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Market and entrepreneurial orientation's effect on organisational performance through marketing capabilities

1. Introduction

Organisational orientations play an important role in capabilities development, since they align management’s strategic objectives with operational activities in two ways; they form the way that the members of an organisation process information and react to the environment, but they also create internal environments in which desired behaviours are encouraged and supported (Atuahene-Gima & Ko, 2001). Market orientation (MO) and entrepreneurship orientation (EO) are two important organisational orientations (Tzokas, Carter, & Kyriazopoulos, 2001) that affect the operational competencies of the firm (Miles & Arnold, 1991). The present study seeks to explore how the two, MO and EO, can together explain the performance of the firm through the development of specific strategic skills each of the two enable. The management literature has mainly addressed the notion of EO (e.g. Burgelman, 1983; Covin & Slevin, 1989; Zahra, Sapienza, & Davidson, 2006) whereas the discussion of MO roots mainly in the marketing literature (e.g. Gounaris, Avlonitis, & Papastathopoulou, 2004; Kohli & Jaworski, 1990; Narver & Slater, 1990; Ruekert, 1992). As a result, the extant knowledge remains rather fragmented and as such impedes scholars from developing a holistic view on the effect these two business orientations can have on the performance of the firm.

The fundamental principles of strategic management and the search for achieving and maintaining a competitive advantage (Zhou, Brown, & Dev, 2008) serve to bridge this gap. Within this framework, over the years, the focus has moved on from the industry to the company level (Spanos & Lioukas, 2001) and from resourcing to the development of capabilities because they are more important than resources since they are valuable either on their own or in enabling the company to augment the strategic value of its resources (Hoopes, Madsen, & Walker, 2003). As such, capabilities are the glue that combines, develops, and transforms the resources to create value offerings for customers (Day, 1994; Grant, 1991; Morgan, Vorhies, & Mason, 2009). They can be classified in terms of the organisational functions that they serve, like ‘marketing capabilities’ for instance, which can be a source of competitive advantage (Peteraf & Bergen, 2003). By analysing data from UK small and medium manufacturing companies, the current study attempts to investigate the joint effect the two most important strategic orientations have on the development of certain marketing-specific capabilities (customer linking and market sensing) and explore any subsequent effect on the performance of SMEs in the UK. Figure 1 presents the research framework underlying this study.

Figure 1: Research Framework
The rest of the paper is structured as follows. First, the theoretical background grounding the effect of MO and EO adoption on company performance through the development of specific capabilities is discussed and pertinent hypotheses are developed. Next the research methodology is explained followed by the presentation of the data analysis. Finally, the discussion of theoretical as well as the managerial implications concludes the manuscript.

2. Theoretical Background and Model Development

Marketing is a significant determinant of profitability, particularly in turbulent market environments since market-oriented organisations are better placed to recognise impending market changes and to respond strategically (Pearce & Michael, 1997). MO adoption is linked directly to the marketing concept (Gounaris et al., 2004) and as such it is the foundation of specific marketing practices (Kohli, Jaworski, & Kumar, 1993) and specifically of the “responsiveness” to customers’ needs and competitors’ actions (Gounaris & Avlonitis, 2001; Jaworski & Kohli, 1993). However, this responsive element can be thought by some to be a myopic approach since the embracement of this philosophy might fail to discover new opportunities. To overcome this and to achieve MO’s full potential an organisation needs to combine the principles underlying MO with the ones coming with the adoption of EO (Matsuno, Mentzer, & Özsomer, 2002). Organisational learning theory suggests that businesses should combine both an exploitative (i.e. being market oriented) and an explorative (i.e. being entrepreneurial oriented) approach in order to achieve effectiveness towards environmental challenges (Burgelman, 1991; Lumpkin & Dess, 1996; March, 1991).

Entrepreneurship is crucial to economic development and its degree varies across different organisations (Hult, Snow, & Kandemir, 2003). Through exploration and risk taking that this behaviour entails (Lumpkin & Dess, 1996; Miller, 1983), companies can actually benefit from environmental uncertainty (Hitt, Ireland, Camp, & Sexton, 2001) and exploit more rapidly new opportunities as they emerge (Wiklund & Shepherd, 2003). As such, EO reflects generative or exploratory learning by which the organisation re-evaluates previously held assumptions about customers, competitors, and the environment (Lumpkin & Dess, 1996; Slater & Narver, 1995) or in other words about the market as a whole. Thus, while MO can be considered as somewhat reactive and EO would appear to be more proactive yet the one complements the other. Adopting EO has per se a higher degree of uncertainty and risk, in return for potentially bigger opportunities for growth and future profitability. On the other hand, adopting MO has less risk in market terms and more certainty in terms of present performance (Matsuno et al., 2002). In a sense, the complementary effect balances the negative points of each orientation. Not surprisingly thus an emerging body of research investigates the scope of aligning business practices and operations across both sets of the values each orientation promotes (cf. Atuahene-Gima & Ko, 2001; Bhuian, Menguc, & Bell, 2005). This idea echoes earlier empirical studies in the organisational behaviour literature which have reported that companies scoring high in EO were also reporting very high rates of MO (Miller, 1987), suggesting thus that the two are interrelated. On these grounds we investigate the following hypothesis:

