance ratings (subjective performance measures) are consistent with objective performance measures (e.g., Menon et al. 1999; Naman and Slevin 1993). Firm size was operationalized as the log of the number of employees, while CEO functional background was coded as 1 for marketing and 0 for all others.

5 Analysis and results

5.1 Measures assessment

We conducted confirmatory factor analysis (CFA) to assess the psychometric properties of the multi-item scales employed in this study. The CFA provided an acceptable fit to the data [$\chi^2(303)=667.43$, p<0.001, TLI=0.88, CFI=0.90; PNFI=0.72; RMSEA=0.09]. All factor loadings were found to be statistically significant (Gerbing and Anderson 1988) and the average variance extracted (AVE) values were higher than 0.50, supportive of convergent validity (Bagozzi and Yi 1988; Naman and Slevin 1993). Further, using the most stringent test of discriminant validity, the square of the intercorrelation between two constructs was less than the AVE estimates of the two constructs for all pairs of constructs (Fornell and Larker 1981), supporting discriminant validity.

Although the threat of common method variance is limited in this study due to the likely inability of respondents to guess the hypothesized two and three-way interactions and provide responses accordingly (Aiken and West 1991; Evans 1985), we confirmed the absence of common method bias by comparing a single-factor model to the seven-factor measurement model. As expected, the CFA for the single-factor model revealed a poor fit to data $[\chi^2_{(324)}=1,688.83, \text{TLI}=0.59, \text{CFI}=$

⁴ The 11 items were: decisions on pricing, distribution, major capital expenditures, strategic direction of business, advertising, expansion into new geographic markets, programs for measuring customer satisfaction, programs for improving customer satisfaction, design of customer service and support, choices of strategic business partners, and NPD.



Variables	1	2	3	4	5	6
1. Firm size (log)	1.00					
2. CEO functional background	-0.129	1.00				
3. Market orientation	-0.190*	0.111	1.00			
4. Marketing subunit influence	0.008	0.277**	0.041	1.00		
5. Entrepreneurial orientation	-0.074	0.111	0.347**	0.146	1.00	
6. Firm performance	0.185*	0.020	0.235**	0.071	0.186*	1.00
Mean	5.106	0.134	5.047	257.909	4.378	4.908
Median	5.016	0.000	5.117	247.955	4.429	5.000
Range	7.600	1.000	4.350	483.640	4.290	6.000
SD	1.459	0.342	0.743	110.229	0.689	1.328

Table 1 Correlations and descriptive statistics

0.62, PNFI=0.53, RMSEA=0.18], suggesting that common method bias was not a likely threat. In Table 1, we report the descriptive statistics of the key constructs. Furthermore, using only key informants at the senior managerial level with high levels of confidence in their responses is consistent with the guidelines to reduce common method bias provided by Rindfleisch et al. (2008).

5.2 Hypothesis testing

For hypothesis testing purposes, we performed a median split on market orientation, entrepreneurial orientation, and marketing subunit influence in order to create two groups (low vs. high). We used these dichotomous variables as independent variables in the regression model, which we explain next. There was no evidence of multicollinearity, as the variance inflation factor for each regression coefficient was less than the recommended threshold of 10 (Neter et al. 1985).

We used the following regression model with the independent variables dummy coded (0=low, 1=high) along with the two-way and three-way interaction terms.⁵ We also included firm size (log of number of employees) and CEO functional background as control variables.

Business Performance =
$$b_1X_1 + b_2X_2 + b_3X_3 + b_4X_1X_2 + b_5X_1X_3 + b_6X_2X_3$$
 (1)
+ $b_7X_1X_2X_3 + \text{control variables} + \varepsilon_1$

where X_1 =market orientation, X_2 =marketing subunit influence, X_3 =entrepreneurial orientation.

We expect $b_1>0$, $b_4>0$, and $b_7<0$, consistent with H_1 , H_2 , and H_3 respectively. Table 2 shows the estimated regression coefficients and associated t statistics. It is

⁵ We also tested our hypotheses using analysis of variance: 2 (Market orientation: low vs. high)×2 (marketing subunit influence: low vs. high)×2 (entrepreneurial orientation: low vs. high). Results suggest a three-way interaction between market orientation, marketing subunit influence, and entrepreneurial orientation [F(1,104)=5.09, p<0.05], consistent with the regression results.



