



# Aligning strategic orientation with local market conditions

## Implications for subsidiary knowledge management

Subsidiary  
knowledge  
management

379

David A. Griffith

*Department of Marketing, Lehigh University, Bethlehem, Pennsylvania, USA*

Timothy Kiessling

*School of Business, Bilkent University, Ankara, Turkey, and*

Marina Dabic

*University of Zagreb, Zagreb, Croatia*

Received 22 March 2011  
Revised 22 November 2011  
Accepted 6 April 2012

### Abstract

**Purpose** – One role of a foreign subsidiary within a multinational corporation's (MNC's) global portfolio is to connect the MNC to foreign customers. To examine this key customer contact point, this study aims to examine the linkages between local market conditions and strategic orientation, and how strategic orientation influences knowledge management capabilities of MNC subsidiaries, employing the Miles and Snow strategic orientation perspective.

**Design/methodology/approach** – A survey was conducted of 112 managers in foreign MNC subsidiaries in Croatia. Data were analyzed with both discriminant analysis and MANCOVA.

**Findings** – The results indicate that in highly dynamic and competitively intense markets, MNC subsidiaries primarily employ a Prospector orientation. Furthermore, the results indicate that there is a significant difference in knowledge management capabilities among subsidiaries depending on their strategic orientation, with the Prospector orientation most closely aligned with knowledge acquisition, knowledge conversion and knowledge application.

**Practical implications** – The findings highlight the importance of strategic orientation in MNC subsidiaries tailoring to local market conditions. The results suggest that MNC subsidiaries undertaking a Prospector strategic orientation develop greater knowledge acquisition, conversion and application capabilities.

**Originality/value** – This study conceptualizes the MNC subsidiary as a key marketing element of the global MNC whole and examines the nuanced relationships between the host environment and MNC foreign subsidiary strategic orientation as well as MNC subsidiary strategic orientation and knowledge management relationship.

**Keywords** Strategic orientation, Knowledge management capabilities, Croatia, Markets, Strategic choices

**Paper type** Research paper

### Introduction

The activities of multinational corporation (MNC) subsidiaries have become of increasing interest to international marketing scholars (Lee, 2010; Pherrson, 2009; Pinho, 2007; Sakarya *et al.*, 2007). While MNC subsidiaries have often been examined for their role in relation to factors such as low cost labor, access to resources, exploitation of the learning curve and location advantages, increasingly foreign subsidiaries are being viewed in relation to their role in innovation (Lee, 2010; Mudambi, 2002) and as part of the MNC's knowledge network (Lee, 2010; Roth *et al.*, 2009; Zhang *et al.*, 2009). Under this expanded view of the role of MNC subsidiaries, it has come to be



acknowledged that one role of MNC subsidiaries is to obtain local knowledge about local customers' current and future needs so as to act upon this knowledge to supply superior offerings, as well as to provide critical market knowledge back to the MNC that can be integrated into the MNC's global knowledge network (Hewett and Bearden, 2001; Roth *et al.*, 2009; Solberg, 2002). In fact, MNCs increasingly rely on the implementation of knowledge management capabilities (i.e. the processes of knowledge acquisition, knowledge conversion and knowledge application; Gold *et al.*, 2001; Inkpen, 1998; Simonin, 1999) to establish competitive postures in the global marketplace that are reflective of local market conditions (Grant, 1996; Roth *et al.*, 2009; Schlegelmilch and Chini, 2003) and this is typically spearheaded at the MNC subsidiary level. The ability of the MNC to gain knowledge from these markets is challenged by the environments in which the foreign subsidiaries operate, especially in markets which are different than MNC home markets, thereby heightening the importance of MNC subsidiaries adjusting to the local market conditions and building knowledge management capabilities.

The alignment approach suggests that there is link between local market conditions and the strategic orientation a firm employs and capabilities developed. For example, Luo and Park (2001) examine the link between strategic orientation of MNC subsidiaries (i.e. prospector, analyzer and defender) within the turbulent market of China and its influence performance. They find that the when MNC subsidiaries adopt an analyzer orientation in the turbulent market of China that they achieve enhanced performance. A foreign subsidiary's strategic alignment to local conditions is consistent with the adaptation approach to global marketing strategy (e.g. Griffith, 2010; Viswanathan and Dickson, 2007). Alignment research draws upon the concept of strategic choice (i.e. Child, 1972; Luo and Park, 2001) to contend that firms can be most effective when they have appropriately aligned the firm's strategy with the environment (Hoque, 2004; Luo and Park, 2001). Although Luo and Park (2001) greatly extend the literature, they only examine three of the four strategic orientations under the Miles and Snow typology, thus limiting our understanding of the strategic orientation alignment to local market environment. Furthermore, although Luo and Park (2001) link strategic alignment to performance, they do not explore the issue of knowledge management capabilities of the MNC subsidiary. As researchers have demonstrated that knowledge management capabilities of MNC subsidiaries are a driver of performance (e.g. Cui *et al.*, 2005), the lack of understanding of the linkage between strategic orientation and knowledge management capabilities within the MNC subsidiary context creates a gap in the literature.

As such, we work to contribute to the field in two ways. First, we work to advance our understanding of the relationship between local market conditions and strategic orientation of the MNC subsidiary as related to the MNC subsidiary's role of connecting with the local market. To do so, we follow the strategic choice approach of Luo and Park (2001) to examine the alignment of a foreign subsidiary's strategic orientation (employing Miles and Snows' (1978) strategic orientations which conceptualizes the firm's strategic approach to the consumer marketplace). We specifically capture the full range of strategic orientations employed by the MNC subsidiaries to provide a more complete understanding of the relationship than in prior literature. Furthermore, we advance the literature by specifying two local market conditions i.e. market dynamism (i.e. the degree of competition a firm faces in the market; Grewal and Tansuhaj, 2001; Jaworski and Kohli, 1993) and competitive intensity (i.e. the competitive activities of firms in the market, including price competition, promotion competition; Cui *et al.*, 2005; Jaworski and Kohli, 1993) that have been theorized in prior marketing literature

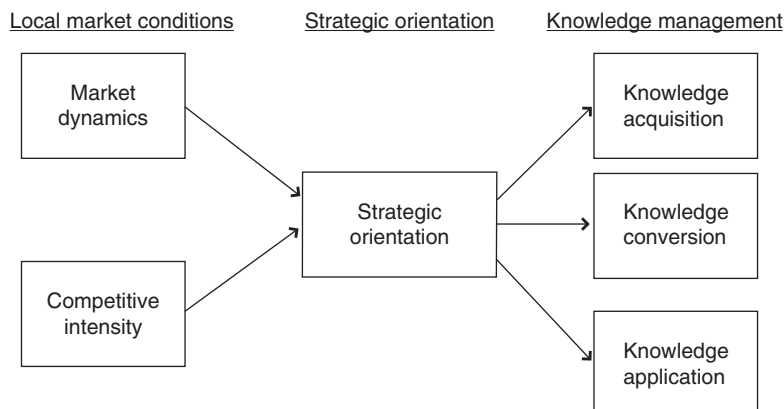
to be key to local market knowledge generation and dissemination. As such, this work builds upon recent research employing strategic orientation in the international marketing literature (e.g. Alam, 2006; Song *et al.*, 2008), providing new insights into how foreign subsidiaries work to align themselves to the local market conditions in which they operate (thereby also contributing to the international marketing standardization/adaptation literature in assessing whether firms adjust to local market conditions; e.g. Backhaus and van Doorn, 2007; Douglas and Craig, 2011; Ryans *et al.*, 2003; Solberg, 2002; Vrontis *et al.*, 2009).

Second, we work to contribute to the international marketing literature by demonstrating that the strategic orientation that the foreign subsidiary undertakes has substantive implications for its knowledge management capabilities. Through this assessment, we can more clearly discern what type of strategic orientation fosters the MNC subsidiary to develop the requisite knowledge management capabilities to obtain knowledge about local customers' current and future needs. As such, this work extends our current understanding of how strategic orientation of an MNC subsidiary influences knowledge management capabilities within the MNC subsidiary that allows it to operate more effectively in the local market context. The findings, which are specific to the MNC subsidiary level, also have implications pertaining to the foreign subsidiary's ability to contribute to the MNC's global knowledge network (Hewett and Bearden, 2001; Roth *et al.*, 2009).

The following section presents theoretical arguments pertaining to the alignment of strategic orientation with local market conditions and the relation of strategic orientation to subsidiary knowledge management capabilities. The method and analysis are then presented. The results, based on a survey of 112 MNC subsidiaries, operating in Croatia, indicate that knowledge management capabilities emerge as most important to those MNC subsidiaries adopting a prospector strategy. The paper concludes by suggesting avenues for theoretical refinement and future empirical investigations in the international marketing literature.

### Conceptual development and hypotheses

Figure 1 presents the proposed conceptual model. The model depicts the influence of two local market conditions (i.e. competitive intensity and market dynamism) on MNC subsidiary strategic orientation and MNC subsidiary strategic orientation's influence



**Figure 1.**  
Conceptual model

on the knowledge management capabilities of knowledge acquisition, conversion and application.

