Available online at www.sciencedirect.com
ScienceDirect
Journal of Business Research 60 (2007) 11 – 20
JOURNAL OF BUSINESS RESEARCH

Balancing external adaptation and internal effectiveness: Achieving better brand performance

Aron O'Cass *, Liem Viet Ngo

Newcastle Graduate School of Business, University House, University of Newcastle, Callaghan NSW 2308, Australia

Received 1 December 2005; received in revised form 1 June 2006; accepted 1 August 2006

Abstract

A long running debate in the marketing literature has focused on whether firm performance is driven primarily by competitive intensity or firm characteristics. This paper attempts to contribute to the debate by developing a conceptual framework, which comprises two components of competing views being External Adaptation (EA) and Internal Effectiveness (IE) as an integrated model. Competitive intensity is identified as influencing a firm's strategic type and characteristics that drive superior brand performance. The heterogeneity of firm characteristics can be explained by not only competitive intensity, but also the strategic type (i.e., posture) adopted by the firm, representing the strategy-firm characteristics fit (congruence). Empirical findings support all hypotheses except the hypothesis related to competitive intensity and innovative culture.

Keywords: Competitive intensity; Strategic type; Market orientation; Organizational culture; Brand performance

1. Introduction

The sources of performance differentials among firms have generally been couched in terms of either competitive intensity within the industrial organization literature (IO) or firm characteristics within the resource-based view (RBV) of the firm. The IO view espoused by Porter (1980) and Hall and Weiss (1967) indicates that the intensity of industry competition determined by intensity of rivalry, supplier power, threat of new entrants, threat of substitutes, and buyer power constrains a firm's strategy, which in turn leads to performance differentials between firms. In contrast, the RBV espoused by Peteraf (1993) and Barney (1991) signifies the significant role of firm characteristics in driving firm performance. In marketing some effort has been devoted to answering the question of whether firm performance is driven primarily by competitive intensity or firm characteristics (e.g., Schmalensee, 1985; Rumelt, 1991; Hawawini et al., 2003; Weerawardena et al., 2006). However, our understanding of the relative roles of industry and firm characteristics on firm performance is still limited in both theory and practice and is even less understood at the brand level (as to their impact on brand performance).

The crux of the challenge facing executives today is attempting to balance competitive intensity and firm characteristics (Hoskisson et al., 1999; Hawawini et al., 2003) and the task for managers is to achieve congruence between firm and environment to enhance brand performance. Some theorists stress the need to integrate IO and RBV into an explanation of performance differentials between firms (Weerawardena et al., 2006). Indeed, different views of the firm within marketing, strategy, and organizational economics have a similar heritage in providing a generic understanding of the sources of performance differentials (Stoelhorst and van Raaij, 2004). Hoskisson et al. (1999) argue that to cope with challenging problems arising from the complex and fluid competitive landscape constituted by rapid technological changes and increasing globalization, the field of marketing will likely experience increasing integration of multiple theoretical views.

In the context of marketing's contribution to firm performance, market orientation (MO) and organizational culture are

* Corresponding author. Tel.: +61 2 4921 7729.
E-mail addresses: aron.ocass@newcastle.edu.au (A. O'Cass), viet.ngo@studentmail.newcastle.edu.au (L.V. Ngo).

0148-2963/$ - see front matter © 2006 Published by Elsevier Inc.
doi:10.1016/j.jbusres.2006.08.003

increasingly being recognized as firm characteristics that should be incorporated into models of how firms adapt to competitive intensity (in their environment) and how these characteristics contribute to performance simultaneously. However, to date, a limitation of current theory in the marketing domain is the lack of research into the relationship among competitive intensity, strategic type, firm characteristics, and performance, especially brand performance.

This paper explores two competing components of a model, external adaptation (EA) and internal effectiveness (IE). The central argument here is that IO and RBV theory are not entirely competing explanations, but actually complement each other toward a better understanding of the achievement of higher brand performance.

2. External adaptation: congruency between competitive intensity, strategic types and firm characteristics

Over the last two decades, competitive intensity has been a dominant theme in the literature of marketing and management. Competitive intensity, collectively formed by five competitive forces including intensity of rivalry, supplier power, threat of new entrants, threat of substitutes, and buyer power, represents the rules of competition that determine industry attractiveness, and help to determine a strategic type (i.e., posture), which in turn influences firm performance (Porter, 1980, 1985) via firm characteristics.

Theorists indicate a need for strategic balance between pursued strategic orientations and firm practices (McKee et al., 1989), especially potential links between strategic orientations and firm characteristics representing the congruence of sub-elements within the microsystem (the firm). However, this microcongruence cannot take place without responding to competitive intensity. That is, executives' perceptions of competitive intensity drive and shape the microcongruence. Indeed, Miles and Snow (1978) suggest that firms competing within an industry pursue different adaptive strategies, which capture the firm's adaptability to competitive intensity. Specifically, the essence of Miles and Snow's approach is that the behavioral patterns of firms within an industry are categorized into prospectors, analyzers, defenders, and reactors according to the scope of the product-market domain and responsive postures towards competitive intensity. As such, the EA provides insights into how sub-elements of the microcongruence (e.g., strategic types and firm characteristics) adapt to the competitive intensity. The literature reveals different terms used in the context of strategy such as, strategic type, strategic orientation, strategic posture, however, this study adopts the notion of strategic type.

Although scholars argue that competitive intensity and strategic types have direct links with firm performance (e.g., Conant et al., 1990; Slater and Narver, 1993; Moore, 2005), this study argues that competitive intensity and strategic types indirectly contribute towards firm performance via firm characteristics (e.g., culture and behaviors). A review of the marketing literature suggests two relevant points pertaining to this. First, the firm is embedded within an environment that has a certain level of competitive intensity which influences its strategic type and the actions/characteristics it initiates in the pursuit of superior performance (e.g., Porter, 1980; Varadarajan and Jayachandran, 1999; Matsuno and Mentzer, 2000). Second, the heterogeneity in firm characteristics can be explained by not only competitive intensity, but also the strategic type pursued by the firm representing the strategy-firm characteristics fit (e.g., Venkatraman, 1989; Vorhies and Morgan, 2003).