**H1**: EO and MO are two interrelated notions.

Although MO has been studied for more than 20 years, the positive effect of MO on organisational performance that has originally stimulated this research stream (Narver and Slater, 1990) has not received universal support. In fact, a review of the pertinent literature reveals mixed and sometimes contradictory results: while some studies report a strong impact on business performance from MO adoption (e.g. Baker & Sinkula, 1999; Hult et al., 2003; Jaworski & Kohli, 1993; Narver & Slater, 1990; Shoham & Rose, 2001; Subramanian & Gopalakrishna, 2001; Taghian, 2010), other report weak (e.g. Gray, Matear, Boshoff, &
Early on, Avlonitis and Gounaris (1999) had noted this and suggested that MO adoption improves the organisational performance only when the prevalent market conditions are unstable and the economic environment is under change. The findings from a recent empirical study have reinforced this suggestion (Ward & Lewandowska, 2008). However, the argument that the underlying theory that would explain this effect remains rather murky (Hunt & Lambe, 2000) opens an alternative and interesting route. That is through the triggering of certain capabilities that emerge as a result of MO adoption, such for instance ‘marketing-specific’ capabilities.

Marketing specific capabilities (Srivastava, Fahey, & Christensen, 2001) show how well a firm performs each key customer-connecting process (Day, 1994). Moreover they show how well a company designs and manages customer relationship processes (Srivastava, Shervani, & Fahey, 1998). The initial conceptualisation of marketing capabilities included mid-level marketing processes like 4Ps and market research however, this was a limitation since it precluded any assessment of higher-level capabilities (Vorhies & Morgan, 2005). Market orientation influences marketing capabilities (Ngo & O’Cass, 2011) and can lead to better outcomes through the outside-in capability of customer linking (Day, 1994). Companies with customer linking capabilities can identify customer wants and requirements and subsequently create and build appropriate relationships with them (Greenley, Hooley, & Rudd, 2005). Therefore the following hypothesis is formulated:

**H2:** Market orientation enhances customer linking capabilities in SMEs.

Following the same reasoning, EO adoption could also relate with the development of another set of capabilities that allow the company to develop a sense of the market or ‘market sense capabilities’ (Hooley, Broderick, & Möller, 1998). Market sensing is defined as a process of generating knowledge about the markets, present and prospective customers and competitors that individuals in the firm use to inform and guide their decision-making. Market sensing enables firms to formulate, test, revise, update and refine their market views (Anderson & Narus, 2007). Market sensing capabilities are crucial to organisational success. They allow the management to give meaning to the developments in the external environment (Hooley et al., 1998) in terms of customers, competitors, the market demand and the wider macro-environmental change. This anticipatory capability creates a spirit of open-minded inquiry, that seeks out latent needs by actively scanning the periphery of the market and by the encouragement of a continuous experimentation (Day, 2002). It reflects generative or exploratory learning by which the organisation re-evaluates previously held assumptions about customers, competitors, and the environment (Lumpkin & Dess, 1996; Slater & Narver, 1995). Since companies with an entrepreneurial orientation put a priority in identifying and exploiting new market opportunities (Shane & Venkataraman, 2000) it is expected that:

**H3:** Entrepreneurial orientation enhances market sensing capabilities in SMEs.

There is a growing stream of research regarding the relationship between marketing capabilities and firm performance (Morgan, Slotegraaf, & Vorhies, 2009; Vorhies, Orr, & Bush, 2011). There are numerous studies (e.g. Day, 1994; Morgan, Slotegraaf, et al., 2009; Smirnova, Naudé, Henneberg, Mouzas, & Kouchtch, 2011) confirming that marketing capabilities affect positively business performance and contribute to the effective implementation of strategy (Morgan, Vorhies, et al., 2009). Based on the above: **H4:** Customer Linking capabilities have a positive effect on the financial performance of SMEs and **H5:** Market Sensing capabilities have a positive effect on the financial performance of SMEs.
3. Research methodology