#### *Strategic choice and local market conditions*

The foundation of the proposed framework is in the literatures of strategic co-alignment (Astley and Van de Ven, 1983) and strategic choice (Child 1972). The strategic co-alignment literature argues that the alignment between a firm's strategic profile and its environment maximizes effectiveness in operations (Astley and Van de Ven, 1983; Child, 1972; Venkatraman and Prescott, 1990). Under this perspective, operational effectiveness results from a congruence of relevant contextual and strategic factors whereas misalignments between local market conditions and firm strategy create barriers to the firms operations, hindering effectiveness (Dong *et al.*, 2010; Venkatraman and Prescott, 1990).

Inherent within the co-alignment literature is the need for managerial choice in strategy determination. Strategic choice refers to the process of selecting an option for implementation, where the option is a range of strategy decisions. Employing the concept of strategic choice within the proposed framework it is argued that the firm, and in this case the MNC subsidiary, is capable of adapting its strategy to be responsive to the local market conditions.

While there are numerous market conditions that could be investigated, two local market conditions that are particularly important to MNC subsidiary connections to local markets are market dynamism and competitive intensity. These local market conditions are important as they reflect the volatility of customer demands changing as well as the competitiveness within which the MNC subsidiary must work to connect to customers, and as such are key elements investigated within the marketing literature (e.g. Cui *et al.*, 2005; Jaworski and Kohli, 1993). Furthermore, local market conditions influence, either individually or collectively, MNC subsidiaries' perception of uncertainty in the local market and its ability to compete (Luo and Park, 2001).

#### *Strategic orientations*

The Miles and Snow's typology is one of the most useful strategic classification systems (Alam, 2006; Di Benedetto and Song, 2003; Kabanoff and Brown, 2008; Song *et al.*, 2008) given its ability to provide a broad perspective on how a firm relates to its marketplace, thereby presenting a proxy of the firm's marketing strategy (Song *et al.*, 2008). This study uses the Miles and Snow typology to conceptualize the strategic orientation of a MNC subsidiary as the focus of this study is on the MNC subsidiary's marketing role and the ability of the Miles and Snow typology to serve as a proxy for marketing strategy. The Miles and Snow typology distinguishes strategic organizations according to four distinctive types of strategic configurations (i.e. defenders, reactors, analyzers and prospectors).

The defender deliberately attempts to maintain a stable environment and organizational structure (Miles and Snow, 1978), which is difficult in volatile local markets. Defenders attempt to seal off a portion of the total market in order to create a stable domain by producing a limited set of products directed at a narrow segment. By aggressively defending their market the defender attempts to carve out and maintain a small niche within an industry. However, these firms often ignore developments outside of their domain and focus, and do not seek knowledge in other realms. Specifically, defenders often do not pursue environmental scanning for new areas

---

of opportunity, and will often have centralized control and communication through formal channels. As such, the defender orientation can create a substantial barrier when markets increase in uncertainty due to changing customer demands or when market opportunities shift dramatically. Furthermore, given the nature of defenders to attempt to create a stable domain, they are less likely to engage in markets characterized by intensive competition.

Reactors exhibit a pattern of adjustment that is both inconsistent and unstable (Miles and Snow, 1978). The reactor strategy is often characterized as a residual strategy in that it results when a firm responds inappropriately to environmental change and uncertainty. Management that maintains the organization's current strategy-structure relationship despite overwhelming changes in environmental conditions typically characterizes the reactor. Further, reactors tend to have a management that does not shape the organization's structure to fit a chosen strategy, or, where management has not clearly articulated the organization's strategy. As such, reactors do not align well with local market conditions a priori, and as such we contend that they will not align with either market dynamism or competitive intensity in a substantial manner.

Analyzers attempt to minimize risk while maximizing opportunity (Miles and Snow, 1978). The analyzer attempts to locate and exploit new product and market opportunities while simultaneously maintaining the firm's core of traditional products and customers. Analyzers move toward new products or new markets through imitation only after success has been demonstrated (i.e. second mover strategy). As such, analyzers emphasize some aspect of environmental scanning in an attempt to learn how to achieve and protect equilibrium between conflicting demands for flexibility and stability. To address the duality of this focus, an analyzer's production is often separated from the producing entity required to adapt new product designs. Luo and Park (2001) argue that the analyzer's orientation is specifically valuable as it reduces the chance of outright failure by being more efficient than the first mover. However, while the analyzer orientation protects a firm from elements of uncertainty in the market, it also limits opportunities in highly dynamic markets (i.e. risk-return paradigm) or markets characterized by intensive competition. Analyzers are second movers in the marketplace and as such their attempts to capitalize on market opportunities are limited.

The prospector orientation works to find and exploit new product and market opportunities. These firms attempt to maintain a reputation as an innovator in product and market development (Miles and Snow, 1978). The prospector must develop and maintain the capacity to survey a wide range of local market conditions. They also are not limited to their current product line and are frequently the creators of change in their industry (first mover strategy) (Kabanoff and Brown, 2008). Flexibility is key to the prospector. One possible drawback to this strategy is that the prospector orientation may have difficulty in being effective as uncertainty increases (Luo and Park, 2001; Rajagopalan and Finkelstein, 1992). However, the proactive and aggressive market stance taken by prospectors aligns well with markets characterized by high level of dynamism or competition.

In summary, differing strategic orientations are apt to be more appropriate given local market conditions. First mover orientation and exploration of the new market through market scanning is most appropriate in highly dynamic and competitive environments. The first mover advantage will erode rapidly as second movers take advantage of the first movers' marketing tactics, so continuous innovation of new

products and marketing is appropriate. Hence, it is argued that the prospector orientation is the most appropriate for MNC subsidiaries when market dynamism and competitive intensity are heightened. More formally stated:

- H1. The greater the competitive intensity in a market, the greater the likelihood that a MNC subsidiary will use a prospector orientation over other strategic orientations.
- H2. The greater the market dynamism in a market, the greater the likelihood that an MNC subsidiary will use a prospector orientation over other strategic orientations.

*The influence of strategic orientation on knowledge management*

Strategic orientation has a direct influence on the firm's development of knowledge management capabilities. Subsidiaries of MNCs in the past were hierarchal driven (Prahalad and Doz, 1987). The expanded role of subsidiaries, such as the focus on strategic marketing and knowledge creation (Hewett and Bearden, 2001; Holm and Pedersen, 2000; Mudambi and Navarra, 2004; Roth *et al.*, 2009), has stimulated the need for more decentralized decision making. Autonomy in MNCs allows local subsidiaries to seek locally specific marketing innovation in the marketing mix (Venaik *et al.*, 2005). These local initiatives can then become intrafirm competencies transferable to other subsidiaries (Rugman and Verbeke, 2004; Roth *et al.*, 2009) as subsidiaries are not only embedded in local networks but throughout the MNC's network, influencing the MNC's strategic competencies (Andersson *et al.*, 2005; Hewett and Bearden, 2001). This is of great importance as learning and innovation for marketing is an increasingly important function for MNCs (Lee, 2010).

Knowledge of the marketplace is critical to strategic marketing formulation (Kohli and Jaworski, 1990) for subsidiaries as the cultural and institutional gaps between target and home markets are a liability of foreignness (Griffith, 2010; Sakarya *et al.*, 2007). As such, firms work to leverage their existing knowledge and create new knowledge to compete effectively (Grant, 1996; Gold *et al.*, 2001; Kabanoff and Brown, 2008; Zhang *et al.*, 2009). Building on previous research, we conceptualize knowledge management capabilities as consisting of three elements:

- (1) knowledge acquisition – those processes oriented toward the obtainment of external knowledge and has many terms: “acquire, seek, generate, create, capture, and collaborate” (Gold *et al.*, 2001, p. 190);
- (2) knowledge conversion – refers to those processes oriented toward making the acquired external knowledge useful (Gold *et al.*, 2001); and
- (3) knowledge application – those processes oriented toward the utilization of knowledge (Gold *et al.*, 2001).

Specifically, we theorize key strategic orientation relations to knowledge management capability aspects (see Figure 2).