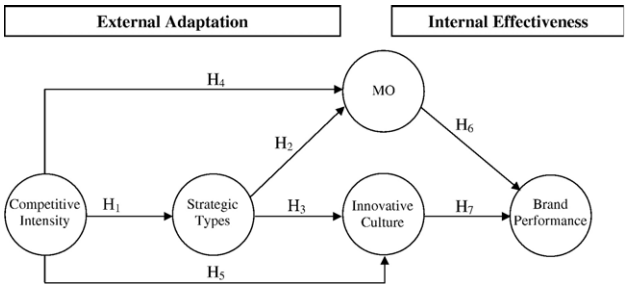

Fig. 1. The conceptual framework of EA and IE model: The balance between external and internal.

Based on the above perspective, Fig. 1 incorporates competitive intensity, strategic types, MO, and innovative culture (firm characteristics) as variables in the EA of how perceptions of competitive intensity influence firm characteristics and the role of strategic types in these links, while MO, along with innovative culture function as antecedents to brand performance in the IE.

2.1. Competitive intensity and strategic types

Porter (1980) argues that a firm's success can be determined by the intensity of competition within the industry it operates, via the intensity of rivalry, supplier power, threat of new entrants, threat of substitute products, and buyer power, which collectively produce and alter the nature of competitive intensity in the industry. It is argued that strategic decisions are affected by the collective competitive intensity of the five competitive forces as perceived by managers in their totality. Competitive intensity has received attention over the last 20 years since Porter's (1980) introduction of the construct into management via the notion of industry structure. Since then various attempts have been made to explain variance in firm performance via industry structure, through the notion of competitive intensity. Recently, Pecotich et al. (1999) attempted to develop an empirical measure of competitive intensity (industry structure). The foundation of their work is the view that prior approaches to the conceptualization and resulting measures suffered significant weaknesses including, the oversight of executive perceptions and an inadequate representation of the construct. This view is also supported here and in effect provides a foundation for the further development in strategic marketing of refined notions of competitive forces and their measurement. Using the notion of five forces as the key foundations of competitive intensity, a prominent schema for managers to represent their own industry's intensity across the five forces is achieved. It is the managers' perception of the strength or power (intensity) of these forces that is of paramount importance in impacting strategy development and firm characteristics. As such, firms

may be grouped together according to how they see the forces (competitive intensity). For example, buyer power may dominate along with substitutes in an industry, while in the same industry the threat of new entrants and supplier power may be weak (for a detailed discussion of this issue see Pecotich et al., 1999).

Based on the earlier conception of competitive intensity by Porter, the work of Pecotich et al. (1999) appears to provide a solid foundation to conclude that managers' perceptions of their industry are in line with or correspond to the notion of five important forces and their impact on strategy and conduct. Importantly, the recent work by Pecotich et al. (1999) conceives the five forces as best represented as five factors of industry structure, which is indicative of the competitive intensity a firm faces within its industry. As such, the key argument is that industry structure is a dominant influence on the rules of the game within an industry and as a consequence strategy development. Tying this view into the original notion of Porter (1980) and Pecotich et al. (1999), it is the overall (cumulative) perception of how managers see their industry via five dominant competitive forces and their intensity in their totality that sets the scene for strategy development.

Indeed, proponents of the IO view suggest that competitive intensity is of vital importance in developing and constraining business strategies, which are generated by, and reflective of different strategic types (O'Cass and Julian, 2003; Zahra, 1987). As such, different strategic types adopted by firms are expected to vary in their adaptability to the collective competitive intensity within the industry they operate. These strategic types include prospector, analyzer, defender, and reactor, which are described as decreasing in adaptive capability to the collective competitive intensity in rank order (McDaniel and Kolari, 1987; Lukas, 1999). For example, being described as proactive in searching for new opportunities and pioneering of changes in the industry, the prospector type is likely to be adopted by firms that view the industry as intensely competitive, while firms that view the industry as less competitive may adopt a defender type.

In this study, we combined analyzer and defender into a single strategic posture as both are conceptually close to each other, with analyzers being argued to share characteristics with both defender and prospector (Miles and Snow, 1978). Furthermore, the distinction between analyzer and defender is not detectable when using datasets obtained from the cross-section of industries. This argument has been supported by empirical evidence found in Moore's (2005) work indicating that, in a cross section of four retail sectors, analyzer and defender were collapsed into a single factor and the strategic postures of firms competing within a single industry are more observable than those operating in various industries. Finally, firms pursuing reactor posture perceive their competitive intensity as low in intensity, compared to other strategic postures. As such they are not as aggressive as other competitors adopting other postures and they make no changes until forced to do so by the competitive intensity.

Having considered the above discussion, it is argued that the perceptions of competitive intensity by executives influence the patterns of responsive strategies (strategic types) adopted by firms. Particularly, it would be expected that when a manager perceives their industry as possessing strong competitive intensity via the five forces, then such perception of pressure will be seen highest in those characterized as prospectors, second in analyzers/defenders, and lowest in reactors. Thus,

H1. The perceived competitive intensity of the industry influences the strategic posture adopted by a firm.

2.2. Strategic types and firm characteristics

Woodside et al. (1999) argue that the distinctive marketing competencies of firms are associated with their performance and that competencies are driven by strategic posture. Such marketing competencies relate directly to abilities that provide superior marketplace information and in effect influence performance. Based on this view and the measure adopted by Woodside et al. (1999), we view MO as a distinctive marketing competency. MO is an essential firm characteristic that has received substantial attention for quite some time. The nature of MO has been discussed under two dominant views. The first view argues that MO is a set of behavioral activities (e.g. Jaworski and Kohli, 1993), and the second sees MO as an aspect of an organization's culture (Deshpande and Webster, 1989; Narver and Slater, 1990). The first stream of research is representative of the work of Jaworski and Kohli (1993), who explore the nature of MO as three sets of specific activities: (1) organization-wide generation of market intelligence pertaining to current and future customer needs, (2) dissemination of the intelligence across departments, and (3) organization-wide responsiveness to it. As such, market orientation from the behavioral perspective is described as reflecting knowledge-producing behaviors (Baker and Sinkula, 1999) and is a key marketing competency.

