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**Differentiating Knowledge Processes in Organizational Learning:
A Case of 'Two Solitudes'**

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Differentiating Knowledge Processes in Organizational Learning: A Case of ‘Two Solitudes’

ABSTRACT

The fields of organizational behaviour (OB)/strategy and marketing have taken different paths over the past two decades to understanding organisational learning. OB/strategy has been pre-occupied with theory development and case study illustrations, whereas marketing research has taken a highly quantitative path. Although relying on essentially the same foundation theory, these two solitudes have had minimal cross-fertilisation. Furthermore, both fields tend to blur or usually ignore the distinction between structural and informal knowledge processes. The marketing literature, in particular, relies on the MARKOR scale, which measures structural knowledge processes. Informal knowledge acquisition and dissemination processes are almost completely ignored.

The purpose of the paper is to highlight the distinction between informal and structural knowledge acquisition and dissemination processes in organizational learning. By noting and comparing the 'two solitudes' of OB/strategy and marketing, we suggest that both fields of inquiry have much to learn from each other regarding such knowledge processes. Future research should bring together cross-disciplinary studies from OB/strategy and marketing field to develop an organizational learning framework to test structural knowledge processes alongside informal knowledge processes.

Keywords: Organizational learning, market orientation, knowledge transfer, cross-boundary knowledge transfer

INTRODUCTION

Organisational learning (or knowledge management) has become a well-entrenched area of research in several business disciplines, including organisational behaviour (OB) and strategy (Bogner & Bansal, 2007; Bontis, Crossan & Hulland, 2002; Crossan, Kane, & White, 1999; Grant, 1996), marketing (Jiménez-Jiménez & Cegarra-Navarro, 2007; Kirca, Jayachandran, & Bearden, 2005), human resource management (Lopez, Peon, & Ordas, 2006), and information systems (Bock et al, 2005; Chui, Hsu, & Wang, 2006). Although these clusters of scholarship overlap considerably in their subject matter, some (ironically) have formed their own silos of knowledge. The lack of cross-fertilization is most apparent between OB/strategy and marketing. Although both camps have a common organizational learning ancestry (e.g., Huber, 1991), they have diverged both conceptually and methodologically.

To illustrate these “two solitudes”, consider the citations of Narver and Slater (1990), a seminal work on organizational learning in the field of marketing. This journal article was cited in more than 100 ISI-monitored journal articles just within the recent span of January 2006 to September 2007, yet less than a half-dozen of these citing articles were published in OB or strategy journals. On closer inspection, one or two of the OB/strategy articles citing Narver and Slater’s work are, in fact,

marketing articles (i.e. written by marketing scholars and citing mainly marketing research) that have been published in an OB/strategy journal (e.g., Ellis, 2006). Most other OB/strategy journals citing Narver and Slater almost completely focus on OB/strategy literature rather than any of the marketing research on organizational learning (e.g., Huang & Dastmalchian, 2006; Thornhill and White, 2007). In short, organizational learning scholars rarely integrate both OB/strategy and marketing writing on this subject (for an exception, see: Bell, Whitwell, and Lukas, 2002).

The purpose of this paper is to highlight and begin to integrate the two apparent solitudes of OB/strategy and marketing research. We begin by pointing out how marketing has adopted a highly empirical approach, which has seemingly advanced in its understanding of organisational learning predictors and outcomes. We then identify two flaws in most that empirical work, both of which may have undermined the value of marketing research findings for the past 15 years. One apparent flaw in past marketing research leads us to present a model that distinguishes organisational learning processes into four quadrants representing knowledge acquisition and dissemination as well as informal and structural processes. This paper offers ideas for future organizational learning research in both OB/strategy and marketing that will incorporate both structural and informal knowledge processes.