*Knowledge acquisition*

The accumulation of knowledge requires more than simply the external sharing, dissemination and collaboration of experiences between firms, divisions or the industry/environment and the firm (Inkpen and Dinur, 1998). Rather, knowledge

		Knowledge Management Capabilities		
		Acquisition	Conversion	Application
Strategic orientation	Prospector	Constantly scanning product as well as entire industry to innovate	Decentralized, flexible, vertical and horizontal knowledge sharing	New entrepreneurial projects take precedence with resources allocated to innovations
	Defender	Focus more on technology to gain efficiencies	Centralized accumulation focussed on economies of scale and scope and manufacturing efficiency	Top management team determines effectiveness of efficiency before resource allocation
	Analyzer	Some R&D but primarily surveying market trends	Complicated matrix structure	Balance between stable and dynamic areas
	Reactor	Moderate to no knowledge acquisition	Market knowledge often ignored or misunderstood	Knowledge applied inappropriately or ignored

**Figure 2.**  
Strategic orientation –  
knowledge management  
relationships

acquisition requires a systematic effort on the part of the organization to recognize and capture external new knowledge (Drucker, 1993; Kohli and Jaworski, 1990) and internal knowledge transference among divisions may be a basis for competitive advantage (Argote and Ingram, 2000). For example, Kohli and Jaworski (1990), when conceptualizing market orientation, denote the central role of market intelligence generation in the firm's ability to be responsive to changing market needs. They further, when empirically investigating market orientation, find that the ability to transfer acquired knowledge among members of the firm enhance business performance (Jaworski and Kohli, 1993).

Acquisition of knowledge for the defender is to improve the use of existing internal knowledge and to become more effective in the acquisition of new technology (Inkpen and Dinur, 1998). As the defender is focussed on obtaining efficiencies, the defender will seek to obtain and develop technological and efficiency knowledge thus developing only limited knowledge acquisition. Knowledge acquisition for the analyzer is much more complicated in some ways, yet simpler in others, in comparison to both the prospector and the defender. The analyzer focusses on defending existing product markets through routine, efficient operations (defender) while quickly reacting to competitor's new product success and innovations (prospector). Therefore the duality forces the analyzer to acquire knowledge in the marketplace to locate new market opportunities and to respond to the market while maintaining a firm's core of traditional products (Luo and Park, 2001). Knowledge acquisition of the analyzer is much more limited than that of a prospector, though more active than that of a defender. Knowledge acquisition for reactors is moderate at best without concerted efforts or a high degree of experience in recognizing and capturing new knowledge.

Acquisition of knowledge for the prospector is very active as management is focussed on obtaining new knowledge related to the competitive environment and where consumer demands change rapidly. As innovation requires concerted efforts and a high degree of experience in recognizing and capturing new knowledge (Drucker, 1993), the prospector invests heavily in individuals and groups who scan the environment for potential opportunities (Miles *et al.*, 1978). The prospector emphasizes scanning, identifying and capitalizing on opportunities (Luo and Park, 2001). As the

uncertainty of the market increases, the prospector orientation is better able to adapt to changes of market needs, focussing on customer responsiveness and product differentiation due to its acquisition-oriented knowledge management. Thus, we hypothesize:

- H3. MNC subsidiaries employing the prospector strategy will pursue acquisition-oriented knowledge management more so than the other strategies.

#### *Knowledge conversion*

Knowledge conversion relates to a firm's ability to organize, integrate (Grant, 1996; Kohli and Jaworski, 1990), coordinate (Sanchez and Mahoney, 1996) and disseminate acquired external knowledge to internal usage within the firm (Davenport *et al.*, 1996, 1998; Zander and Kogut, 1995). Replacing old knowledge, reducing redundancies in efforts and integrating the acquired knowledge of many individuals is the focus of knowledge conversion. Thus, the strategic orientation of an organization is directly related to the firm's employment of the conversion process of knowledge.

The defender is a centrally controlled organization focussed upon economies of scale and scope. Knowledge conversion is embedded in a framework for organizing and structuring its knowledge to reach its goals of efficiency (Davenport and Klahr, 1998). As the process is highly centrally controlled and hierarchal, the capability is cumbersome and slow. The analyzer's conversion of the acquired knowledge is through a complex matrix structure that balances the exploitation of firm-specific competitive advantages and exploration of host country-specific comparative advantages (Ghoshal, 1987). The dual nature of the analyzer (maintaining a defender position and a prospector strategy) encourages firms to minimize the active seeking of new knowledge in an uncertain market, but to maintain the more certain and focussed knowledge conversion of the defender. As such, the analyzer's knowledge conversion management will be less intense than that of the prospector's due to their focus on continual innovation. The reactor's conversion of acquired knowledge or making use of existing knowledge is either ignored or misunderstood by the firm.

The prospector's organizational framework is decentralized with very flexible knowledge sharing (vertical and horizontal) which assists in knowledge conversion (Miller and Friesen, 1983). As a prospector organization is driven toward knowledge acquisition, centralized bureaucratic structures and processes will not be present to create internal barriers in the ability to transfer knowledge, present in most MNCs or subsidiaries (Bartlett and Ghoshal, 1998). Efforts to centralize authority (as in bureaucratic organizations) may encourage low system comprehension. Thus, autonomy in knowledge conversion is needed, such as under a prospector orientation, to encourage high levels of commitment and knowledge (Marcus, 1988). Therefore, we theorize:

- H4. MNC subsidiaries employing the prospector strategy will pursue conversion-oriented knowledge management more so than the other strategies.

#### *Knowledge application*

Knowledge application assists in product development, system development or modifications of structure (Gold *et al.*, 2001; Roth *et al.*, 2009; Zhang *et al.*, 2009). Effective storage and retrieval processes allow a firm to efficiently and effectively access knowledge for its application. As such, knowledge application is consistent with



Kohli and Jaworski's (1990) argumentation that the value of market knowledge is realized when market intelligence is not only disseminated throughout the organization, but is also acted upon. Through application a firm is able to establish and maintain a competitive position within the marketplace (Kohli and Jaworski, 1990).

The defender's top management team, after determining the importance of knowledge, applies it into new technologies to further guard their market. Application is the most important part of knowledge management for the defender as effective application of knowledge helps companies to improve their efficiency and reduce costs (Davenport and Klahr, 1998). The goal of the analyzer in the application of knowledge is to maintain a stable domain while introducing new products to achieve market flexibility by focussing on local as well as international markets. Reactors do not effectively apply any knowledge acquired to improve their efficiency and reduce costs.

The acquisition of knowledge, for example, analyzing local competitor moves and how they operate (Griffith *et al.*, 2006), and customer current and evolving preferences is complex (Foss and Pedersen, 2004). Knowledge acquisition itself is important (Kohli and Jaworski, 1990); however, the key to success is the configuration and integration into the subsidiary (DeLuca and Atuahene-Gima, 2007). The application of knowledge for the prospector is such that entrepreneurial projects take precedence in the allocation of resources, as this is the prospector's major strategic focus (Miles *et al.*, 1978). This approach is in stark contrast to the analyzer that attempts to maintain two positions and must allocate resources to more uncertain projects having a longer time horizon. This allows the prospector, that focusses its energies and prioritizes the employment of knowledge application, to be more sensitive to changing market conditions. Therefore, we theorize:

*H5. MNC subsidiaries employing the prospector strategy will pursue application-oriented knowledge management more so than the other strategies.*

## The study

### Sample

Data used to test the hypotheses consisted of 112 usable responses of foreign MNC subsidiaries located in Croatia. The sample frame consisted of the top local 300 Croatian firms that had foreign direct investment from a database provided by the Croatian National Bank. Foreign direct investment was defined within this database as at least 10 percent of the target firm's equity capital. The 300 subsidiary firms were initially contacted via mail and asked to have the person most knowledgeable about the operational interactions between the foreign MNC and the subsidiary complete the survey. Multiple follow-up phone calls and e-mails were used to stimulate additional responses.

In all, 112 subsidiaries responded in full to the key items in the questionnaire (i.e. strategy and knowledge management constructs), for a 37.3 percent response rate. Overall, 42 firms reported a prospector orientation, 35 reported an analyzer orientation, 13 a defender orientation and 22 a reactor orientation. Of those firms that responded with figures on the item "number of employees": 11 percent of the firms have over 1,000 employees, 39 percent of the firms have over 100 employees, and the percentage of firms with under 100 employees is 50 percent. Respondents who offered information in regard to where their MNC head office was located were: Belgium, Bosnia, EU, Germany, Greece, Hungary, Italy, Liechtenstein, Malaysia, Netherlands, Slovenia, Spain, Sweden and the UK.

Respondent MNC subsidiaries averaged 18 years of existence, encompassed a wide range of industries including agricultural, biotech, chemical, electric equipment, naval technology, plastics, printing, rubber manufacturing and electronics and averaged over \$1 million USD in annual sales revenue. In all, 35 percent of the respondents were senior executives (e.g. vice-president level or above) with the remaining 65 percent being senior managers. Respondents averaged 40 years of age, with male respondents averaging 43 and female respondents averaging 37. Per gender, 17 percent of the females were senior executives and 83 percent were senior managers, while 40 percent of the males were senior executives and 60 percent were senior managers.

Our research relies upon key informants, which is appropriate as the content of our inquiry could not be determined through secondary data only (Kumar *et al.*, 1993). However, key informant methodology has some significant drawbacks, e.g. informant bias and random error. Since our sample used key informants that occupy roles that make them knowledgeable about the issues being researched (i.e. senior management and above) and were able and willing to communicate with the researcher, we suggest that key informant bias is not of a major consideration (Campbell, 1955).