^{*}p < 0.05; ** p < 0.01 (two-tailed test)

Table 2	Regression	results	(dependent	variable:	Firm	performance)	
---------	------------	---------	------------	-----------	------	--------------	--

	B	t value
Constant	3.700	6.625**
Controls		
Firm size (log)	0.202	2.410*
CEO background (marketing = 1, others = 0)	-0.047	-0.139
Main effects		
Market orientation (MO) (H ₁)	0.128	0.283
Marketing subunit influence (MSI)	0.760	1.720
Entrepreneurial orientation (EO)	0.219	0.449
Two-way interactions		
$MO \times MSI (H_2)$	1.709	2.449*
$MO \times EO$	0.690	1.035
$MSI \times EO$	0.921	1.368
Three-way interaction		
$MO \times MSI \times EO (H_3)$	-2.278	-2.306*
R^2	0.17	
Adjusted R ²	0.10	
F	2.355*	

Unstandardized coefficients

noteworthy that for model specification purposes, we included the other two-way interaction terms (X_1X_3) and X_2X_3 , although they are not part of the hypotheses (Aiken and West 1991).

Contrary to H_1 , the results indicate a non-significant effect of market orientation on business performance. In support of H_2 , the interaction between market orientation and marketing subunit influence is positive and significant (b_4 =1.709, p<0.05). Regarding H_3 , we expected a negative three-way interaction effect, whereby at high levels of entrepreneurial orientation, the positive interaction between market orientation and marketing subunit influence should have a weaker effect on business performance. Table 2 confirms our predictions, as the three-way interaction is negative and significant (b_7 =-2.278, p<0.05). As for the control variables, firm size is positive and significant, indicating that larger firms have higher business performance. CEO functional background (whether the CEO has a marketing background or not) has no direct effect on business performance.

6 Supplementary analysis

Drawing on the work of Schoonhoven (1981), and more recently Wathne and Heide (2004) in marketing, we more formally present the three-way interaction effect by graphing the partial derivative of Eq. 1. We accomplish this by taking the second



^{*}p < 0.05, **p < 0.01 (two-tailed test)

derivative of Eq. 1 with respect to market orientation (MO; X_1) and then marketing subunit influence (X_2). We are then left with the following equation:

(d Business Performance/d Market Orientation)

 \times (1/d Marketing Subunit Influence)

$$= 1.709 - 2.278 \times (Entrepreneurial Orientation).$$
 (2)

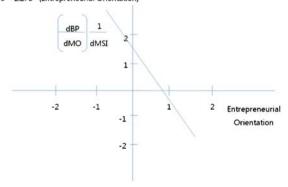
The result of Eq. 2 is graphically depicted in Fig. 2. The figure shows that as EO increases from low to high, the slope is downward sloping, which is consistent with $\rm H_3$ in that the positive moderating effect of marketing subunit influence on the market orientation—business performance relationship, captured by (d Business Performance/d Market Orientation) \times (1/d Marketing Subunit Influence), diminishes.

7 Discussion and implications

An interesting finding of the study is the non-significant effect of market orientation on business performance. Although a large body of literature has supported a positive relationship between the two variables, a null relationship is not entirely novel. For example, Diamantopoulos and Hart (1993) found no significant relationship, and Greenley (1995) and Jaworski and Kohli (1993) observed mixed results. Also, some differences have been observed in the link between market orientation and performance across cultures (Kirca et al. 2005). We can compare our findings to an Australian study by Pulendran et al. (2000) that replicates Jaworski and Kohli's (1993) study. While those authors discuss some evidence indicating that the relationship between market orientation and performance may not be as applicable in Australia as in the USA, they do find a positive relationship between the two in Australian firms. However, the discrepancies in our findings may be explained by the fact that while we employed Narver and Slater's (1990) conceptualization of market orientation, which is a cultural view, Pulendran et al.