On the other hand, the second view represented by Deshpande and Webster (1989) argues that MO is considered as an organizational culture that is created and maintained to provide individual norms for behavior within organizations. Organizational culture is the pattern of shared values and beliefs that explains to organizational members why things happen the way they do (Deshpande et al., 1993). Narver and Slater (1990) argue that MO is "the organization culture...that most effectively...creates the necessary behaviors for the creation of superior value for buyers and, thus, continuous superior performance for the business" (p. 21).

MO is the implementation of market culture, which emphasizes competitiveness and market superiority rather than innovation culture (adhocracy culture), which unites organization members through entrepreneurship, flexibility, and risk (Deshpande et al., 1993). Gray and Hooley (2002), in an effort to combine both perspectives of MO, define MO as the implementation of a corporate culture or philosophy, which encourages behaviors aimed at gathering, disseminating and responding to information on external environments in ways that add value for shareholders, customers and other stakeholders. Based on a careful analysis of the two streams, MO is seen here as a set of behaviors pertaining to market intelligence.

Interestingly, the link between strategic type and market-oriented behaviors has long been discussed in the literature, often within the context of marketing tactics. Fry and Smith (1987) postulate the importance of the congruence between business strategies and marketing tactics in the development of a contingency perspective of marketing and it has been argued that "various strategy types conduct their marketing activities in distinctly different ways" (McKee et al., 1989, p 23). Indeed, Miles and Snow's typology, when rank-ordered by adaptive capability, correlates positively with marketing tactics (McKee et al., 1989; Lukas, 1999). The prospectors' distinctive competence is in identifying and exploiting new products and market opportunities in the quest to become first-in players in the marketplace (Slater and Narver, 1993). As such, they should be more market-oriented than analyzers/defenders and reactors who are second-in players and only change when forced to do so, under competitive pressure, respectively. The rationale for the compatibility between market-oriented behaviors and adaptive strategic order in Miles and Snow's typology is that marketing is accepted as an adaptive, boundary-spanning function (Lukas, 1999). Such views are also consistent with the findings of Woodside et al. (1999), who identify a relationship between marketing competencies and strategic posture. Thus,

H2. The degree of MO is highest in prospectors, second in analyzers/defenders, and lowest in reactors.

Firms with a culture that stresses innovation should maintain and use more adaptive and innovative strategies than firms possessing a less innovative culture. An innovative culture encourages exploration and experimentation to develop new businesses and the renewal or revival of ongoing businesses (Menon et al., 1999). Miller (1987) contends that an innovative culture is a driving force that harmonizes different perspectives on a strategic option. Innovative culture, with its focus on entrepreneurship, creativity and adaptability, is inherently novel-opportunity seeking. Extending this line of argument, we believe that firms adopting a proactive and pioneering posture are likely to emphasize creative and adaptive capabilities and new product-market domains. In particular, prospectors tend to create and nurture a culture that is more likely to be innovative than that of analyzers/defenders and reactors. Thus,

H3. The degree of innovative culture is highest in prospectors, second in analyzers/defenders, and lowest in reactors.

2.3. Competitive intensity and firm characteristics

Environmental characteristics appear to play an important role in determining the degree of MO. On this point, Kotler (1977) and Porter (1979) both emphasize that environmental characteristics and environmental analysis are of vital importance, such that both allude to the strong role of the environment and a firms' need to understand it. Consequently, a number of environmental characteristics have been examined as the precursors to MO (e.g., Pelham and Wilson, 1996; Avlonitis and Gounaris, 1999). Firms that perceive competitive intensity as stable and predictable may not have to develop a MO (Levitt, 1960), while those who perceive competitive intensity as high may push themselves to undertake more marketing activities (Miles and Snow, 1978) and be more market-oriented. Therefore, businesses that observe and serve the marketplace as a fixed set of customers with stable preferences in stable environments are likely to have less need to be market-oriented, compared to businesses in unstable markets. Thus,

H4. The perceived competitive intensity of the industry influences a firms' level of MO.

Along with MO, organizational culture has been identified as an essential characteristic influencing firm performance. Four types of organizational culture have been identified including market, hierarchical, adhocracy, and clan (Deshpande et al., 1993). Compared to the others, adhocracy, labeled here as innovative culture, values entrepreneurship, creativity, and adaptability. Firms may push themselves to be more proactive and innovative if they perceive competitive intensity as mounting (Miles and Snow, 1978). Similarly, firms nurturing innovative cultures will facilitate external activities designed for adapting and monitoring changes in the marketplace. These external activities are prominent and emphasized when executives perceive their environment to be competitively intense (Pelham and Wilson, 1996). Thus,

H5. The perceived competitive intensity of the industry influences a firm's level of innovative culture.

3. Internal-effectiveness: congruency between MO, innovative culture, and brand performance

The view adopted here is that market-oriented behaviors occur as a reflection of and are driven by the organizational culture that manifests itself in specific behaviors. Our theoretical model conceives MO as a firm's market-oriented behaviors (Jaworski and Kohli, 1993) and considers MO and innovative culture as antecedents of brand performance in the context of IE.

3.1. MO and brand performance

Firms pursuing MO are argued to outperform others, who are less market-oriented. Indeed, Jaworski and Kohli (1993) argue that "a market orientation is frequently posited to improve business performance" (p. 57). The positive link between MO and firm performance has been empirically explored in many studies (e.g., Jaworski and Kohli, 1993; Matsuno and Mentzer, 2000). Such findings also relate to marketing competencies and performance (Woodside et al., 1999) and as argued above, MO is seen as key marketing competency. Whilst the majority of performance measures have been discussed at the macro level (e.g., firm performance), a critical perspective is drawn from a firm's product performance and in reality this is operationalized at the brand level (e.g., microperformance). This is critical as using overall firm performance may mask underperforming areas, and in reality brands are the primary assets of firms. As such, focusing on specific brands provides a better picture of the characteristics of the firm, its environment and how such characteristics and environment impact the firm's brands.