Consistent with the extant literature, non-response bias was tested by examining early v. late respondents. This technique is heavily used in the marketing literature and is based on the assumption that late respondents are most similar to non-respondents because their replies took the most effort and the longest time. In terms of the early v. late, 27 of the first returns and the 27 last returns (approximating the first 25 percent and last 25 percent) were utilized for comparison. There was a slight difference in relation to competitive intensity with early respondents having slightly greater competition than late respondents. No differences were observed related to knowledge management capability constructs. Given these findings, non-response bias is not deemed problematic.

#### *Pre-test*

Pre-testing was conducted in multiple stages. First we worked to refine the English version of the survey instrument. The survey was developed based upon pre-existing measures. The pre-test consisted of 13 international market researchers, business professionals and translators. These participants examined the proposed survey packet and proposed modifications to minimize misinterpretation. Next, the survey instrument was translated into Croatian by an independent translator. The survey was then back-translated by committee and then checked for form and meaning equivalence with adjustments being made as necessary (cf., Douglas and Craig, 2006).

#### *Measures*

Strategic orientation was conceptualized under Miles and Snow's (1978) typology of strategy. We utilized the Miles and Snow's measures as they have been used considerably over the years since the introduction in 1978 and continue to be used and tend to focus on a business's market effectiveness (e.g. Lukas, 1999; Luo and Park, 2001). The Miles and Snow's measures are often used in international marketing research and, for example, recent research utilized a *K*-means cluster analysis to compare marketing types (aggressive marketers, mass marketers, marketing minimizers and value marketers) to Miles and Snow's taxonomy (Slator and Olson, 2001). Other examples of recent research utilizing Miles and Snow's measures are applied to research and development and marketing cooperation in an international setting (Lu and Yang, 2004) and exploring proactive marketing during a recession

(Srinivasan *et al.*, 2005). Following Snow and Hrebiniak (1980), and Lukas (1999), strategic orientation was operationalized via a self-report based upon four descriptive paragraphs relating to each strategic archetype (see Appendix). Respondents were asked to indicate which of the four strategic archetypes reflected the MNC subsidiary's approach compared to other firms in the industry. Respondents were directed to select only one strategic archetype.

Knowledge management capabilities were captured in relation to the conceptualization by Gold *et al.* (2001). Gold *et al.*'s (2001) approach has been amply employed within the international literature, in contexts such as innovation (Cegarra-Navarro *et al.*, 2012), knowledge transfer from foreign subsidiaries to corporate headquarters (Ambos *et al.*, 2006) and knowledge as a mediator to performance (Dröge *et al.*, 2003). Of important note is that in this study we employed a reduced version of the Gold *et al.* measures for knowledge acquisition, conversion and application. Items were selected based upon their perceived applicability to the context under study and to maintain feasibility in survey administration.

Knowledge acquisition was conceptualized as those processes oriented toward the obtainment of knowledge and was assessed using a five-item, seven-point, Likert-type scale derived from Gold *et al.* (2001). The scale assessed the respondent's disagreement or agreement with whether the firm has processes for generating new knowledge from existing knowledge; uses feedback from customers and business partners to improve subsequent products and services; has processes for acquiring knowledge about our customers; has processes for acquiring knowledge about its business partners; and has processes for exchanging knowledge with its business partners. Coefficient  $\alpha$  for the scale was 0.88.

Knowledge conversion was conceptualized as those processes oriented toward making existing knowledge useful and was assessed using a four-item, seven-point, Likert-type scale derived from Gold *et al.* (2001). The scale assessed the respondent's disagreement or agreement with whether the firm has ways of converting knowledge into the design of new products or services; has processes for integrating different sources and types of knowledge; has processes for organizing knowledge; and has processes for converting competitive intelligence into plans of action. Coefficient  $\alpha$  for the scale was 0.89.

Knowledge application was conceptualized as those processes oriented toward knowledge utilization and was assessed using a four-item, seven-point, Likert-type scale derived from Gold *et al.* (2001). The scale assessed the respondent's disagreement or agreement with whether the firm has processes for applying knowledge learned from mistakes; quickly applying knowledge to critical competitive needs, applying knowledge learned from experiences; and using knowledge to solve new problems. Coefficient  $\alpha$  for the scale was 0.84.

Local market conditions were characterized by market dynamism and competitive intensity. Market dynamism was conceptualized as a multi-dimensional construct encompassing environmental demands and business practices and was measured via a two-item, seven-point, Likert-type scale derived from Jap (1999). The two items assessed were the environment demands on our firm are constantly changing and the business practices in our industry are constantly changing. The correlation coefficient for the scale was 0.62. Competitive intensity was conceptualized as the level of competition within the environment generating a dynamic and uncertain operating environment. Following Grewal and Tansuhaj, (2001) and Jaworski and Kohli (1993), a four-item, seven point Likert-type scale assessed the extant of competition in terms of

general competition, promotional wars, price competition and new competitive moves. Coefficient  $\alpha$  for the scale was 0.89.

#### *Control variables*

Firm size (measured as number of employees) plays an important role in an MNC subsidiary's knowledge management. It can be argued that while larger firms may have the resources to develop knowledge management acquisition and conversion they may also have a more bureaucratic structure thus limiting the firm's ability to apply knowledge. Alternatively, it can be argued that while smaller firms may be able to apply knowledge more timely, they may lack the resources necessary to develop appropriate knowledge acquisition or conversion capabilities.

Industry also may play a significant role in knowledge management capabilities. The type of market can influence how a firm's resources are organized, employed and subsequently integrated. The market type also effects knowledge as it becomes the most strategically significant resource of the organization as the increasing turbulence of the external business environment has focussed attention upon resources and organizational capabilities (Grant, 1996). We thus control for industry effects by using Hitt and Ireland's (1985) industry typology. MNC subsidiaries were classified as consumer durable (goods are purchased for personal gratification and last for long periods of time – automobile), consumer non-durable (goods are purchased for personal gratification and last for short periods of time-processed foods), capital (goods are used to manufacture or provide consumer or producer goods to others – machinery, buildings) and producer (goods are used as raw material to produce consumer of capital goods – steel, cement). Dummy coding was used for industry effects (1: consumer durables, 2: consumer non-durables, 3: capital goods, 4: producer goods).

International experience (measured as years in international business) also has the potential to influence knowledge management. Subsidiaries with less international experience may be subject to a high level of internal stability, weak and irregular links with external publics and over reliance on the MNC which could influence the MNC subsidiaries approach to knowledge management.

### **Analysis and results**

#### *Measurement issues*

Prior to analyzing the hypotheses it was necessary to validate the measures of knowledge management and test for common method variance. First, following the approach undertaken by Gold *et al.* (2001) we began by testing the validity of the knowledge management measures using confirmatory factor analysis. We followed the procedure recommended by Bagozzi and Yi (1988). The generalized least squares (GLS) procedure of AMOS 19.0 was used to fit the measurement model. GLS was used over maximum likelihood (ML) as this approach is less constrained by the small sample size of this study. The  $\chi^2$  statistic was 83.42 based on 58 degrees of freedom ( $p < 0.05$ ). The GFI was 0.884 and the root mean squared error of approximation (RMSEA) was 0.063. Next, the composite reliability of the measures were calculated (knowledge acquisition = 0.89, knowledge conversion = 0.93 and knowledge application = 0.88). Further, all of the factor loadings for each of the constructs were found to be large (range: 0.670-0.871) and significant ( $t$ -values  $> 1.96$ ), indicating convergent validity.

Following Fornell and Larcker (1981), discriminant validity was assessed by comparing the average variance extracted for each multi-item construct with the shared variances between all relevant pairs (see Table I for each construct's AVE and

shared variance). The three constructs failed to meet the requirements of the Fornell and Larcker (1981). This result was not surprising as the Fornell and Larcker (1981) procedure was developed for independent constructs and the knowledge acquisition, knowledge conversion and knowledge application are related. Therefore, to assess whether the individual knowledge management elements of knowledge acquisition, knowledge conversion and knowledge application are most appropriately modeled as three related constructs, discriminant validity of these three dimensions was established utilizing by analyzing the correlations between the constructs; examining the loading factors of the items on each of the individual knowledge management elements under CFA; and performing sequential model testing. First, following Anderson and Gerbing (1988), the correlations between each of the individual knowledge management constructs were found to be significantly less than one, providing some evidence of discriminant validity. Second, the fact that the individual knowledge management items loaded on their respective knowledge management capability and modification indices under CFA did not indicate a need for cross-loading of items across constructs provides further evidence of discriminant validity. Finally, sequential model testing was utilized to test whether the items for knowledge management capabilities are better modeled as one construct, three independent constructs or three related constructs (see Table II).  $\chi^2$ -difference testing indicates significant differences between the three models (e.g. the one-factor model and the interdependence model are significantly different ( $\Delta\chi^2 = 10.27$ ;  $df = 3$ )). These findings, coupled with the better fit statistics (GFI and RSMEA) for the interdependence model, as opposed to the one-factor model or the independence model suggests that the three knowledge management elements are most appropriately modeled as three separate,

	Knowledge acquisition	Knowledge conversion	Knowledge application
Knowledge acquisition	0.653	0.719	0.781
Knowledge conversion	0.848	0.758	0.775
Knowledge application	0.884	0.869	0.609

**Note:** Correlations are below the diagonal, shared variances are above the diagonal and average variance extracted on the diagonal

**Table I.**  
Discriminant validity  
testing

Model	Internal value
One-factor model	$\chi^2 = 93.694$ $df = 61$ GFI = 0.870 RMSEA = 0.069
Three-factor model (independent)	$\chi^2 = 117.300$ $df = 61$ GFI = 0.837 RMSEA = 0.091
Three-factor model (interdependent)	$\chi^2 = 83.424$ $df = 58$ GFI = 0.884 RMSEA = 0.063

**Table II.**  
Sequential model testing  
of knowledge  
management process  
constructs

but related constructs. These results provide additional evidence for discriminant validity.