Fig. 2 The impact of entrepreneurial orientation on the effect that marketing subunit influence has on the market orientation—business performance relationship

(d Business Performance/d Market Orientation)* (1/d Marketing Subunit Influence) = 1.709 - 2.278* (Entrepreneurial Orientation)



Note: BP: Business Performance; MO: Market Orientation; MSI: Marketing Subunit Influence



(2000) relied on a behavioral perspective (Kohli et al. 1993). It is plausible that Australian firms display the behavioral traits of a market-oriented organization without having yet truly embedded a market orientation culture in their organization.

Perhaps more interestingly, and to reconcile the ambiguous empirical findings regarding the market orientation—performance link, our positive two-way interaction between market orientation and marketing subunit influence on performance seems to indicate that market orientation alone may not be enough. Instead, a market orientation may also need to be complemented with a strong marketing subunit influence to reap its fruits. The significant two-way interaction effect between market orientation and marketing subunit influence on firm performance also echoes previous findings that an influential marketing department can still contribute to business performance (Moorman and Rust 1999).⁶

Firms with lower levels of entrepreneurial orientation seem to benefit from the specialized knowledge and skills that come with an influential marketing subunit. These firms may need to rely to a larger extent on a very senior marketing manager and a strong marketing department who can exercise a high level of influence. In these firms, there may be a need to centralize around the marketing subunit to capitalize on the market orientation—performance link, and reliance on some key marketing players may be desirable. Initiatives aimed at improving the marketing subunit's ability to deal effectively with uncertainty in the external environment should be supported. These include activities that would improve the collection of market information, the capacity to deal with this information effectively and in a timely manner, and the ability to share this information successfully with other functions.

In contrast, highly entrepreneurially oriented firms may have less of a need for an influential marketing function. In these firms, it may be desirable to have representatives from all departments involved in market-related decision making, and a flat organization may be preferred. Boundary spanning employees and social networks are important sources of innovation, and formal and informal channels are desirable through which to communicate the market orientation culture of the firm.

When entrepreneurial orientation is high, performance levels are similar between firms with high or low marketing subunit influence. This may indicate that an influential marketing subunit makes no tangible difference, performance-wise, alongside a strong entrepreneurial orientation. This explanation is supported by concerns expressed in the literature regarding the marketing function's inability to act as a source of imaginative ideas. For decades, marketing professionals have been criticized by senior managers for being unable to design innovative strategies, for being unimaginative, and for relying on traditional means of competing (Webster 1981; Webster et al. 2005). Kotler (1999) notes that CEOs are disappointed with the marketing function, as it often fails to develop effective marketing mixes and is relegated to clearing up the mess "through harder selling and advertising" (Kotler

⁶ However, it should also be noted that while Moorman and Rust (1999) found a direct positive effect of marketing influence on performance (with correlations ranging from 0.221 to 0.281), Verhoef and Leeflang (2009) did not (r=0.09). As the latter authors suggest, more research is required to further elucidate the presence or otherwise of this link.



2004, p. 14). What our findings suggest is that to some extent, in an entrepreneurially oriented firm, members of the marketing department are probably not the sources of those innovative and daring ideas that lie at the heart of entrepreneurship.

We also classified the firms into four groups by conducting a cross-tabulation between low and high market-oriented firms vs. low and high marketing subunit influence firms. Table 3 summarizes our findings. The results shed light on some general characteristics of the different groups of firms.

First, CEO background was more likely to be from marketing in firms with highly influential marketing departments. Production and operations were the dominant backgrounds of CEOs in firms with "weaker" marketing departments. However, this pattern was different between low MO and high MO firms such that in highly market-oriented organizations, although the marketing subunit may be weak, the CEO background was still more likely to be from marketing. This confirms our underlying assumption that marketing's influence has at least two different aspects, a cultural and a functional aspect, and suggests that each can be associated with specific structural and strategic elements. It also suggests that in a way, a CEO with a marketing background may substitute for a low-influence marketing subunit. The question of course remains as to whether it is a CEO with a functional background in marketing that has an impact on the degree of market orientation and marketing subunit influence or vice versa. Also notable is the fact that firms within the low market orientation/low marketing subunit influence quadrant do not tend to have CEOs with a marketing background and tend to perform relatively poorly.