The sampling framework for this study was drawn from FAME database which provides data of all UK companies with a turnover of over £1 million and 5529 small and medium manufacturing companies with 20 or more employees were identified. The latter criterion was set in order to minimise the risk of including in the sample frame companies with non-adequate organisational structures. The choice to focus on SMEs is justified by the important role they play in the economy. The second step was to identify the appropriate respondents within each firm that had the access to the necessary information to complete the research instrument (Kumar, Stern, & Anderson, 1993). To this end senior executives who get involved in the marketing and sales functions, such as the ‘Marketing Director’ or the ‘Sales Director’ were considered to be the most appropriate key informants for this study (Seidler, 1974).

To contact the sample units we used a random procedure. The 5529 companies received a random number, which served to classify them in an ascending order. One every tenth company was then chosen to participate in the sample. Of the 553 identified through this process 221 responded (response rate 40%). Well-established scales were employed based on previous studies of market orientation (Gounaris & Avlonitis, 2001), entrepreneurial orientation (Matsuno et al., 2002), market sensing capabilities (Morgan, Slotegraaf, et al., 2009) and customer linking capabilities (Hooley, Greenley, Cadogan, & Fahy, 2005). To measure performance the respondents were asked to evaluate organisational performance against their main competitors in terms of market share, profitability, and gaining new customers. A composite indicator of performance was created with all of the three loading factors above the threshold of 0.50. Subjective performance measures have been widely used in strategy related research (Spanos & Lioukas, 2001) mainly because the two are highly interrelated (Dess & Robinson, 1984). The questionnaire used a seven-point Likert scale with ‘1’ indicating a strong disagreement and ‘7’ a strong agreement.

4. Construct reliability and validity

Prior to testing the hypotheses, an assessment of construct reliability and validity was performed through a confirmatory factor analysis (CFA) by using the IBM AMOS 22 software. Each construct had acceptable psychometric properties in terms of Cronbach’s alpha. Moreover the convergent validity was examined by computing the Average Variance Extracted (AVE). An AVE of at least 0.50 provides support for convergent validity (Gerbing and Anderson, 1988).

As Table 1 suggests, all the measurement scales have reliability indices that exceed the 0.70 threshold (Nunnally, 1978) and average variance extracted that is greater than 0.50. Additionally, CFI and TLI indices exceed the .90 threshold while the RMSEA index is lower than 0.08 for all study’s measures as (Hu & Bentler, 1999) suggested, indicating an adequate fit.

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Mean</th>
<th>SD</th>
<th>Cronbachs’ A</th>
<th>AVE</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Orientation</td>
<td>4.95</td>
<td>.932</td>
<td>.805</td>
<td>.681</td>
<td>.967</td>
<td>.952</td>
<td>.051</td>
</tr>
<tr>
<td>Entrepreneurial Orientation</td>
<td>4.50</td>
<td>1.04</td>
<td>.884</td>
<td>.719</td>
<td>.975</td>
<td>.938</td>
<td>.079</td>
</tr>
<tr>
<td>Customer Linking</td>
<td>5.89</td>
<td>.902</td>
<td>.874</td>
<td>.723</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Market Sensing</td>
<td>4.96</td>
<td>1.08</td>
<td>.872</td>
<td>.651</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Performance</td>
<td>4.64</td>
<td>1.11</td>
<td>.750</td>
<td>.535</td>
<td>.986</td>
<td>.952</td>
<td>.047</td>
</tr>
</tbody>
</table>

Table 1: Descriptive statistics & internal consistency reliabilities
5. Data analysis

Having assessed the reliability and validity of the measures, it is appropriate to investigate the fit of the structural model. The structural relations among the constructs of the conceptual model were examined with path analysis using the maximum likelihood estimation (MLE). Results obtained from fitting the model of Figure 1 are presented in Tables 2, and 3. The goodness-of-fit statistics revealed that the model fits the data reasonably well; with a $\chi^2 = 441.458$ and 287 degrees of freedom. Other representative indices also suggest that the results of the structural model analysis are a good fit of the proposed model to the data: CFI is .939, and RMSEA is .049. Table 2 below presents the model fit.