The threat of common method variance among the constructs was investigated via the Harman one-factor test. Knowledge management constructs, along with competitive intensity and market dynamism were examined (strategy was not included given its categorical nature). Principal component analysis resulted in a two-factor solution wherein knowledge management constructs loaded on the first factor and local market condition constructs loaded on a second factor. The first factor accounted for 64 percent of the variance while the second factor accounted for 21 percent of the variance. Given these results, common method variance appears to be minimal. Table III presents the descriptive statistics and Pearson correlation coefficients for the non-strategic orientation variables (descriptive statistics by strategic orientation variables are presented in Tables IV and V).

**Table III.**  
Means, standard  
deviations and  
correlations

	Mean	SD	2	3	4	5	6	7
Market dynamism	4.62	1.51						
Competitive intensity	5.05	1.68	0.497**					
Knowledge acquisition	4.44	1.25	0.432**	0.245**				
Knowledge conversion	4.06	1.49	0.491**	0.254**	0.848**			
Knowledge application	4.33	1.38	0.432**	0.300**	0.886**	0.871**		
Firm size	544.00	1,476.68	0.094	0.072	0.076	0.141	0.091	
International experience	18.06	19.94	0.106	0.276*	0.159	0.171	0.131	0.126

**Notes:** \*\*\*Correlation is significant at the 0.01 and 0.05 levels, respectively

**Table IV.**  
MANCOVA on results of  
strategy-knowledge  
management linkage

	Prospector	Analyzer	Defender	Reactor	Univariate <i>F</i>	Significance	Multivariate <i>F</i>	Significance
Knowledge acquisition	5.13 (1.15)	4.34 (1.12)	3.54 (1.30)	3.83 (0.92)	10.464 df(3, 108)	0.001		
Knowledge conversion	5.11 (1.18)	4.15 (1.29)	3.49 (1.26)	3.61 (1.22)	10.454 df(3, 108)	0.001		
Knowledge application	4.99 (1.34)	3.79 (1.29)	2.85 (1.27)	3.43 (1.22)	13.191 df(3, 108)	0.001		
Strategy							2.233 df(9, 158) $\lambda = 0.748$	0.023
Firm size							1.025 df(3, 65) $\lambda = 0.955$	0.387
International experience							0.589 df(3, 65) $\lambda = 0.974$	0.624
Industry							0.405 df(3, 65) $\lambda = 0.982$	0.750

	Prospector	Analyzer	Defender	Reactor
Market dynamism	5.45 (1.41)	4.41 (1.33)	3.65 (1.29)	3.95 (1.37)
Competitive intensity	5.88 (1.21)	4.96 (1.52)	4.25 (2.04)	4.10 (1.75)
Firm size	471.50 (1,561.95)	509.97 (964.83)	143.54 (226.94)	992.43 (2,219.25)
International experience	21.12 (20.50)	15.73 (19.89)	7.77 (11.78)	24.83 (22.50)
Industry	2.10 (0.928)	2.18 (0.983)	2.40 (0.843)	2.22 (0.943)

**Table V.**Descriptors across  
strategy**Note:** Means are presented with standard deviations being presented in parentheses

### Results

Discriminant analysis was used to examine the relationship between strategic orientations and local market conditions as proposed in *H1* and *H2*. The discriminant function, presented in Table VI, is highly significant and presents interpretable results. The overall Wilks'  $\lambda$  was significant,  $\lambda = 0.74$ ,  $\chi^2 = 32.641$ ,  $p < 0.001$ , indicating that the overall predictors differentiated among the four strategic orientations. The correlation and standardized coefficients for competitive intensity and market dynamism are 0.590 and 0.838 and 0.614 and 0.823, respectively. Furthermore, the unstandardized canonical discriminant functions evaluated across strategy orientation centroids were: prospector ( $\bar{X} = 0.707$ ), analyzer ( $\bar{X} = -0.122$ ), defender ( $\bar{X} = -0.735$ ) and reactor ( $\bar{X} = -0.658$ ). The results support the proposed linkages presented in *H1* and *H2* between environment and strategic orientation (Tables IV-VII).

MANCOVA was used to test the linkage between strategic orientation and knowledge management capabilities as proposed in *H3-H5*, controlling for firm size, industry (dummy coded) and international experience. The results in Table IV show consistently significant differences in knowledge management capabilities across strategic orientations (Wilks'  $\lambda = 0.748$ ,  $F = 2.235$ ,  $df = 9/158$ ,  $p = 0.023$ ). Further, the results demonstrate that the differences in knowledge management capabilities were not associated with the covariates employed in the analysis: firm

Variables	Correlation coefficients	Standardized coefficients
<i>Dependent</i>		
Strategy		
<i>Independent</i>		
Competitive intensity	0.590	0.838
Market dynamism	0.614	0.823
Eigenvalue	0.350	
Canonical correlation	0.509	
$\eta^2$	0.259	

**Table VI.**Discriminant analysis of  
the environment-strategy  
alignment**Notes:** Wilks'  $\lambda$  was significant,  $\lambda = 0.74$ ,  $\chi^2 = 32.641$ ,  $p < 0.001$

	Prospector	Analyzer	Defender
<i>Knowledge acquisition</i>			
Analyzer	0.786 (0.014)		
Defender	1.590 (0.001)	0.804 (0.124)	
Reactor	1.301 (0.001)	0.516 (0.329)	-0.288 (0.881)
<i>Knowledge conversion</i>			
Analyzer	1.195 (0.001)		
Defender	2.142 (0.001)	0.947 (0.117)	
Reactor	1.556 (0.001)	0.361 (0.736)	-0.586 (0.570)
<i>Knowledge application</i>			
Analyzer	0.966 (0.005)		
Defender	1.622 (0.001)	0.656 (0.360)	
Reactor	1.505 (0.001)	0.540 (0.377)	0.117 (0.993)

**Table VII.** Note: Mean differences between strategies are presented with *p*-values being presented in parentheses  
Post hoc MANOVA testing

size (Wilks'  $\lambda = 0.955$ ,  $F = 1.025$ ,  $df = 3/65$ ,  $p = 0.387$ ); international experience (Wilks'  $\lambda = 0.974$ ,  $F = 0.589$ ,  $df = 3/65$ ,  $p = 0.624$ ); industry (Wilks'  $\lambda = 0.982$ ,  $F = 0.405$ ,  $df = 3/65$ ,  $p = 0.750$ ).

To explore the differences in the linkages between strategic orientation and knowledge management capabilities, a MANOVA was conducted with post hoc testing (see Table V). MANOVA results indicate the significance of the strategy to knowledge management linkage (Wilks'  $\lambda = 0.702$ ,  $F = 4.84$ ,  $df = 9/258$ ,  $p < 0.001$ ,  $\eta^2 = 0.111$ ). Tukey analysis was conducted to examine the difference across groups. Results indicate that the prospector orientation was most closely aligned with knowledge acquisition in relation to the analyzer ( $\bar{X}_{P-A} = 0.786$ ,  $p < 0.015$ ), defender ( $\bar{X}_{P-D} = 1.590$ ,  $p < 0.001$ ) or reactor ( $\bar{X}_{P-R} = 1.301$ ,  $p < 0.001$ ) orientations. No differences in knowledge acquisition were observed across analyzer, defender and reactor orientations. Thus, *H3* was supported. Results indicate that the prospector orientation was most closely aligned with knowledge conversion in relation to the analyzer ( $\bar{X}_{P-A} = 1.195$ ,  $p < 0.001$ ), defender ( $\bar{X}_{P-D} = 2.142$ ,  $p < 0.001$ ) or reactor ( $\bar{X}_{P-R} = 1.556$ ,  $p < 0.001$ ) orientations. No differences in knowledge conversion were observed across analyzer, defender and reactor orientations. Thus, *H4* was supported. Similarly, results indicate that the prospector orientation was most closely aligned with knowledge application in relation to the analyzer ( $\bar{X}_{P-A} = 0.966$ ,  $p < 0.005$ ), defender ( $\bar{X}_{P-D} = 1.622$ ,  $p < 0.001$ ) or reactor ( $\bar{X}_{P-R} = 1.505$ ,  $p < 0.001$ ) orientations. No differences in knowledge application were observed across analyzer, defender and reactor orientations. Thus, *H5* was supported.