Second, we also found that in high MO/low subunit influence firms, the CEO is more likely to be from a marketing background when entrepreneurial orientation is high and that this is associated with very strong business performance. This may suggest that firms that are both market and entrepreneurially oriented tend to deal with the lack of an influential marketing department by relying on a CEO from a marketing background. Hence, while these businesses benefit from the dilution of marketing activities across the firm, they also still rely on the functional role of

		Low MSI	High MSI
Low MO	N	22 ^a /9 ^b (27%)	13/16 (26%)
	Business performance	4.87/5.07	3.91/5.13
	CEO with marketing background	1/0	2/4

3,472/22,670

12/20 (28%)

4.52/5.38

1.107/255

1/5

Table 3 Cross-tabulation between market orientation and marketing subunit influence

N

High MO

Firm size (employees)

Business performance

Firm size (employees)

CEO with marketing background



13,925/2,263

9/12 (19%)

5.42/5.08

523/1,012

3/1

^a Value under low entrepreneurial orientation

^b Value under high entrepreneurial orientation

marketing, but in an indirect fashion, through their reliance on the specialist marketing experience and expertise gained by their CEO. This seems to indicate that the most successful high MO/high EO firms are those that have the best of both worlds: They decentralize marketing activities across the firm to facilitate the discovery of sources of innovation, while at the same time relying on senior leadership that is very familiar with the tasks involved in managing the market.

Third, firms with low market orientation appear to be significantly larger than firms that are more market-oriented. This begs the question of whether larger manufacturing firms are ever in the position to achieve a very high level of market orientation or whether being small and nimble actually facilitates the development of a market orientation. Research that has dealt with this question has provided conflicting results on the issue. For example, Liu (1995) has found that the level of market orientation increases with firm size, while a more recent study (Laforet 2008) has found no relationship between the two. These conflicting results clearly indicate that more research is required on the issue.

Table 3 also allows for an interesting comparison between our findings regarding the performance outcomes of each type of firm and those of Verhoef and Leeflang (2009). The latter found that high MO/high marketing subunit influence firms were the top performers, followed by high MO/low influence, then low MO/high influence and low MO/low influence. Although in some cases such performance differences were small, a similar pattern is visible in our results, with the top performers being the high MO/high subunit influence firms, followed by the high MO/low influence firms, and then both of the low MO companies. In our results, the high MO/high subunit influence firms particularly stand out performance-wise from the rest of the pack, while lesser differences exist among the other three types of firms. This finding suggests perhaps that combining a market orientation and strong subunit influence may be more desirable than substituting the two. This is because a strong market orientation and an influential marketing function are not only compatible, but in combination, they are beneficial to firm performance. Thus, the current trend for marketing as a function to decline while marketing as a philosophy and orientation becomes increasingly more important (e.g., Day 1997; Webster et al. 2005; Wind 1996) should be monitored with caution. While it is perhaps true, as Drucker (1954) famously noted, that marketing is too important to be left to marketing people alone, it is also true that marketing should also not be taken away completely from marketing people.

Incidentally, this perspective may also explain the lack of a significant correlation between market orientation and marketing influence (0.041). It is plausible that in firms where marketing activities are diluted throughout the organization and where market orientation is at its highest, the marketing subunit is treated as having no purpose and no significant influence, which in turn leads to its downsizing and loss of resources. Nevertheless, given the multifaceted role of marketing within the firm, as Webster et al. (2005) observe, one should keep in mind that marketing influence does not necessarily have to be synonymous with a large marketing department.

Our study naturally has a number of limitations. First, the general applicability of our results is limited by the use of respondents from manufacturing industries, which does have a number of benefits but also represents a potential limitation. Second, the



use of key informants has intrinsic limitations, so future studies might consider employing multiple informants. Nevertheless, as Rindfleisch et al. (2008) observe, obtaining multiple informants may not always be feasible and the use of single key informants can still produce valid results when the key informants are highly involved and knowledgeable, which was the case in our study. Third, we would encourage the use of a longitudinal approach to uncover the dynamics behind our findings. Although a longitudinal design might be a superior option, Rindfleisch et al. (2008) again provide some comfort by asserting that domains that are well built and developed from a theoretical foundation perspective (e.g., market orientation, entrepreneurial orientation, etc.) are less likely to be affected by using cross-sectional survey designs.