TWO SOLITUDES OF ORGANIZATIONAL LEARNING METHODOLOGY

OB and strategy scholars have mainly devoted their attention to theory development as well as case studies and other qualitative methods to understand knowledge processes in organizational learning (Bogner. & Bansal, 2007; Bontis, Crossan & Hlland, 2002; Crossan, Kane & White, 1999). Very few have ventured into empirical analysis of organizational learning concepts and relationships (for an exception, see Goh and Richards, 1997). The emphasis on theory development and qualitative investigation has produced several thoughtful models of organizational learning as well as thick description of this complex phenomenon. However, the lack of quantitative research may have hindered OB/strategy scholars from developing a more unified and generalisable model of organizational learning. For example, Nonaka et al (2006, p. 1197) recently noted that their concept of “ba” (the shared interpersonal space for knowledge sharing) has been empirically under-explored. Lopez et al (2006, p. 223) reported that there is such a paucity of existing measures for organizational learning constructs that “organizational learning has not yet reached maturity”. Jerez-Gómez et al (2005, p. 719) also observed that most OB/strategy studies take a theoretical view without actually measuring these constructs.

In contrast to OB/strategy research, marketing scholars have empirically measured organizational learning constructs for more than 15 years. Marketing’s empirical approach to organizational learning is so well entrenched that the field is now at the stage where meta-analyses of predictors and outcomes of organizational learning have been published (Ellis et al, 2006; Kirca et al., 2005). However, perhaps

as a result of its early rush into empirical investigation, the marketing literature appears to have overlooked an important part of the organizational learning process and made questionable assumptions about that process. Before discussing these issues, as well as their relationship to the OB/strategy research, we need to provide background on how these two research camps approach the study of organizational learning processes.

ORGANIZATIONAL LEARNING PROCESSES

The OB/strategy literature acknowledges several models, most of which view organizational learning as a set of processes (DiBella & Nevis, 1998; Garvin, 1998; Huber, 1991; Nonaka & Takeuchi, 1995). With more than 750 citations to date, Huber's (1991) organizational learning process model is one of the most widely known and respected in both the OB/strategy and marketing literature. Huber divides the organizational learning process into four components: knowledge acquisition, information distribution, information interpretation, and organisational memory. Knowledge acquisition is the process by which knowledge is received, either through formal acquisition of knowledge sources (e.g. grafting on new staff) or through learning and experimentation process. Information dissemination is the process by which information is shared within the organisation. Huber defines information interpretation as the process by which information is given meaning, such as how it is framed or contextualised. Organisational memory is the process by which knowledge is stored for further use.

DiBella and Nevis (1998) further developed Huber's model by streamlining the stages of organizational learning as well as providing a richer discussion of the variety of activities that fall within each stage of the process. They describe the organizational learning process in three stages: knowledge acquisition, knowledge dissemination, and knowledge use. Knowledge acquisition is defined as the development or creation of skills, insights and relationships. It is also how knowledge is collected (Holsapple & Jones, 2004). Some examples of knowledge acquisition activities include having casual conversation with competitors at trade shows, and conducting regular customer visits and in-house market research. Knowledge dissemination is the process by which knowledge is shared and diffused throughout the organisation (Argyris & Schon, 1978). Knowledge dissemination occurs when knowledge is passed around among individuals and groups. Some examples of knowledge dissemination activities include employees informing other colleagues of plans through hallway conversations and marketing personnel scheduling regular meetings to discuss customers' future needs with departments. Knowledge use refers to the way in which knowledge is applied by members of an organization to better understand the area of assigned work so as to be able to make informed managerial decisions, and implement changes (Maltz & Kohli, 1996; Moorman, 1995). Some examples of knowledge use activities include shaping of organizational policies, implementing new products and services, and increasing productivity through application of acquired and disseminated market knowledge.

MARKET ORIENTATION AND ORGANISATIONAL LEARNING PROCESSES

In the field of marketing, organizational learning processes are incorporated into the concept of market orientation (Matsuno, Mentzer, and Rentz, 2005). Market orientation refers to the organization-wide generation of knowledge (called “intelligence”) on current and future customer needs, dissemination of knowledge (intelligence) across departments, and organization-wide responsiveness to that knowledge (Kohli & Jaworski, 1990). It deals with the way market knowledge is managed through knowledge acquisition and dissemination activities such as conducting market surveys and discussion of market trends among departments. The organization-wide responsiveness to such knowledge activities includes periodically reviewing products and services to ensure they meet customers’ needs. This responsiveness includes co-ordination among functions. Inter-functional coordination is the coordinated utilization of organizational resources in creating superior value for target customers (Narver & Slater, 1990). In essence, market orientation establishes the principles in which an organization should focus on its customers and competitors, and internal functional activities, which have an effect on organizational performance (Han, Kim & Srivastava, 1998; Santos-Vijande et al., 2005).