---

## Discussion and conclusion

This purpose of this study was to advance the literature by providing a broader understanding of the relationship between local market conditions and strategic orientation of the MNC subsidiary under the strategic alignment approach, and gaining a deeper understanding of the relationship that the strategic orientation of an MNC subsidiary has on its knowledge management capabilities. The findings provide unique insights into each of these areas, substantively enhancing the international marketing literature.

Broadening the extant literature (i.e. Luo and Park, 2001), the results of this study demonstrate that the reactor orientation is a substantive segment of the MNC subsidiary marketplace. In fact, almost 20 percent of respondent MNC subsidiaries reported adopting the reactor orientation. These findings, purely from a descriptive perspective, indicate the importance of including the full Miles and Snow strategic orientation typology when investigating MNC subsidiaries. Furthermore, the findings pertaining to reactor orientation suggest similarity to defender orientation when considering adoption of strategic orientation and alignment to local market conditions of competitive intensity and market dynamism. Theoretically, the prevalence of reactor orientation is of note as it suggests that if we are to gain a better understanding of MNC subsidiary relation to markets, we need to broadly approach the concept of strategic orientation.

Specifically to the issue of alignment, the findings indicate that MNC subsidiaries tend to favor a prospector orientation when faced with higher levels of market dynamism and competitive intensity (prospector:  $n = 42$ , analyzer:  $n = 35$ , reactor:  $n = 22$ , defender:  $n = 13$ ). While international marketing scholars have increasingly been adopting the Miles and Snow typology (e.g. Song *et al.*, 2008), this work demonstrates that MNC subsidiaries carefully consider the local market contexts in which they operate when determining strategic orientation. In fact, the results clearly demonstrate that the prospector orientation is aligned to highly dynamic and competitive market conditions, thus suggesting the proactive approach inherent within the prospector orientation is perceived by managers to assist in gaining the subsidiary in its underlying roles.

However, although the results indicate that the prospector orientation is related to higher levels of market dynamism and competitive intensity, it is important to note that the prospector orientation was not the only orientation adopted by MNC subsidiaries. In fact, the analyzer orientation was heavily adopted by MNC subsidiaries (both the prospector and analyzer orientations account for the majority of the MNC subsidiary strategic orientations selected). Our findings are in contrast to Luo and Park (2001) who examined the environment to strategy linkage in the emerging market of China. Their findings suggest that MNC subsidiaries adopt an analyzer strategy due to highly uncertain conditions of the Chinese market. Explanations for the inconsistency in the findings may derive from the unique differences between the Chinese market and the Croatian market, from the operationalization of local market conditions, or from the more inclusive strategic orientation approach undertaken here. All of these areas can serve as fruitful areas of investigation to further understand the importance linkage between local market conditions and MNC subsidiary strategic orientation.

The findings of this study also provide clear support for the linkage between strategic orientation and knowledge management capabilities. As theorized and empirically supported in this study, prospectors develop advanced knowledge acquisition, conversion and application capabilities to allow them to more appropriately exploit

opportunities in the highly uncertain and dynamic environment. Through the development of knowledge management prospectors are able to optimize resource investments while coordinating efficiently and effectively with their MNC. The ability of MNC subsidiaries to capitalize on market opportunities requires that the MNC subsidiary have knowledge management capabilities. While some may argue that under highly uncertain and dynamic local market conditions MNC subsidiaries may adopt a defender orientation to minimize risks, the study results indicate that few MNC subsidiaries adopt this orientation as it does not provide the MNC subsidiaries with opportunities for market exploitation, a key rationale for MNC subsidiary establishment.

Also, while it can be argued that MNC subsidiaries adopting an analyzer orientation minimize the risks associated with the dynamic market while concurrently adopting a strategic stance to allow for market exploitation, the actual reluctance to take a more aggressive posture in the market, such as a prospector orientation, may diminish an analyzer's long-term prospects. Analyzers may lack the necessary capabilities to exploit opportunities when they appear. By being a second mover, analyzers may relinquish market opportunities to those employing a more aggressive strategic posture.

Managerially, the results suggest that MNC's allow subsidiaries autonomy in determining their strategic orientation (as gauged by the diversity of strategic orientations undertaken in the sample and their alignment with the environment), assisting in assessing issues of market dynamism and competitive intensity within each subsidiary's local market. Appropriate alignment will assist in the development of knowledge management capabilities at the MNC subsidiary level. It can be further argued that the development of knowledge management capabilities at the MNC subsidiary level has important implications for the MNC itself (although not tested here) in that greater local knowledge at the MNC subsidiary level could be transferred into the MNC's global network. That is to say, as MNC managers are increasingly in need of local knowledge (e.g. Hewett and Bearden, 2001; Roth *et al.*, 2009), the active management of the MNC's subsidiary portfolio by the MNC could result in competitive global positioning for the MNC.

### *Limitations*

While this study has provided a number of new insights, as with prior studies, it has its limitations. First, perceptual measures were used in this study. Some researchers contend that objective measures are more appropriate (Sawyer, 1993). However, a substantial research history exists supportive of the fact that managers operate based upon perceptions and that therefore perceptual measures of issues such as environmental change is appropriate (e.g. Luo and Park, 2001; Weick, 1969). For example, in this study local market conditions were assessed via managerial perception of market dynamism and competitive intensity. Although the objective measurement may differ from the subjective measurement obtained here, strategic choice theory is founded on the rationale that managers operate based upon their perceptions in determining strategy. Future research may wish to assess the alignment of perception and objective measures of local market conditions and strategic orientation to provide for a more robust assessment of strategic alignment.

Second, one single informant was used per MNC subsidiary. Several researchers have advocated querying multiple informants to increase the reliability and validity of reports (Bagozzi *et al.*, 1991; Golden, 1992). For example, response errors are likely to be high for informants whose roles are not closely associated with the phenomena under

study (Kumar *et al.*, 1993). In this study we focussed on informants who had sufficient expertise in the MNC subsidiary. However, multiple informants would strengthen the research. Similarly, informant bias may result due to individuals attempting to project a socially desirable image by casting a light of rationality upon their past decisions (Feldman and March, 1981); respondents with good intentions may misrepresent the past as a result of the hindsight bias (Fischhoff and Beyth, 1975) or of subconscious attempts to maintain their self-esteem (Nisbett and Wilson, 1977); and that individual differences will affect the likelihood to accurately recall past events (Huber and Power, 1985). These factors suggest that researchers consider opportunities to minimize informant bias issues in future research.

Third, an additional limitation exists in that this study assumes the direction of causality from the environment to strategic orientation. Clearly there is substantial interaction between the MNC subsidiary's environment and the MNC subsidiary's strategic orientation. Most notably, the environment studied here was at the competitive and consumer market level. As more firms in the marketplace adopt a prospector orientation, market development becomes accelerated. For example, as more firms in a market engage in a prospector orientation they continually strive to introduce new products into the market. As such, individual product life cycles become shorter as newer products are introduced into the market. Existing products are pushed from the growth stage to the maturity stage of the product life cycle, enhancing the overall competitive intensity due to reduced margins. At the same time, the introduction of new products influences consumer demands that can significantly alter business practices. Longitudinal examination of managerial strategic orientation adoption would allow greater understanding of the interactive strategic alignment process.

Fourth, although the focus of this work was on the fit of strategy of MNC subsidiaries to the environment for knowledge creation, performance effects were not examined. Kohli and Jaworski (1990) argue that through market intelligence that a firm is able to enhance business performance. Performance effects could actually be studied at two levels. For example, if MNC subsidiaries are able to appropriately align knowledge management to the local market, the subsidiary's performance should be improved. As such, future research examining subsidiary-level performance effects (e.g. sales, profits, return on investment) would be useful. Furthermore, MNC-level performance could be examined. For example, it would be useful to examine whether MNC subsidiary knowledge management influences MNC performance (both from the individual subsidiary perspective as well as from the MNC's subsidiary portfolio perspective). That is to say, does the local alignment of strategy to environment at the local MNC subsidiary level, transfer to MNC itself. This issue, while of interest, brings forth critical issues related to levels of analysis in international research that researchers should examine carefully (cf., Oliveira *et al.*, 2012).

In conclusion, as demonstrated in this study, the alignment of strategy to local market conditions has the potential to provide significant insights for researchers and practitioners. However, the field is only beginning to develop a strong theoretical framework. The intricacy of this linkage is much richer than the simplified relationship examined here. The myriad contextual differences across countries plays a vital role in shaping strategy and capabilities. Thus, a continued research effort is needed to develop a strong theoretical framework for understanding these intricate international marketing strategy implications.