In conclusion, while there is evidence that individually a market orientation, departmental influence, and entrepreneurial orientation are beneficial to business performance, the marketing literature has only started to scratch the surface with regard to the interactions among these critical factors. Our study represents a step forward in understanding the dynamics of marketing's influence from an integrative perspective (which captures the essence of marketing' influence both as an orientation and as a distinct function) and by elevating our understanding of these dynamics to a contingency level. There are clearly different performance outcomes depending on whether businesses rely on a strong market orientation and/or an influential marketing function, and these outcomes tend to vary according to a firm's entrepreneurial profile. The good news is that while the cross-functional dispersion of marketing activities may be a current trend, marketing subunits should continue to play a key role within organizations, particularly in those with low levels of entrepreneurial orientation. At the same time, the challenge remains perhaps for marketing departments in highly entrepreneurial firms to demonstrate and strengthen their role as the key providers of those bold and novel ideas that are central to an entrepreneurial orientation.

References

- Achrol, R. S., & Kotler, P. (1999). Marketing in the network economy. *Journal of Marketing*, 63(Special Issue), 146–163. doi:10.2307/1252108.
- Aiken, L. S., & West, S. G. (1991). Multiple regression: Testing and interpreting interactions. Newbury Park, CA: Sage.
- Armstrong, J. S., & Overton, T. S. (1977). *Estimating non-response bias in mail surveys. *JMR*, *Journal of Marketing Research*, *XIV*, 396–402. doi:10.2307/3150783.
- Atuahene-Gima, K., & Evangelista, F. (2000). Cross-functional influence in new product development: An exploratory study of marketing and R&D perspectives. *Management Science*, 46(10), 1269–1284. doi:10.1287/mnsc.46.10.1269.12273.
- Atuahene-Gima, K., & Ko, A. (2001). An empirical investigation of the effect of market orientation and entrepreneurship orientation alignment on product innovation. *Organization Science*, 12(1), 54–74. doi:10.1287/orsc.12.1.54.10121.
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(Spring), 74–94. doi:10.1007/BF02723327.
- Barringer, B. R., & Bluedorn, A. C. (1999). The relationship between corporate entrepreneurship and strategic management. *Strategic Management Journal*, 20(5), 421–424. doi:10.1002/(SICI)1097-0266 (199905)20:5<421::AID-SMJ30>3.0.CO;2-O.
- Christensen, C. M. (1997). The innovator's dilemma. Boston, MA: Harvard Business School Press.