Although there are several interpretations of market orientation (Kohli & Jaworski, 1990; Narver & Slater, 1990), all have an operational focus on market knowledge processing activities regarding customers and competitors, particularly knowledge acquisition, knowledge dissemination and the ability to behaviourally respond to what is received. Developed in the early 1990s, the MARKOR scale is a measure of market orientation that most closely operationalises the three organizational learning processes (Kohli, Jaworski, and Kumar, 1993; Conduit & Mavondo, 2001; Stone, 2000).. Specifically, the 20-item instrument has three dimensions measuring knowledge acquisition, knowledge dissemination, and responsive to knowledge (i.e. knowledge use). MARKOR is a widely adopted measure of market orientation. There is also evidence that MARKOR is predicts firm performance better than do other market orientation scales (Ellis, 2006; Oczkowski and Farrell, 1998).

Empirical Marketing Research Flaws on Organisational Learning

Although the MARKOR scale seems to put the field of marketing on a firm footing for modelling the causes and effects of the organizational learning process, a closer inspection reveals two flaws in its approach. One apparent flaw is that although MARKOR distinguishes the three stages of organizational learning, it is considered “a one-dimensional construct with three behavioural components” (Farrell, 2002, p. 4). In other words, most marketing studies have routinely investigated a composite of the three organizational learning processes rather than each of the three components separately. This practice has likely undermined the predictive value of most marketing research studies on this subject because there is both theoretical logic and empirical evidence that knowledge acquisition, knowledge dissemination, and knowledge use are influenced by different predictors (Hoe

and McShane, 2007). OB/strategy studies on organizational learning anecdotally seem to separate these three activities to some extent (Jerez-Gomez, Cespedes-Lorente & Valle-Cabrera, 2005).

The other apparent flaw in the empirical marketing studies, at least those relying on the popular MARKOR scale, is that MARKOR measures only systematically planned and organized knowledge acquisition and dissemination activities, whereas more informal organizational learning processes are excluded. With little empirical research in OB/strategy, it is difficult to directly assess the extent to which this oversight exists in these fields as well. A perusal of qualitative OB/strategy research suggests all aspects of the organizational learning process are studied. At the same time, we could not find any explicit discussion in either OB/strategy or marketing where these two forms of knowledge acquisition and dissemination are clearly differentiated.

STRUCTURAL VERSUS INFORMAL ORGANIZATIONAL LEARNING

The observation that marketing research has mostly overlooked information organizational learning processes, and that OB/strategy literature has not explicitly addressed these distinctions, we offer the following as a guide for future research. Specifically, we suggest that knowledge acquisition and dissemination processes should be further divided into structural and informal sub-types on the basis that they are distinct processes and are likely associated with different predictors. Figure 1 depicts these four categories along with representative examples.

Figure 1: Structural and Informal Knowledge Acquisition and Dissemination Practices

	Informal	Structural
Acquisition	<ul style="list-style-type: none"> • Coincidental conversations with customers • Unexpected observation of a competitor’s new service 	<ul style="list-style-type: none"> • Focus group sessions with customers • Formal meetings with key suppliers • Systematic environmental scanning
Dissemination	<ul style="list-style-type: none"> • Sharing information with coworkers through hallway conversations • Assisting a coworker on a problem 	<ul style="list-style-type: none"> • Scheduled staff meetings to discuss market trends • Distribution of market research reports to staff

Structural knowledge acquisition and dissemination

Structural knowledge acquisition and dissemination processes are planned, organized and systematic way of collecting and sharing knowledge. This means that they are pre-arranged activities to collect and share market knowledge from the customers and competitors. Structural knowledge acquisition activities include all the various market research methods available to organizations, such as experiments, surveys and qualitative research. Some structural knowledge acquisition activities include meeting customers on a periodic basis to find out the products and services to meet their future needs, and performing significant amount of in-house market research (Haas, 2006; Kohli, Jaworski & Kumar, 1993). These organizational activities help to improve the pool of market knowledge by systematically collecting key customer and competitor knowledge on a planned schedule and organized manner. Some examples of structural knowledge dissemination activities include scheduled inter-departmental meetings to discuss market trends and development, regular market updates by sales and marketing staff and regular distribution of customer satisfaction knowledge at all levels of the organization (Fedor et al., 2003). These structural knowledge dissemination processes serve to increase the flow and circulation of knowledge within the organization, which provides greater visibility of market knowledge to more people.