The notion of brand performance resides in the marketplace strength of a firm's brand as evidenced in its market share, sales growth, profitability and the like. Brand performance can also be seen in the brand achieving the firm's established objectives for it in the marketplace. As such, brand performance is defined as a relative measurement of brand success in the marketplace. It is argued here that firms, who are market-oriented, are more likely to possess strong brands. Surprisingly, the relationship between MO and brand performance has not been addressed extensively to date (e.g., Cravens and Guiding, 2000), however, extant work provides evidence to support the positive link between MO and brand performance. Thus,

H6. MO positively influences brand performance.

3.2. Innovative culture and brand performance

Organizations with a strong innovative culture may question whether market-oriented behaviors are the only way to achieve brand success. Such organizations rather than being market-driven tend to be proactive in the development of brand success. Baker and Sinkula (1999) argue that "breakthroughs do not always come from reacting to the market as it is" (p. 415), and in the same vein, Gatignon and Xuereb (1997) contend that proactiveness and R&D orientation are key characteristics of innovation-oriented firms in the development for their new products. Therefore, firms with a strong innovative culture might recognize that building a successful brand may not always depend on the interpretation of feedback received from current customers and competitors, but instead upon an ability to innovatively develop unique ways of delivering superior value to customers. Doyle (1989) indicates that a successful brand reflects 'getting there first' innovations in many ways including developments of new technology, new positioning concepts, new distribution channels, and new market segments. Thus,

H7. Innovative culture positively influences brand performance.

4. Research design

4.1. Data collection

The study was based on a survey of 1000 firms from a cross section of industries obtained from a professional database company. Questionnaire protocol was used as the primary means for data collection, with the data collection process following similar procedures to Jaworski and Kohli (1993). In total 180 usable questionnaires were returned accounting for approximately 18%.

In this study senior marketing executives were key informants because of their specific knowledge about the phenomena being studied (see Heide and Weiss, 1995). Moreover, being considered as decision-makers, marketing executives are in appropriate positions to respond and adapt to market changes and foster the culture of the organization. As such, data provided by senior executives are argued to be as reliable and accurate (Zahra and Covin, 1993). Supporting this reasoning, a majority of similar research about strategic types, organizational culture, and MO have used senior executives as key informants (e.g., McKee et al., 1989; Deshpande et al., 1993; Jaworski and Kohli, 1993; Pelham, 1997; Noble et al., 2002).

4.2. Measures

Strategic type was measured by asking respondents to evaluate the strategic type adopted by their firm using the three generic strategies adopted from Miles and Snow's (1978) typology via descriptions of the firm strategic types encompassing prospector, analyzer/defender and reactor. Descriptions of these strategies were the same as those used by Snow and Hrebiniak (1980). Although having several limitations (Snow and Hambrick, 1980; Conant et al., 1990), this self-typing approach to identifying strategic type has been widely used in marketing strategy research (McDaniel and Kolari, 1987; McKee et al., 1989; Matsuno and Mentzer, 2000).

Competitive intensity was measured via a Type II formative model (Diamantopoulos and Winklhofer, 2001), in which competitive intensity was treated as a latent variable formed by five reflective indicators including intensity of rivalry, supplier power, threat of new entrant, threat of substitute, and buyer power. A 20-item scale was adopted capturing these five reflective components. This scale was modified from the original 54-item scale of industruct scale developed by Pecotich et al. (1999).

To increase its applicability to branding, specific instructions were provided to respondents to think about the behaviors relative to a specified marketed brand. For example, to orient the respondent the following instruction was given: *Please complete this questionnaire in relation to one business unit only and for one brand*. Further orienting instruction was provided such as those used for competitive intensity, which instructed the respondent to: *Remember to think of the industry that relates to your identified BRAND*. A seven-point scale anchored by 'strongly disagree' and 'strongly agree' was used in the current study.

The MO scale consisted of 10 items capturing the three components of this construct (e.g. intelligence generation, intelligence dissemination, and responsiveness to the intelligence) as a set of behaviors. The Jaworski and Kohli's (1993) work has been widely used in stream of MO research as they provide a useful distinction and interpretation of the marketing concept and a MO from the behavioral perspective (Matsuno et al., 2000). The scale was modified to increase its applicability to branding, by orienting the respondent to think about the behaviors relative to a specified brand in the SBU. We also sought to focus on a shortened set of items tapping the focal manifest behaviors to ensure a more parsimonious measurement of MO. A seven-point scale anchored by 'strongly disagree' and 'strongly agree' was used in the current study.

Innovative culture was measured via a 12-item scale, based on the earlier work of Deshpande et al. (1993) focusing on key aspects of innovativeness from a cultural perspective. They include encouraging creativity, being receptive to new ideas,

decentralizing decision-making and encouraging open communication. The items were developed to tap into the adhocracy culture dimension. These items were also measured via a seven-point scale with scale poles ranging from 'strongly disagree' to 'strongly agree'.

Brand performance was measured via perceptual measures of brand performance in this study. Respondents were asked to rate the overall perception of the performance of their identified brand, its market share, and sales growth rated on a 7-point scale from very poor to very good.

5. Results

5.1. Preliminary results

In total 180 useable questionnaires were returned. Preliminary data analysis was undertaken to examine the mean and standard deviations, and following this initial assessment, bivariate Pearson correlations and reliability estimates were computed, and then principal component analysis was undertaken.

The descriptive statistics indicated that in relations to sales, 25% of firms achieved greater than 50% of their sales in the domestic market, while 75% achieved at least 50% of sales in foreign markets. The analysis also indicated that 50% of firms were at least 50% foreign owned. Based on the number of employees, 34%, 35%, and 31% were characterized as small, medium, and large firms, respectively. In relation to sales volume, 12% had less than $1 millions in sales, 10% had between $1 and $2 millions in sales, 13.5% had between $2 millions and $4.9 millions in sale, and 64.5% has less than $5 millions in sales. The analysis indicated that services firms accounted for 34% of the respondents, industrial manufacturing 32%, retailing 8%, IT 6%, food and beverage 5%, mining 3%, electrical and power measurement 2%, and 10% nonclassified.