<table>
<thead>
<tr>
<th>Structural Model</th>
<th>CFI</th>
<th>CFI/DF</th>
<th>RMSEA</th>
<th>GFI</th>
<th>NFI</th>
<th>IFI</th>
<th>TLI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>939</td>
<td>1.538</td>
<td>.049</td>
<td>.869</td>
<td>.846</td>
<td>.940</td>
<td>.931</td>
</tr>
</tbody>
</table>

Model fit: $\chi^2 = 441.458$, DF= 287, Probability level, p=0.000, N=221

Table 2: Model Fit

As results indicate in table 3 below, evidence support the first hypothesis since there is a very strong positive relationship between market orientation and entrepreneurial orientation ($\gamma=.971, p<.000$). Regarding the second hypothesis, results show that market orientation predicts in a moderate degree customer linking capabilities ($\gamma=.577, p<.000$) while the third hypothesis is also accepted since entrepreneurial orientation affects strongly market sensing capabilities ($\gamma=.737, p<.000$). Both H4 and H5 are supported. Specifically, performance is affected both by customer linking capabilities ($\gamma=.303, p<.000$) and by market sensing capabilities ($\gamma=.240, p<.005$). An overview of the results can be found in table 3.

<table>
<thead>
<tr>
<th>Standardised Estimates</th>
<th>S.E.</th>
<th>P (sig.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Orientation $\leftrightarrow$ Entrepreneurial Orientation (H1)</td>
<td>.971</td>
<td>.153</td>
</tr>
<tr>
<td>Market Orientation $\rightarrow$ Customer Linking (H2)</td>
<td>.577</td>
<td>.055</td>
</tr>
<tr>
<td>Entrepreneurial Orientation $\rightarrow$ Market Sensing (H3)</td>
<td>.737</td>
<td>.104</td>
</tr>
<tr>
<td>Customer Linking $\rightarrow$ Performance (H4)</td>
<td>.303</td>
<td>.144</td>
</tr>
<tr>
<td>Market Sensing $\rightarrow$ Performance (H5)</td>
<td>.240</td>
<td>.086</td>
</tr>
</tbody>
</table>

Table 3: Path Analysis

6. Discussion and Managerial Implications

The current study combines MO, EO, and marketing capabilities in a single model. Data confirm that MO and EO are two interrelated notions. From a theoretical perspective this adds to the emerging literature which suggests that MO enriches EO and vice versa. Accordingly, from a managerial point of view, companies should collect, disseminate internally and respond to intelligence about customer and markets (i.e. being market-oriented) or in other
words should have a marketing philosophy which primary goal is to place satisfaction of customer needs, at the forefront of their entrepreneurial activity (Kirca, Jayachandran, & Bearden, 2005). This entrepreneurial activity should seek to identify opportunities where other companies only see threats. It should encourage the exploration of creative solutions rather than those of conventional wisdom and the development of innovative marketing strategies even knowing that some might fail. Although MO and lately EO have been examined in many studies, there is no consensus regarding their effect on performance. Moreover, few studies have tested them both simultaneously. However, based on the current research there is evidence to support that MO and EO affect a set of marketing capabilities, which in turn can be the base of a competitive advantage and this makes them equally important. Specifically, MO leads to enhanced customer linking capabilities while EO leads to enhanced market sensing capabilities. To the best of our knowledge this is the first study to support a link between EO and market sensing. We proved their relationship empirically after justifying theoretically why we believe that EO enhances market sensing capabilities.

Adding to the extant literature, we confirmed the important role of marketing capabilities in organisational performance. The findings indicate that customer linking capabilities affect positively organisational performance. Therefore, the management team should forge the creation and maintenance of relationships with target customers. In addition to this, companies should have superior level of customer service and support in order to enjoy better performance than their competitors. Finally, significant evidence show that market sensing capabilities have a positive effect on organisational performance. Companies with the competence of sensing the market can identify and understand market trends, and discover their major competitors’ strategies and tactics. Moreover, they are able to learn both about customer needs and requirements, and about the broader market environment. Managers should try to inspire the development of these capabilities among the different organisational departments that will eventually allow their firm to experience better performance. Nevertheless, marketing practitioners should recognise that these capabilities can not be developed or transferred easily. Instead they are part of the entire unit and their development requires focus and effort.

7. Limitations and further research

As with all research, the current study has some limitations. First, to calculate the dependent variable of performance subjective measurements were used. Despite scholars suggesting that subjective measures have their strengths as assessments of performance, there is a concern associated with using a self-reported service performance measure, as employees tend to over-report their performance under the influence of social desirability bias. Therefore, a future study could report objective measures of profitability and market share, or it could include a scale that measures the social desirability element of the respondent. Second, the current study did not take into consideration customer specific measures of performance like customer satisfaction and customer loyalty. It would be very interesting to see whether or not those performance indicators are aligned with organisational performance indicators.
8. References