Informal knowledge acquisition and dissemination

Several scholars have suggested that, parallel to the concepts of structural knowledge processes, there also exist informal knowledge processes (Anderson & Narus, 1990; Argote, McEvily & Reagans, 2003; Holsapple & Jones, 2004; Johnson et al., 1994; Maltz & Kohli, 1996; McDermott, 1999; Ribbens; 1997). However, discussion of these informal organisational learning activities has been cursory at best (Jaworski, Macinnis & Kohli, 2002; Johnson, 1990; Maltz & Kohli, 1996). Structural knowledge processes have received much more attention, particularly in the marketing literature (Conduit & Mavondo, 2001; Day, 1994; Kohli & Jaworski, 1990; Li & Calantone, 1998).

Stohl and Redding (1987) offer two criteria to distinguish between structural and informal knowledge processes: spontaneity and voluntariness. Spontaneity refers to whether the knowledge activities are planned ahead of time. For example, sharing knowledge during an unexpected meeting in the hall is spontaneous, whereas disseminating knowledge during a monthly review meeting is non-spontaneous (Maltz & Kohli, 1996). Voluntariness refers to whether the acquisition or dissemination of knowledge was mandated by the organization. For example, voluntary knowledge sharing occurs when an employee shares the necessary market knowledge on his or her own without being told by the managers. Using the two criteria set by Stohl and Redding (1987), informal knowledge process can be defined as the spontaneous and voluntary activities. Informal knowledge processes usually do not follow the reporting structure of the organizational chart and tend to be more personal in nature (Jaworski, Macinnis & Kohli, 2002; Johnson et al., 1994; Thompson, 2005). Such informal knowledge

processes do not follow the hierarchical structure and are not affected by formal authority. Activities in an informal knowledge process are generally more ad hoc and casual in nature (Storck & Hill, 2000).

Similar to structural knowledge processes, informal knowledge processes may exist as acquisition or dissemination activities. Informal knowledge acquisition is characterized by the spontaneous and voluntary way of collecting market knowledge from customers and competitors. Such informal knowledge acquisition activities could include calling a friend who is working with the customer to find out more about their organization should the need arise (Soekijad & Andriessen, 2003), and informally speaking with the competitors at trade shows to better understand the market. The first example -- calling a friend who is working in the customer's organization -- can only be achieved spontaneously instead of relying on planned, organized activity. This is because this knowledge collection method can only be done on an ad hoc and casual basis. Any effort to systematically perform such a collection task will be difficult to enforce and co-ordinate since it depends on the relationship between the employee and friend concerned, and the employee volunteering to perform the task. In the second example in which the competitors' knowledge is 'sought' at a trade show, the knowledge collection will also depend on the spontaneity of the situation between the employee and competitor at the trade show, and whether the employee is willing to oblige in such an endeavour.

Informal knowledge dissemination is defined as the spontaneous and voluntary way in which market knowledge is distributed within an organization. Some examples of informal knowledge dissemination are informing colleagues through hallway conversations of plans and issues, and working on a casual, one-to-one basis with another colleague rather jointly as a formal group (Akgun, Lynn & Byrne, 2003). Generally, such corridor conversations happen by chance and the employees need to voluntarily initiate the talk to exchange knowledge. Also, in an informal personal interaction situation, the probability of happenstance knowledge sharing would be higher given the more casual and relaxed environment. Thus, informal knowledge processes facilitate knowledge acquisition and dissemination, and maintain a sense of organizational cohesion and autonomy (Smelser, 1963). This viewpoint recognizes that informal knowledge processes are not solely based on the positions individuals occupy within formal organizations or accepted norms or procedures.