The preliminary analysis indicated that some items had moderate to high levels of skewness and kurtosis. The results in Table 1 indicate that, the factor analysis of MO produced three factors explaining 77% of the variance, with factor loadings ranging between .72 and .87 and reliability of .80. Innovative culture had one factor explaining 52% of the variance with loadings ranging between .59 and .84 and reliability .93. The brand performance analysis produced a single factor explaining 71% of the variance and a reliability of .88. Competitive intensity was constructed as a type II model (Diamantopoulos and Winklhofer, 2001). The five second-order constructs explained between 55% and 70% of the variance with loadings ranging between .64 and .88 and reliabilities between .83 and .90 as indicated in Table 1. The final reliabilities for all scales were higher than .80.

5.2. Convergent and discriminant validity

Given that a single source of information can introduce spurious relationships among the variables, and as this study collected data via single source methods (self-report scales), the need to test for common method variance was warranted. This test was conducted in accordance with Harmon's one factor test

Table 1
Measurement model results

Components and manifest variables	Loading	Critical ratio
Market orientation (AVE=0.77, Cronbach alpha=.80)		
Intelligence generation (AVE=0.58, composite reliability=0.81)		
IG V1: Polling end users to assess the quality of brand	0.72	12.68
IG V2: Gathering information on the effect of changes in business environment	0.73	9.82
IG V3: Collecting information concerning general social and economic trends	0.84	24.61
Intelligence dissemination (AVE=0.58, composite reliability=0.81)		
ID V4: Discussing the implications of information about customers' needs.	0.77	18.65
ID V5: Circulating documents that provide information on customers.	0.72	10.05
ID V6: Having meeting to update knowledge and share information.	0.79	15.56
Responsiveness (AVE=0.66, composite reliability=0.89)		
RESP V7: Responding quickly to customer needs in relation to brand	0.83	22.63
RESP V8: Being responsive to environment changes in relation to brand.	0.87	30.87
RESP V9: Responding well to competitor campaigns	0.81	20.99
RESP V10: Responding well to detect changes in social trends.	0.75	12.75
Innovative culture (AVE=0.52, composite reliability=0.93)		
IC V1: Encouraging creativity and innovation	0.72	10.85
IC V2: Being receptive to new ways of doing things	0.75	16.07
IC V3: Being an organization people can identify with	0.64	9.51
IC V4: Stressing team work among all departments	0.81	24.60
IC V5: Giving high responsibilities to managers	0.68	9.90
IC V6: Explaining reasons for decisions to subordinates	0.79	21.58
IC V7: Allowing individuals to adopt their own approach to the job.	0.65	10.55
IC V8: Improving communication between departments	0.78	23.35
IC V9: Delegating decision making to lowest possible level	0.68	17.03
IC V10: Taking a long-term view even at expense of short-term performance	0.71	16.44
IC V11: Communicating how each person's work contributes to the firm's 'big picture'	0.84	37.27
IC V12: Valuing effectiveness more than adherence to rules and procedures.	0.59	7.85
Brand performance (AVE=0.71, composite reliability=0.88)		
BP V1: Overall brand performance	0.89	36.44
BP V2: Market share	0.74	10.54
BP V3: Sales growth	0.89	38.15
Competitive intensity (AVE=0.64, Cronbach alpha=0.85)		
Intensity of rivalry (AVE=0.70, composite reliability=0.90)		
CI V1: Firms in the industry compete intensely to hold and/or increase market share	0.84	22.09
CI V2: Competitive moves incite retaliation and counter moves	0.83	21.67
CI V3: Price competition is highly intense	0.77	18.74
CI V4: Appropriate terms used to describe competition are "intense, fierce"	0.88	40.85

Table 1 (*continued*)

Components and manifest variables	Loading	Critical ratio
Supplier power (AVE=0.55, composite reliability=0.83)		
SP V5: The supplier's contribution is an important input into the industry	0.73	15.34
SP V6: The suppliers can raise prices easily or threaten to reduce the quality of products	0.64	7.75
SP V7: Supplier or supplier groups are powerful	0.86	43.08
SP V8: The suppliers of raw and other materials do demand, and gain concessions	0.73	14.87
Threat of new entrant (AVE=0.56, composite reliability=0.84)		
NE V9: Established firm have substantial resource used to prevent the new entrants	0.75	16.03
NE V10: Retaliation towards new entrants is and has been strong	0.82	30.09
NE V11: New entrants spend heavily to build up brand names and to overcome brand loyalties	0.74	13.25
NE V12: New entrants with small operation scale must accept a considerable cost disadvantage	0.69	10.35
Threat of substitute (AVE=0.60, composite reliability=0.86)		
TS V13: All firms in the industry are aware of the strong competition from substitutes	0.77	18.13
TS V14: Substitute products limit the profitability	0.83	26.43
TS V15: Industry's products serve functions which may be easily served by many other products	0.70	11.05
TS V16: The industry makes products for which there are a large number of substitutes	0.80	17.32
Buyer power (AVE=0.64, composite reliability=0.88)		
BP V17: Buyers are highly concentrated in the industry	0.73	12.85
BP V18: Buyers or buyer groups are powerful in the industry	0.79	13.50
BP V19: The buyers of the industry's products are in a position to demand concessions	0.88	46.10
BP V20: There are a small number of buyers who form a large proportion of this industry's sales	0.81	19.08
Strategic type	Weight	Critical ratio
ST V1: Prospector	1.604	2.89
ST V2: Analyzer/defender	1.605	3.66
ST V3: Reactor	.00	.00

All figures are loadings with the exception of strategic type where weights are shown.

(O'Cass and Pecotich, 2005) where all items, presumably measuring a variety of different constructs, were subjected to a single factor analysis. Using this approach, 9 factors were extracted with eigenvalues greater than 1 and the variance explained was 61%. The first factor accounted for 19% of the variance with the second factor accounting for 12% and the remaining 7 factors sharing 30% of the variance. As one factor was not present (or a common factor underlying the data) and as the majority of the variance was not accounted for by one general factor, a substantial amount of common method variance was not evident.

Assessing measurement validity is important. Fornell and Larcker (1981) argue that convergent validity is achieved if the average variance explained (AVE) in items by their respective constructs is greater than the variance unexplained (i.e., AVE>.50). Therefore, in order to assess the constructs convergent validity, the squared multiple correlations from the factor analysis were used to calculate the average variance explained. All factors had an average variance explained (AVE) greater than or equal to .50, therefore meeting the recommended criteria for convergent validity. The calculated AVEs for each of the factors were higher than .50 (competitive forces [between .55 and 64], MO [.77], innovative culture [.52], and brand performance [.71]).