---

**References**

- Alam, I. (2006), "Service innovation strategy and process: a cross-national comparative analysis", *International Marketing Review*, Vol. 23 No. 3, pp. 234-54.
- Ambos, T.C., Ambos, B. and Schlegelmilch, B.B. (2006), "Learning from foreign subsidiaries: an empirical investigation of headquarters' benefits from reverse knowledge transfers", *International Business Review*, Vol. 15 No. 3, pp. 294-312.
- Anderson, J.C. and Gerbing, D.W. (1988), "Structural equation modeling in practice: a review and recommended two-step approach", *Psychological Bulletin*, Vol. 103 No. 3, pp. 411-23.
- Andersson, U., Björkman, I. and Forsgren, M. (2005), "Managing subsidiary knowledge creation: the effect of control mechanisms on subsidiary local embeddedness", *International Business Review*, Vol. 14 No. 5, pp. 521-38.
- Argote, L. and Ingram, P. (2000), "Knowledge transfer: a basis for competitive advantage in firms", *Organizational Behavior and Human Decision Processes*, Vol. 82 No. 1, pp. 150-69.
- Astley, W.G. and Van de Ven, A.H. (1983), "Central perspectives and debates in organization theory", *Administrative Science Quarterly*, Vol. 28 No. 2, pp. 245-73.
- Backhaus, K. and van Doorn, J. (2007), "Consumer perceptions of advertising standardization: a cross-country study of different advertising categories", *International Management Review*, Vol. 3 No. 4, pp. 37-52.
- Bagozzi, R.P. and Yi, Y. (1988), "On the evaluation of structural equation models", *Journal of the Academy of Marketing Science*, Vol. 16 No. 1, pp. 74-94.
- Bagozzi, R.P., Yi, Y. and Phillips, L.W. (1991), "Assessing construct validity in organizational research", *Administrative Science Quarterly*, Vol. 36 No. 3, pp. 421-58.
- Bartlett, C.A. and Ghoshal, S. (1998), "Beyond strategic planning to organization learning: lifeblood of the individualized corporation", *Strategy and Leadership*, Vol. 26 No. 1, pp. 34-9.
- Campbell, D.T. (1955), "The informant in quantitative research", *The American Journal of Sociology*, Vol. 60 No. 4, pp. 339-42.
- Cegarra-Navarro, G., Cepeda-Arrión, J. and Jiménez-Jiménez, D. (2012), "The effect of absorptive capacity on innovativeness: context and information systems capability as catalysts", *British Journal of Management*, Vol. 23 No. 1, pp. 110-29.
- Child, J. (1972), "Organizational structure, environment, and performance: the role of strategic choice", *Sociology*, Vol. 6 No. 1, pp. 2-22.
- Cui, A.S., Griffith, D.A. and Cavusgil, S.T. (2005), "The influence of competitive intensity and market dynamism on knowledge management capabilities of MNC subsidiaries", *Journal of International Marketing*, Vol. 13 No. 3, pp. 32-53.
- Davenport, T., DeLong, D. and Beers, M. (1998), "Successful knowledge management projects", *Sloan Management Review*, Vol. 39 No. 2, pp. 43-57.
- Davenport, T., Jarvenpaa, S. and Beers, M. (1996), "Improving work knowledge processes", *Sloan Management Review*, Vol. 37 No. 4, pp. 53-65.
- Davenport, T.H. and Klahr, P. (1998), "Managing customer support knowledge", *California Management Review*, Vol. 40 No. 3, pp. 195-209.
- DeLuca, L. and Atuahene-Gima, K. (2007), "Market knowledge dimensions and cross-function collaboration: examining the difference routes to product innovation and performance", *Journal of Marketing*, Vol. 71 No. 1, pp. 95-112.
- Di Benedetto, C.A. and Song, M. (2003), "The relationship between strategic type and firm capabilities in Chinese firms", *International Marketing Review, Special Issue on Marketing in China*, Vol. 20 No. 5, pp. 514-33.

- 
- Dong, M.C., Tse, D.K. and Hung, K. (2010), "Effective distributor governance in emerging markets: the salience of distributor role, relationship stages, and market uncertainty", *Journal of International Marketing*, Vol. 18 No. 3, pp. 1-17.
- Douglas, S.P. and Craig, C.S. (2006), "On improving the conceptual foundations of international marketing research", *Journal of International Marketing*, Vol. 14 No. 1, pp. 1-22.
- Douglas, S.P. and Craig, C.S. (2011), "Convergence and divergence: developing a semi-global marketing strategy", *Journal of International Marketing*, Vol. 19 No. 1, 82-101.
- Dröge, C., Claycomb, C. and Germain, R. (2003), "Does knowledge mediate the effect of context on performance? Some initial evidence", *Decision Sciences*, Vol. 34 No. 3, pp. 541-68.
- Drucker, P. (1993), *Post-Capitalist Society*, Butterworth Heinemann, New York, NY.
- Feldman, M.S. and March, J.G. (1981), "Information in organizations as signal and symbol", *Administrative Science Quarterly*, Vol. 26 No. 2, pp. 171-86.
- Fischhoff, B. and Beyth, R. (1975), "I knew it would happen: remembered probabilities of once future things", *Organizational Behavior and Human Performance*, Vol. 13 No. 1, pp. 1-16.
- Fornell, C. and Larcker, D.F. (1981), "Structural equation models with unobservable variables and measurement error: algebra and statistics", *Journal of Marketing Research*, Vol. 18 No. 3, pp. 382-8.
- Foss, N. and Pedersen, T. (2004), "Organizing knowledge processes in the multinational corporation: an introduction", *Journal of International Business Studies*, Vol. 35 No. 5, pp. 340-9.
- Ghoshal, S. (1987), "Global strategy: an organizing framework", *Strategic Management Journal*, Vol. 8 No. 5, pp. 425-41.
- Gold, A.H., Malhotra, A. and Segars, A.H. (2001), "Knowledge management: an organizational capabilities perspective", *Journal of Management Information Systems*, Vol. 18 No. 1, pp. 185-214.
- Golden, B.R. (1992), "The past is the past – or is it? The use of retrospective accounts as indicators of past strategy", *Academy of Management Journal*, Vol. 35 No. 4, pp. 848-60.
- Grant, R.M. (1996), "Toward a knowledge-based theory of the firm", *Strategic Management Journal*, Vol. 19 (Special Issue), pp. 109-22.
- Grewal, R. and Tansuhaj, P. (2001), "Building organizational capabilities for managing economic crisis: the role of market orientation and strategic flexibility", *Journal of Marketing*, Vol. 65 No. 2, pp. 67-80.
- Griffith, D. (2010), "Understanding multi-level institutional convergence effects on international market segments and global marketing strategy", *Journal of World Business*, Vol. 45 No. 1, pp. 59-67.
- Griffith, D., Noble, S. and Chen, Q. (2006), "The performance implications of entrepreneurial proclivity: a dynamic capabilities approach", *Journal of Retailing*, Vol. 82 No. 1, pp. 51-62.
- Hewett, K. and Bearden, W. (2001), "Dependence, trust, and relational behavior on the part of foreign subsidiary marketing operations: implications for managing global marketing operations", *Journal of Marketing*, Vol. 65 No. 4, pp. 51-66.
- Hitt, M.A. and Ireland, R.D. (1985), "Strategy, contextual factors and performance", *Human Relations*, Vol. 38 No. 8, pp. 793-812.
- Holm, U. and Pedersen, T. (2000), *The Emergence and Impact of MNC Centres of Excellence: A Subsidiary Perspective*, Palgrave MacMillan, New York, NY.
- Hoque, Z. (2004), "A contingency model of the association between strategy, environmental uncertainty and performance measurement: impact on organizational performance", *International Business Review*, Vol. 13 No. 4, pp. 485-502.