FUTURE RESEARCH AND CONCLUSION

Structural knowledge acquisition and dissemination are overt aspects of how an organization processes information (Day, 1991; Haas, 2006; Kohli & Jaworski, 1990). The systematic, organized and structured acquisition and dissemination of market knowledge is usually a result of an organization's formal reporting structure. As an organization learns to make sense of its markets, it develops rules for harnessing knowledge about markets that manifest themselves in internal organizational norms and policies, and external organizational actions like product, promotion, distribution, and pricing

strategies and tactics (Menon, Thompson & Choi 2006). Goh (1998) suggested that knowledge acquisition is useless unless the knowledge can be disseminated across the organization. Over time, the acquired and disseminated knowledge would result in the organization developing a large stock of knowledge. A greater stock of acquired knowledge would lead to employees having more choices in tapping such knowledge and use them in their daily work. Similarly, the greater the extent that knowledge is disseminated in an organization, the higher the tendency for employees to use the knowledge. Supporting this view, many previous research studies suggest that structural knowledge acquisition and dissemination promote knowledge use (Conduit & Mavondo, 2001; Kohli, Jaworski & Kumar, 1993; Stone, 2000). This leads to the propositions:

P1: Structural knowledge acquisition is positively associated with market knowledge use.

P2: Structural knowledge dissemination is positively associated with market knowledge use.

The distinction between structural and informal activities is important because it captures the differences in outlook and fundamental assumptions about the nature of interaction of an organization. This is because the actual informal knowledge acquisition and dissemination relationships of an organization may be less rational than the structural processes (Johnson, 1993). Since there are numerous informal exchanges at work as a result of human interactions, there is also plentiful of informal knowledge acquired and disseminated which lead to an improved knowledge advantage. In an informal setting, employees are more likely to seek clarifications given the spontaneity of the informal environment to seek clarifications. Informal knowledge processes generally help employees cope with breakdowns in the organizational structure's structural knowledge processes (Deetz, 1995). Since informal knowledge processes are more spontaneous and voluntary, they may serve to compensate for the structural knowledge processes' 'shortcomings'. The informal sources of learning take into account trial-and-error experiences with past decisions directed toward customers, feedback from seller contacts with individual customers, and managers' personal observations of customers. Hedlund (1994) and Walsh (1995) found that such social processes play an important role in the transition of knowledge across individuals or group.

Given the pervasiveness of informal knowledge acquisition and dissemination activities, it is argued that not only do informal acquisition and dissemination have an effect on knowledge use but the effect may even be greater than those of structural knowledge acquisition and dissemination. Thus, it is argued that informal knowledge processes mirror structural knowledge processes in contributing to knowledge use. Thus, it is proposed that informal knowledge processes mirror structural knowledge processes in contributing to knowledge use. This leads to the propositions

P3: Informal knowledge acquisition is positively associated with market knowledge use.

P4: Informal knowledge dissemination is positively associated with market knowledge use.

To date, very few empirical studies have been conducted in either OB/strategy or marketing to better understand the predictors and dynamics of informal knowledge acquisition and dissemination (Argote, McEvily & Reagans, 2003; Jaworski, Macinnis & Kohli, 2002; Johnson, 1990). Thus, an area for future empirical research is to test a combined model of informal and structural knowledge processes. OB/strategy scholars should now move toward a testable model of knowledge acquisition and dissemination, possibly with other antecedents. Such an integrated framework could be tested using structural equation modelling. It is recommended that more cross-disciplinary research and recognition between OB/strategy areas and marketing be conducted to leverage knowledge discoveries from all areas. It is suggested that OB/strategy and scholars should pay more attention to the market orientation literature in marketing. On the hand, marketing researcher may need to step back from its existing models which have a strong emphasis on construct measurement and reconfigure their measures to better capture and distinguish informal and structural knowledge processes. One way to achieve this is to revisit such knowledge processes through qualitative studies.

This paper contributes to the literature and managerial practice in a number of ways. The paper has identified the importance of the informal knowledge acquisition and dissemination in organizational learning and proposed new definitions to differentiate structural and informal knowledge acquisition and dissemination. It suggests that informal knowledge processes exists alongside structural knowledge processes in organizations. Finally, the paper proposed a model of organizational learning that distinguishes structural from informal knowledge processes.

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