Having computed the composite measures, an assessment of discriminant validity as recommend by Gaski and Nevin (1985) and O'Cass (2002) was undertaken. If the correlation between two composite constructs is not higher than their respective reliability estimates, then discriminant validity exists. Therefore, construct correlations were examined and compared to the reliabilities calculated via Cronbach's alpha in the preliminary data analysis. Correlations ranged from .21 to .46 and the reliabilities ranged from .80 to .93. The comparison of individual bivariate correlations between constructs revealed that no correlations were higher than their respective reliabilities. This being the case discriminant validity was verified.

5.3. Results for H1 to H7

Based on the initial preliminary analysis, the relationships depicted in the hypotheses were tested using variance based SEM. Of particular interest here is the issue of whether the latent construct, competitive intensity, should be modeled as a formative or reflective model and a first-order–second-order configuration. In marketing, a great deal of attention has been devoted to developing latent constructs where the measurement items reflect the observed variation in the constructs (reflective). However, an alternative measurement perspective, in which observed indicators (formative) are assumed to cause the latent construct, makes more sense and is theoretically valid in some cases (Diamantopoulos and Winklhofer, 2001). As such the choice between formative and reflective models indicates the direction of causality between the latent construct and its indicators. One of the essential decision rules for determining the measurement model is the covariance among indicators (Jarvis et al., 2003). Analysis of competitive intensity (intensity of rivalry, supplier power, threat of new entrant, threat of substitute, and buyer power) indicates a weak covariance among five second-order constructs. In supporting this judgment, we argue that in the cross-section of industries, industry structures are characterized by distinct forces, which are not necessarily related to each other. Indeed, the fast food and restaurant industry is typically characterized by a strong power of consumers and an intensive competition, while the PC operating systems industry where Linux is one of the few challengers to Microsoft is characterized by a weak power of consumers and less intense competition (Thompson and Strickland, 2003). That is the attractiveness of industries varies across different competitive forces (Porter, 1980).

Intensity of rivalry, supplier power, threat of new entrant, threat of substitute, and buyer power cause competitive intensity. Therefore, the individual forces are reflected by the indicators as in a Type II model. Given the analysis and

Table 2
Partial least squares results for theoretical model

Predicted variables	Predictor variables	Path weights	Variance due to path	R^2	Critical ratio
H1 strategic types	Competitive intensity	.139	.02	.02	1.73*
H4 market orientation	Competitive intensity	.3.01	.08		3.88**
H2	Strategic types	.259	.056	.14	2.53**
H5 innovative culture	Competitive intensity	.076	.0023		0.91
H3	Strategic types	.349	.117	.12	2.92**
H6 brand performance	Market orientation	.205	.067		2.70**
H7	Innovative culture	.257	.093	.16	2.42**
AVA				.32	

(* exceeds minimum acceptable level .05; ** exceeds minimum acceptable level .01).

arguments presented, our attempt is to advance the operationalization of competitive intensity by specifying the construct as a second-order factor having first-order factors as formative indicators and the first-order factors themselves have reflective indicators.

The model parameters as depicted in the Fig. 1 were estimated using Partial Least Squares (PLS), a multivariate, variance based technique used for estimating path models involving latent constructs indirectly observed by multiple indicators. PLS also assisted in avoiding the necessity of a large sample size and can be used to assess models with ordinal and categorical data and is not sensitive to the assumptions of normality, thus circumventing the necessity for the multivariate normal data. Another major advantage of PLS is that the outer model formulation explicitly allows for the specification of both reflective and formative models, as well as the use of categorical variables. This allowed for the recoding of strategic type into a dummy variable (0–1) to be used in the analysis of H1, H2 and H3. This procedure is similar to that adopted by O'Cass and Pecotich (2005) when analyzing models using PLS with formative, reflective and categorical variables.

Two sets of linear relations specify the model: the outer model relationships between the latent and the manifest variables; and the inner model where the hypothesized relationships between the latent variables are specified and whose interpretation is as for standardized regression coefficients (weights). The focus here is on the inner results as they relate directly to H1–H7. Evaluation of the relationships was via statistical results that attempt to clearly explain the data, congruence with the hypotheses and precision. An examination of model fit was undertaken via r^2, average variance accounted for (AVA), average variance extracted (AVE), and regression weights and bootstrap critical ratios (t-values) and path variance.

In Table 2, the majority of the individual r^2 and AVA for the endogenous variables are of an acceptable magnitude in the inner model. The strength of the paths associated with the constructs is acceptable. A reasonable criterion for evaluating their significance is the absolute value of the product of the path coefficient and the appropriate correlation coefficient (Falk and Miller, 1992). As paths are estimates of the standardized regression weights, this produces an index of the variance in an endogenous variable explained by that particular path and 1.5% (.015) of the variance is recommended as the cut off point. The paths in Table 2 exceed this criterion except for the competitive intensity-innovative culture path (<0.015). Being defined as the ratio between estimate and standard errors, the critical values greater than 1.64 and 1.96 are statistically significant at 90% and 95%. As such the bootstrap critical ratios are of magnitudes above the acceptable benchmarks for all the paths, except for competitive intensity-innovative culture. Overall, the various results used to evaluate the hypotheses indicate that all hypotheses (H1–H4, H6 and H7) are supported, except for H5.

6. Discussion

Overall, the empirical findings provide significant insights concerning the relationships among competitive intensity, strategic types, firm characteristics, and brand performance, and the conceptual framework was supported. The central theme of our research is twofold: (1) competitive intensity, constructed by five competitive forces in which the firm competing, influences its strategic types and characteristics developed in pursuit of superior brand performance; and (2) the heterogeneity of firms' characteristics can be explained by not only competitive intensity but also strategic types pursued by the firm representing the strategy-firm characteristics fit. Empirical findings largely support this position.