- Day, G. S. (1997). Aligning the organization to the market. In D. R. Lehmann, & K. E. Jocz (Eds.), Reflections on the futures of marketing. Cambridge, MA: Marketing Science Institute.
- Day, G. S. (1994). The capabilities of market-driven organizations. *Journal of Marketing*, 58(4), 37–53. doi:10.2307/1251915.
- Diamantopoulos, A., & Hart, S. (1993). Linking market orientation and performance: preliminary evidence on Kohli and Jaworski's framework. *Journal of Strategic Marketing*, 1, 93–121. doi:10.1080/09652549300000007.
- Drucker, P. F. (1954). The practice of management. New York: Harper & Row.
- Evans, M. G. (1985). A Monte Carlo study of the effects on correlated method variance in moderated multiple regression analysis. *Organizational Behavior and Human Decision Processes*, 13, 305–323. doi:10.1016/0749-5978(85)90002-0.
- Fisher, R. J., Maltz, E., & Jaworski, B. J. (1997). Enhancing communication between marketing and engineering: The moderating role of relative functional identification. *Journal of Marketing*, 61, 54–70.
- Fornell, C., & Larker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *JMR*, *Journal of Marketing Research*, *18*(February), 39–50. doi:10.2307/3151312.
- Gerbing, D. W., & Anderson, J. C. (1988). An updated paradigm for scale development incorporating unidimensionality and its assessment. *JMR*, *Journal of Marketing Research*, 25, 186–192. doi:10.2307/ 3172650.
- Greenley, G. (1995). Market orientation and company performance: Empirical evidence from UK companies. *British Journal of Management*, 6, 1–13. doi:10.1111/j.1467-8551.1995.tb00082.x.
- Greyser, S. A. (1997). Janus and marketing: The past, present, and prospective future of marketing. In D. R. Lehmann, & K. E. Jocz (Eds.), *Reflections on the futures of marketing*. Cambridge, MA: Marketing Science Institute.
- Hamel, G., & Prahalad, C. K. (1994). Competing for the future. Boston, MA: Harvard Business School Press. Homburg, C., Workman Jr., J. P., & Harley, K. (1999). Marketing's influence within the firm. Journal of Marketing, 63, 1–17. doi:10.2307/1251942.
- Jaworski, B. J., & Kohli, A. K. (1993). Market oientation: Antecedents and consequences. *Journal of Marketing*, 57(July), 53–70. doi:10.2307/1251854.
- Jaworski, B. J., & Kohli, A. K. (1996). Market orientation: Review, refinement, and roadmap. *Journal of Market-Focused Management*, 1(2), 119–135. doi:10.1007/BF00128686.
- Keith, R. J. (1960). The marketing revolution. *Journal of Marketing*, 24(3), 35–38. doi:10.2307/1248704.
 Kirca, A. H., Jayachandran, S., & Bearden, W. O. (2005). Market orientation: A meta-analytic review and assessment of its antecedents and impact on performance. *Journal of Marketing*, 69(April), 24–41. doi:10.1509/jmkg.69.2.24.60761.
- Kohli, A. K., Jaworski, B. J., & Kumar, A. (1993). MARKOR: A measure of market orientation. JMR, Journal of Marketing Research, 30(November), 467–477. doi:10.2307/3172691.
- Kotler, P. (1999). Kotler on marketing. How to create, win and dominate markets. New York: The Free Press. Kotler, P. (2004). Ten deadly marketing sins. Signs and solutions. Hoboken, NJ: Wiley.
- Kumar, N., Stern, L. W., & Anderson, J. C. (1993). Conducting interorganizational research using key informants. Academy of Management Journal, 36(6), 1633–1651. doi:10.2307/256824.
- Laforet, S. (2008). Size, strategic, and market orientation effects on innovation. *Journal of Business Research*, 61, 753–764. doi:10.1016/j.jbusres.2007.08.002.
- Langerak, F. (2003). The effect of market orientation on positional advantage and organizational performance. *Journal of Strategic Marketing*, 11(June), 93–115. doi:10.1080/0965254032000102957.
- Liu, H. (1995). Market orientation and firm size: An empirical examination in UK Firms. *European Journal of Marketing*, 29(1), 57–71. doi:10.1108/03090569510075343.
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. Academy of Management Review, 21(1), 135–172. doi:10.2307/258632.
- Matsuno, K., Mentzer, J. T., & Ozsomer, A. (2002). The effects of entrepreneurial proclivity and market orientation on business performance. *Journal of Marketing*, 66(3), 18–32. doi:10.1509/jmkg.66.3.18.18507.
- Menon, A., Bharadwaj, S. G., Adidam, P. T., & Edison, S. W. (1999). Antecedents and consequences of marketing strategy making: A model and a test q. *Journal of Marketing*, 63(2), 18–40. doi:10.2307/1251943.
- Miller, D. (1983). The correlates of entrepreneurship in three types of firms. *Management Science*, 29(7), 770–791. doi:10.1287/mnsc.29.7.770.
- Miller, D., & Friesen, P. H. (1982). Innovation in conservative and entrepreneurial firms: Two models of strategic momentum. *Strategic Management Journal*, 3(1), 1–25. doi:10.1002/smj.4250030102.
- Moorman, C., & Rust, R. T. (1999). The role of marketing. *Journal of Marketing*, 63(Special Issue), 180–197. doi:10.2307/1252111.