- Huber, G.P. and Power, D.J. (1985), "Retrospective reports of strategic level managers: guidelines for increasing their accuracy", *Strategic Management Journal*, Vol. 6 No. 2, pp. 171-80.
- Inkpen, A.C. (1998), "Learning and knowledge acquisition through international strategic alliances", *Academy of Management Review*, Vol. 12 No. 4, pp. 69-80.
- Inkpen, A.C. and Dinur, A. (1998), "Knowledge management processes and international joint ventures", *Organization Science*, Vol. 9 No. 4, pp. 454-68.
- Jap, S.D. (1999), "Pie-expansion efforts: collaboration processes in buyer-seller relationships", *Journal of Marketing Research*, Vol. 36 No. 4, pp. 461-75.
- Jaworski, B.J. and Kohli, A.K. (1993), "Market orientation: antecedents and consequences", *Journal of Marketing*, Vol. 57 No. 3, pp. 53-70.
- Kabanoff, B. and Brown, S. (2008), "Knowledge structures of prospectors, analyzers, and defenders: content, structure, stability, and performance", *Strategic Management Journal*, Vol. 29 No. 2, pp. 49-171.
- Kohli, A.K. and Jaworski, B.J. (1990), "Market orientation: the construct, research propositions, and managerial implications", *Journal of Marketing*, Vol. 54 No. 2, pp. 1-18.
- Kumar, N., Stern, W. and Anderson, J.C. (1993), "Conducting interorganizational research using key informants", *Academy of Management Journal*, Vol. 36 No. 6, pp. 1633-51.
- Lee, R.P. (2010), "Extending the environment-strategy-performance framework: the roles of multinational corporation network strength, market responsiveness, and product innovation", *Journal of International Marketing*, Vol. 18 No. 4, pp. 58-73.
- Lu, L. and Yang, C. (2004), "The R&D and marketing cooperation across new product development stages: an empirical study of Taiwan's IT industry", *Industrial Marketing Management*, Vol. 33 No. 7, pp. 593-605.
- Lukas, B.A. (1999), "Strategic fit, market orientation, and the balance between adaptability and adaptation", *Journal of Business Research*, Vol. 45 No. 2, pp. 147-56.
- Luo, Y. and Park, S.H. (2001), "Strategic alignment and performance of market-seeking MNCs in China", *Strategic Management Journal*, Vol. 22 No. 2, pp. 141-55.
- Marcus, A. (1988), "Implementing externally induced innovations: a comparison of rule bound and autonomous approaches", *Academy of Management Journal*, Vol. 31 No. 2, pp. 235-56.
- Miles, R.E. and Snow, C.C. (1978), *Organizational Strategy, Structure and Process*, McGraw-Hill, New York, NY.
- Miles, R.E., Snow, C.C., Meyer, A.D. and Coleman, H.J. Jr (1978), "Organizations strategy, structure, and process", *Academy of Management Review*, Vol. 3 No. 3, pp. 546-62.
- Miller, D. and Friesen, P.H. (1983), "Strategy-making and environment: the third link", *Strategic Management Journal*, Vol. 4 No. 3, pp. 221-35.
- Mudambi, R. (2002), "Knowledge management in multinational firms", *Journal of International Management*, Vol. 8 No. 1, pp. 1-9.
- Mudambi, R. and Navarra, P. (2004), "Is knowledge power? Knowledge flows, subsidiary power and rent-seeking within MNCs", *Journal of International Business*, Vol. 35 No. 5, pp. 385-99.
- Nisbett, R. and Wilson, T.D. (1977), "Telling more than we can know: verbal reports on mental processes", *Psychological Review*, Vol. 84 No. 3, pp. 231-59.
- Oliveira, J.S., Cadogan, J.W. and Souchon, A. (2012), "Level of analysis in export performance research", *International Marketing Review*, Vol. 29 No. 1, pp. 114-27.
- Phersson, A. (2009), "Marketing strategy antecedents of value adding by foreign subsidiaries", *International Marketing Review*, Vol. 26 No. 2, pp. 151-71.
- Pinho, J.C. (2007), "The impact of ownership: location-specific advantages and managerial characteristics on SME foreign entry mode choices", *International Marketing Review*, Vol. 24 No. 6, pp. 715-34.

- 
- Prahalad, C. and Doz, Y. (1987), *The Multinational Mission*, The Free Press, New York, NY.
- Rajagopalan, N. and Finkelstein, S. (1992), "Effects of strategic orientation and environmental change on senior management reward systems", *Strategic Management Journal*, Vol. 13 (Summer Special Issue), pp. 127-42.
- Roth, M., Jayachandran, S., Dakhli, M. and Colton, D.A. (2009), "Subsidiary use of foreign marketing knowledge", *Journal of International Marketing*, Vol. 17 No. 1, pp. 1-29.
- Rugman, A.M. and Verbeke, A. (2004), "A perspective on regional and global strategies of multinational enterprises", *Journal of International Business Studies*, Vol. 35 No. 1, pp. 3-18.
- Ryans, J.K., Griffith, D.A. and White, D.S. (2003), "Standardized/adaptation of international marketing strategy: necessary conditions for the advancement of knowledge", *International Marketing Review*, Vol. 20 No. 6, pp. 588-602.
- Sakarya, S., Eckman, M. and Hyllegard, K. (2007), "Market selection for international expansion: assessing opportunities in emerging markets", *International Marketing Review*, Vol. 24 No. 2, pp. 208-21.
- Sanchez, R. and Mahoney, J.T. (1996), "Modularity, flexibility and knowledge management in product and organization design", *Strategic Management Journal*, Vol. 17 (Special Issue), pp. 63-76.
- Sawyer, O.O. (1993), "Environmental uncertainty and environmental scanning activities of Nigerian manufacturing executives: a comparative analysis", *Strategic Management Journal*, Vol. 14 No. 4, pp. 287-300.
- Schlegelmilch, B.B. and Chini, T.C. (2003), "Knowledge transfer between marketing functions in multinational companies: a conceptual model", *International Business Review*, Vol. 12 No. 2, pp. 215-32.
- Simonin, B.L. (1999), "Ambiguity and the process of knowledge transfer in strategic alliances", *Strategic Management Journal*, Vol. 20 No. 7, pp. 595-623.
- Slator, S. and Olson, E. (2001), "Marketing's contribution to the implementation of business strategy: an empirical analysis", *Strategic Management Journal*, Vol. 22 No. 11, pp. 1055-68.
- Snow, C.C. and Hrebiniak, L.G. (1980), "Strategy, distinctive competence and organizational performance", *Administrative Science Quarterly*, Vol. 25 No. 2, pp. 317-36.
- Solberg, C. (2002), "The perennial issue of adaptation or standardization of international marketing communication: organizational contingencies and performance", *Journal of International Marketing*, Vol. 10 No. 3, pp. 1-21.
- Song, M., Nason, R.W. and Di Benedetto, C.A. (2008), "Distinctive marketing and information technology capabilities and strategic types: a cross-national investigation", *Journal of International Marketing*, Vol. 16 No. 1, pp. 4-38.
- Srinivasan, R., Rangaswamy, A. and Lilien, G. (2005), "Turning adversity into advantage: does proactive marketing during a recession pay off?", *International Journal of Research in Marketing*, Vol. 22 No. 2, pp. 109-25.
- Venaik, S., Midgley, D. and Devinney, T. (2005), "Dual paths to performance: the impact of global pressures on MNC subsidiary conduct and performance", *Journal of International Business Studies*, Vol. 36 No. 6, pp. 655-75.
- Venkatraman, N. and Prescott, J.E. (1990), "Environment-strategy coalignment: an empirical test of its performance implications", *Strategic Management Journal*, Vol. 11 No. 1, pp. 1-23.
- Viswanathan, N. and Dickson, P. (2007), "The fundamentals of standardizing global marketing strategy", *International Marketing Review*, Vol. 24 No. 1, pp. 46-63.
- Vrontis, D., Thrassou, A. and Lamprianou, I. (2009), "International marketing adaptation versus standardization of multinational companies", *International Marketing Review*, Vol. 26 Nos 4/5, pp. 477-500.

- Weick, K.E. (1969), "Laboratory organizations and unnoticed causes", *Administrative Science Quarterly*, Vol. 14 No. 2, pp. 294-303.
- Zander, U. and Kogut, B. (1995), "Knowledge and the speed of the transfer and imitation of organizational capabilities: an empirical Test", *Organization Science*, Vol. 6 No. 1, pp. 76-92.
- Zhang, J., Di Benedetto, C.A. and Hoeing, S. (2009), "Product development strategy, product innovation performance, and the mediating role of knowledge utilization: evidence from subsidiaries in China", *Journal of International Marketing*, Vol. 17 No. 2, pp. 42-58.

---

### Further reading

- Asmussen, C., Pedersen, T. and Dhanaraj, C. (2009), "Host-country environment and subsidiary competence: extending the diamond network model", *Journal of International Business Studies*, Vol. 40 No. 1, pp. 42-57.
- Batra, R. (1997), "Marketing issues and challenge in transitional economies", *Journal of International Marketing*, Vol. 5 No. 4, pp. 95-114.
- Golden, P., Doney, P., Johnson, D. and Smith, J. (1995), "The dynamics of a marketing orientation in transition economies: a study of Russian firms", *Journal of International Marketing*, Vol. 3 No. 2, pp. 29-49.

### Appendix

#### *Prospector*

Our firm almost continuously searches for market opportunities and regularly experiments with potential responses to emerging environmental trends.

#### *Defender*

Our firm attempts to maintain a stable, limited line of products or services, operating routinely and efficiently. Our firm monitors a carefully selected set of products for introduction.

#### *Analyzer*

Our firm has a narrow product-market domain. We are an expert in our business area and do not tend to search outside of this area for new opportunities.

#### *Reactors*

Our business frequently perceives change occurring but is often unable or unwilling to respond effectively, resisting making any sort of adjustment until forced to do so by the environment.

### Corresponding author

David A. Griffith can be contacted at: [griffith@bus.msu.edu](mailto:griffith@bus.msu.edu)