Competitive intensity is a determinant of strategic type, MO, and innovative culture, providing support to EA theory. Interestingly, individual competitive forces were not perceived equally in influencing strategic postures pursued by the firm. For a better understanding of the support for this hypothesis, the examination of individual impact of each industry-forces component on strategic type was conducted. Interestingly, intensity of rivalry was most strongly associated with strategic types in terms of their descending order: prospector, analyzer/defender, and reactor (i.e., the indirect effects of competitive forces on strategic type, MO and innovative culture were greater for intensity of rivalry, then suppliers, then new entrants, then substitutes, followed by buyers). This finding, while still providing support for the central tenet that firms who follow different strategic types will tend to perceived their environment differently (Snow and Hrebiniak, 1980; Zahra, 1987), also signifies the significance of industry traits in examining the relationship between competitive intensity and strategic types. This important issue has not yet been discussed in the literature. The association between competitive intensity and strategic type is taken into place in a single industry (e.g., Zahra, 1987) or in a cross section of industries constituting similar traits (e.g. Snow and Hrebiniak, 1980). As such, in this research, buyer power can be considered as a common trait sharing across different industries, while other individual competitive forces (e.g., intensity of rivalry, new entrant, supplier power, and substitute) may be perceived unequally.

As far as competitive intensity is concerned, the findings suggest that competitive intensity facilitates or positively influences the development of MO. That is, market-oriented firms

perceive competitive intensity as more sophisticated and dynamic than less market-oriented firms. This result supports previous research that found a number of environmental characteristics as the precursors to MO (Pelham and Wilson, 1996; Avlonitis and Gounaris, 1999). Unexpectedly, the relationship between competitive intensity and culture is not significant indicating that culture is not strongly linked to the outside world.

Strategic type is another important determinant driving the degree of MO and innovative culture. When analyzer and defender were collapsed, a significant relationship between strategic types and MO in which the degree of MO is highest for prospectors, followed by analyzers, defenders, and reactors was found. This is consistent with the findings of Lukas (1999) who reports that the degree of MO is ranked from highest to lowest according to strategic type. Similarly, the compatibility between innovative culture and the order of strategic types was also established.

The marketing literature has focused on the notion that a proper implementation of MO leads to superior performance. Yet to date, a limitation of the current theory in this domain is the lack of research into the relationship among MO, innovative culture, and brand performance all together. The main theme of IE is that organizations with a strong innovative culture might be aware that building a successful brand may not always depend on the interpretation of feedback received from current customers and competitors, but instead upon firms' ability to innovatively develop unique ways of delivering superior value to customers and empowering employees to do this. The results of the study strongly support this proposition by indicating that MO and innovative culture have positive impacts on brand performance. These findings are consistent with previous research, which found a positive relationship between MO and performance at macro level (Jaworski and Kohli, 1993; Matsuno and Mentzer, 2000) and the association between organizational culture and firm performance (e.g., Deshpande et al., 1993; Leisen et al., 2002).

7. Limitations

Whilst the study does make some contributions, a limitation is a narrow application of different types of organizational culture. Future research may include broader types of organizational culture to generate a bigger picture of the potential impact of organizational culture on brand performance. Moreover, organizational capabilities facilitated by organizational culture is worthy of consideration. In order to enrich findings related to strategic type, future research may operationalize this construct by using nominal or interval multiple-item scale. Although the sample utilized in this research provides useful insights into the link between competitive intensity and strategic type as well as the combination of analyzer and defender, attention to the level of industries is warranted.

8. Conclusion

Whether firm performance is driven primarily by competitive intensity or firm characteristics has long been debated in marketing. In this paper, attempts has been made to unlock that primary question, by theoretically premising that IO and RBV whilst positioned as competing, in reality complement each other in a firm's effort to achieve higher brand performance. The paper contributes to IO and RBV by developing a conceptual framework, which comprises two components of competing models being EA and IE to understand how the perceived competitive intensity impacts the development of strategy types, MO, and organizational culture in pursuit of superior brand performance and how strategy typology is associated with MO and organizational culture. Clearly, the linkages between EA and IE need to be further explored. Whilst some aspects for our arguments did bear out, others did not. Whilst to some this might be a problem, it is seen here as an opportunity. The internal–external issues related to brand performance are significant and bear great potential for marketing academics to contribute to a meaningful aspect that has practical as well as theoretical importance.

References

Avlonitis G, Gounaris S. Marketing orientation and its determinants: an empirical analysis. Eur J Mark 1999;33(11/12):1003–37.

Baker WE, Sinkula JM. The synergistic effect of market orientation and learning orientation on organizational performance. J Acad Mark Sci 1999;27:411–27 [Fall].

Barney J. Firm resources and sustained competitive advantage. J Manage 1991;17(1):99–120.

Conant JS, Mokwa MP, Varadarajan PR. Strategic types, distinctive marketing competencies and organizational performance: a multiple-measures-based study. Strateg Manage J 1990;11(5):365–83.

Cravens KS, Guiding C. Measuring customer focus: an examination of the relationship between market orientation and brand valuation. J Strat Mark 2000;8:27–45.

Deshpande R, Webster FE. Organizational culture and marketing: defining the research agenda. J Mark 1989;53:3–15 [January].

Deshpande R, Farley JU, Webster FE. Corporate culture, customer orientation, and innovativeness in Japanese firms: a quadrad analysis. J Mark 1993;57:23–7 [January].

Diamantopoulos A, Winklhofer HM. Index construction with formative indicators: an alternative to scale development. J Mark Res 2001;38: 269–77 [May].

Doyle P. Building successful brands: the strategic options. J Mark Manag 1989;5 (1):77–95.

Falk RF, Miller NB. A Primer for Soft Modeling. Akron: University of Akron Press; 1992.

Fornell C, Larcker DF. Evaluating structural equation models with unobservable variables and measurement error. J Mark Res 1981;18:39–50 [February].

Fry LW, Smith DA. Congruence, contingency, and theory building. Acad Manage Rev 1987;12(1):117–32.

Gaski JF, Nevin J. The differential effects of exercised and unexercised power sources in a marketing channel. J Mark Res 1985;22:130–42 [May].

Gatignon H, Xuereb J. Strategic orientation of the firm and new product performance. J Mark Res 1997;34:77–90 [February].

Gray BJ, Hooley GJ. Market orientation and service firm performance — a research agenda. Eur J Mark 2002;36(9/10):980–8.