- Morris, M. H., & Paul, G. W. (1987). The relationship between entrepreneurship and marketing in established firms. *Journal of Business Venturing*, 2(3), 247–259. doi:10.1016/0883-9026(87)90012-7.
- Naman, J. L., & Slevin, D. P. (1993). Entrepreneurship and the concept of fit: A model and empirical test. Strategic Management Journal, 14, 137–153. doi:10.1002/smj.4250140205.
- Narver, J. C., & Slater, S. F. (1990). The effect of market orientation on business profitability. *Journal of Marketing*, 54(October), 20–35. doi:10.2307/1251757.
- Neter, J., Wasserman, W., & Kutner, M. H. (1985). Applied linear statistical models: Regression, analysis of variance, and experimental design. Homewood, IL: Irwin.
- Pulendran, S., Richard, S., & Widing II., R. E. (2000). The antecedents and consequences of market orientation in Australia. Australian Journal of Management, 25(2), 119–143.
- Rindfleisch, A., Malter, A. J., Ganesan, S., & Moorman, C. (2008). Cross-sectional versus longitudinal survey research: Concepts, findings, and guidelines. *JMR, Journal of Marketing Research*, 45(June), 261–279. doi:10.1509/jmkr.45.3.261.
- Schoonhoven, C. B. (1981). Problems with contingency theory: Testing assumptions hidden within the language of contingency theory. Administrative Science Quarterly, 26(September), 349–377. doi:10.2307/2392512.
- Schumpeter, J. A. (1934). The theory of economic development. An inquiry into profits, capital, credit, interest, and the business cycle. Cambridge, MA: Harvard Business Press.
- Seidler, J. (1974). On using informants: A technique for collecting quantitative data and controlling measurement error in organization analysis. *American Sociological Review*, 39(6), 816–831. doi:10.2307/2094155.
- Slater, S. F., & Narver, J. C. (1994). Does competitive environment moderate the market orientationperformance relationship. *Journal of Marketing*, 58, 46–55. doi:10.2307/1252250.
- Slater, S. F., & Narver, J. C. (1995). Market orientation and the learning organization. *Journal of Marketing*, 59(3), 63–74. doi:10.2307/1252120.
- Slater, S. F., & Narver, J. C. (2000). The positive effect of a market orientation on business profitability: A balanced replication. *Journal of Business Research*, 48, 69–73. doi:10.1016/S0148-2963(98)00077-0.
- Venkatraman, N. (1989). Strategic orientation of business enterprises: The construct, dimensionality, and measurement. *Management Science*, *35*, 942–962. doi:10.1287/mnsc.35.8.942.
- Verhoef, P. C., & Leeflang, P. S. H. (2009). Understanding marketing department's influence within the firm. *Journal of Marketing*, 73 (March), 14–37. doi:10.1509/jmkg.73.2.14
- Wathne, K. H., & Heide, J. B. (2004). Relationship governance in a supply chain network. *Journal of Marketing*, 68(January), 73–89. doi:10.1509/jmkg.68.1.73.24037.
- Webster Jr., F. E. (1997). The future role of marketing in the organization. In D. R. Lehmann, & K. Jocz (Eds.), *Reflections on the futures of marketing*. Cambridge, MA: Marketing Science Institute.
- Webster Jr., F. E. (1981). Top management's concerns about marketing: Issues for the 1980's. *Journal of Marketing*, 45, 9–16.
- Webster Jr, F. E., Malter, A. J., & Ganesan, S. (2005). The decline and dispersion of marketing competence. *MIT Sloan Management Review*, 46(Summer), 35–43.
- Wind, J. (1996) Mastering management—Part 15. Financial Times, pp. 562–571.
- Workman Jr, J. P., Homburg, C., & Gruner, K. (1998). Marketing organization: An integrative framework of dimensions and determinants. *Journal of Marketing*, 62(July), 21–41. doi:10.2307/1251741.
- Yukl, G., Kim, H., & Falbe, C. M. (1996). Antecedents of influence outcomes. The Journal of Applied Psychology, 81(June), 309–317. doi:10.1037/0021-9010.81.3.309.