Hall M, Weiss LW. Firm size and profitability. Rev Econ Stat 1967;49 (8):319–31.

Hawawini G, Subramanian V, Verdin P. Is performance driven by industry- or firm-specific factors? A new look at the evidence. Strateg Manage Jηγ 2003;24:1–16.

Heide JB, Weiss AM. Vendor consideration and switching behavior for buyers in high-technology markets. J Mark 1995;59:30–43 [July].

Hoskisson RE, Hitt MA, Wan WP, Yiu D. Theory and research in strategic management: swings of a pendulum. J Manage 1999;25(3):417–56.

Jarvis CB, Mackenzie SB, Podsakoff PM. A critical review of construct indicators and measurement model misspecification in marketing and consumer research. J Consum Res 2003;30:199–218 [September].
Jaworski BJ, Kohli AK. Market orientation: antecedents and consequences. J Mark 1993;57:53–70 [July].
Kotler P. From sales obsession to marketing effectiveness. Harvard Bus Rev 1977:67–75 [November/December].
Leisen B, Lilly B, Winsor RD. The effects of organizational culture and market orientation on the effectiveness of strategic marketing alliances. J Serv Mark 2002;16(3):201–22.
Levitt T. Marketing myopia. Harvard Bus Rev 1960:53–60 [July/August].
Lukas BA. Strategic type, market orientation, and the balance between adaptability and adaptation. J Bus Res 1999;45:147–56.
Matsuno K, Mentzer JT. The effects of strategy type on the market orientation–performance relationship. J Mark 2000;64:1–16 [October].
Matsuno K, Mentzer JT, Rentz JO. A refinement and validation of the MARKOR scale. J Acad Mark Sci 2000;28(4):527–39.
McDaniel SW, Kolari JM. Marketing strategy implications of the Miles and Snow strategic typology. J Mark 1987;51(4):19–30.
McKee DO, Varadarajan PR, Pride WM. Strategic adaptability and firm performance: a market-contingent perspective. J Mark 1989;53:21–35 [July].
Menon A, Bharadwaj SG, Adidam PT, Edison SW. Antecedents and consequences of marketing strategy making: a model and a test. J Mark 1999;63(2):18–40.
Miles RE, Snow CC. Organizational structure strategy and process. New York: McGraw–Hill; 1978.
Miller D. The structural and environmental correlates of business strategy. Strateg Manage J 1987;8:55–76.
Moore M. Towards a confirmatory model of retail strategy types: an empirical test of Miles and Snow. J Bus Res 2005;58:696–704.
Narver JC, Slater SF. The effect of a market orientation on business profitability. J Mark 1990;54:20–35 [October].
Noble CH, Sinha RK, Kumar A. Market orientation and alternative strategic orientations: a longitudinal assessment of performance implications. J Mark 2002;6:25–39 [October].
O'Cass A. Political advertising believability and information source value during elections. J Advert 2002;XXXI(1):63–74.
O'Cass A, Julian C. Examining firm and environmental influences on export marketing mix strategy and export performance of Australian exporters. Eur J Mark 2003;37(3/4):366–84.
O'Cass A, Pecotich A. Exploring the dynamics of voter behavior and influence processes in electoral markets: a consumer behavior perspective. J Bus Res 2005;58(4):406–13.
Pecotich A, Hattie J, Low LP. Development of industruct: a scale for the measurement of perceptions of industry structure. Mark Lett 1999;10(4):409–22.
Pelham AM. Mediating influences on the relationship between market orientation and profitability in small industrial firms. J Mark Theory Pract 1997;5(3):55–76.
Pelham AM, Wilson DT. A longitudinal study of the impact of market structure, firm structure, and market orientation culture on dimensions of small firm performance. J Acad Mark Sci 1996;24(1):27–43.
Peteraf M. The cornerstones of competitive advantage: a resource-based view. Strateg Manage J 1993;14(3):179–91.
Porter ME. How competitive forces shape strategy. Harvard Bus Rev 1979:137–45 [March/April].
Porter ME. Competitive strategy: techniques for analyzing industries and competitors. New York: Free Press; 1980.
Porter ME. Competitive advantage. New York: Free Press; 1985.
Rumelt RP. How much does industry matter? Strateg Manage J 1991;12 (3):167–85.
Schmalensee R. Do markets differ much? Acad Econ Rev 1985;75(3):341–51.
Slater SF, Narver JC. Product-market strategy and performance: an analysis of the Miles and Snow strategic types. Eur J Mark 1993;27(10):33–51.
Snow CC, Hambrick DC. Measuring organizational strategy: some theoretical and methodological problems. Acad Manage Rev 1980;5(4):527–38.
Snow CC, Hrebiniak LG. Strategy, distinctive competence, and organizational performance. Adm Sci Q 1980;25:317–36 [June].
Stoelhorst JW, van Raaij EM. On explaining performance differentials: marketing and the managerial theory of the firm. J Bus Res 2004;57:462–77.
Thompson AA, Strickland AJ. Strategic management: concepts and cases. Boston: McGraw–Hill/Irwin; 2003.
Varadarajan PR, Jayachandran S. Marketing strategy: an assessment of the state of the field and outlook. J Acad Mark Sci 1999;27(2):120–43.
Venkatraman N. The concept of fit in strategy research: toward verbal and statistical correspondence. Acad Manage Rev 1989;14(3):423–44.
Vorhies DW, Morgan NA. A configuration theory assessment of marketing organization fit with business strategy and its relationship with marketing performance. J Mark 2003;67:100–15 [January].
Weerawardena J, O'Cass A, Julian C. Does industry matter? Examining the role of industry structure and organization at learning in innovation and brand performance. J Bus Res 2006;59:37–45.
Woodside AG, Sullivan DP, Trappey III RJ. Assessing relationships among strategic types, distinctive marketing competencies and organizational performance. J Bus Res 1999;45:135–46.
Zahra S. Corporate strategic types, environmental perceptions, managerial philosophies, and goals: an empirical study. Akron Bus Econ Rev 1987;18 (2):64–77.
Zahra SA, Covin JG. Business strategy, technology policy and firm performance. Strateg Manage J 1993;14(6):451–78.