Social capital, knowledge management, and sustained superior performance

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Abstract

Purpose – *This article attempts to begin the process of removing the cloak of causal ambiguity by examining the role that knowledge management has in the creation of the wide variety of competitive advantages found in some organizations. Specifically, this article aims to extend understanding in the field of knowledge management by examining how knowledge management can affect organizational performance, and by examining one possible determinant of an organization's capacity to manage knowledge.*

Design/methodology/approach – *Reviews literature on resources-advantage theory of the firm, social capital and knowledge management to propose ways within the organization to improve their ability to manage knowledge and achieve sustained superior performance. The paper is structured around the following constructs: resource-advantage theory of the firm, social capital, and knowledge management.*

Findings – *Describes the relationship between social capital and knowledge management and how both help organizations achieve a sustained superior performance within the market. Suggests that organizations with high levels of social capital have more knowledge-management capabilities than organizations with low levels of social capital.*

Research limitations/implications – *This article extends prior research of knowledge management by proposing how social capital can positively impact the ability of organizations to manage knowledge.*

Practical implications – *Since resources within all businesses are relatively limited, and particularly so when the business is small relative to its competitors, the revelation that social capital can lead to more effective knowledge management makes the decision to support and nurture social-capital development much more credible.*

Originality/value – *Because there is no existing literature that has examined the relationship between social capital, knowledge management, and organizational performance, this paper provides a foundation for future studies that examine the relationship between social capital and knowledge management.*

Keywords *Knowledge management, Trust, Organizational performance*

Paper type *Conceptual paper*

Most organizations possess valuable knowledge relating to their products, processes, management, and technologies. However, often times these organizations do not communicate as well as they might or apply this knowledge for maximum advantage (King *et al.*, 2002). Organizations that are able to manage this knowledge often have a competitive advantage over those organizations that are not as adept at knowledge management.

Knowledge management has been defined as the process of accumulating and creating knowledge, and facilitating the sharing of knowledge so that it can be applied effectively throughout the organization (Turban *et al.*, 2003). Knowledge management involves four main processes. The first process is the generation of knowledge, which includes all activities that discover ''new'' knowledge. The second process is knowledge capture, which involves continuous scanning, organizing, and packaging of knowledge after it has been

DOI 10.1108/13673270510602791

generated. Knowledge codification is the third process and it is the representation of knowledge in a manner that can easily be accessed and transferred. The fourth process, knowledge transfer, involves transmitting knowledge from one person or group to another person or group, and the absorption of that knowledge (Pearlson and Saunders, 2004).

In spite of the fact that knowledge management is of great interest and has great potential value to business managers, to date there is no clear and cohesive theoretical framework that can provide a structure for analysis and a lens through which to assess why knowledge management can provide organizations with a sustainable competitive advantage, or even more importantly how knowledge management can be enhanced within an organization. Such a framework should capture the mechanisms underlying why some organization possess a higher capacity for knowledge management than other organizations. Unfortunately, these underlying mechanisms have been unclear because they have been shrouded in a cloak of causal ambiguity. Causal ambiguity exists when the link between the resources controlled by a firm (i.e. the organization's capacity for knowledge management) and a firm's sustained competitive advantage is not fully understood.

This article attempts to begin the process of removing the cloak of causal ambiguity by examining the role that knowledge management has in the creation of the wide variety of competitive advantages found in some organizations. Specifically, this article extends understanding in the field of knowledge management by examining how knowledge management can affect organizational performance, and by examining one possible determinant of an organization's capacity to manage knowledge.

A resource-advantage theory of how knowledge management can lead to sustained superior performance

As mentioned above, to date there is no clear and cohesive theoretical framework that can provide a structure for analysis and a lens through which to assess how knowledge management can lead to sustained superior organizational performance, or what determines an organization's capacity for knowledge management capabilities.

One theory that can be used to examine the benefits of knowledge management is resource-advantage theory (Hunt, 1999). A key concept of resource-advantage theory is found in the examination of an organization's reach for sustained competitive advantage. Strategy theorists share the view that the strategic imperative of a firm should be sustained, superior financial performance and the belief that this goal can be achieved through a sustainable competitive advantage in the marketplace (Hunt, 1999). Sustained competitive advantage occurs when a firm develops a distinctive core competency such as knowledge management. Prahalad and Hamel (1990) observe that a basic core competency becomes a distinctive core competency when, not only is it something that a company does very well (a core competency), but the company does it better than anyone else in the industry (a distinctive core competency). This competency then becomes a competitive resource and, if barriers exist that limit other firms access to the resource, it becomes a long-term source of economic rents (Wernerfelt, 1984).

Petraf (1993) explained rents particularly well. If a firm is fortunate enough to find itself with a superior resource (e.g. such as a high capability to manage knowledge); and that resource can be utilized in the production of a product for less cost than using other resources; and the resource is limited, inimitable, and difficult to substitute or non-substitutable (Barney, 1995; Derickx and Cool, 1989); and finally, if the demand for the product is sufficiently strong that others in the marketplace also produce that product at a greater cost; then the product will be produced until marginal cost equals marginal revenue for the higher cost producers. The higher cost producers will earn a normal return for their efforts. The firm holding the superior resource, will earn rents, the difference between costs to the firm without the superior resource and the cost to the firm with the superior resource (Petraf, 1993).

Mahoney and Pandian (1992) further refine the rents and divide them into several categories: Ricardian rents (as described above), monopoly rents (as in government intervention or coercion), Schumpeterian rents (as in innovation), and quasi-rents or parato

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rents. This final category of rents is rents created through some resource attainment barrier such as path dependency or time compression diseconomies.

Therefore, organizations are largely in control of their own destiny, and are heterogeneous in both their resource inventory and in their potential. Management has strategic impact in the paths they choose and the insight they have in choosing the resource bundles with which to compete. Thus, from the literature we know that firms are more than homogeneous entities. They are unique bundles of resources (Penrose, 1995; Chandler, 1962). We know that resources can be important sources of innovation through combinations (Schumpeter, 1934) and through their superior abilities (Nelson, 1990). Further, we know that through these combinations we can devise competitive positions or distinctive core competencies (Prahalad and Hamel, 1990) that yield us rents. These rents can be long lasting if the resource in question is rare, inimitable, and non-substitutable (Barney, 1995). The question remains, however, how do we attach the quality of longevity to our superior resource? Wernerfelt (1984) discusses this issue in terms of resource position barriers. What a firm wants is to create a situation where its own resource position directly or indirectly makes it more difficult for others to catch up. One possible way to create such a resource position is through the use of knowledge management as a resource position barrier.

Knowledge management can act as a resource barrier because it can result in shorter life cycles of innovation and have a direct impact on bottom-line returns. Knowledge management can also lead to decreased cycle times, help firms avoid obsolescence, streamline processes, and give firms a sense of how to respond to change (Pearlson and Saunders, 2004). From a global perspective, knowledge management can help give a firm global access to knowledge and help global firms adapt to local conditions (Pearlson and Saunders, 2004).

Although it is proposed that the use of knowledge management as a resource barrier is positively associated with an organization’s ability to achieve sustained superior performance, the question still remains as to what factors can determine an organization’s capacity for knowledge management. One answer to this question may be found in the social capital literature.

Social-capital theory and knowledge management

The term social capital first arrived on the scene in the sociology literature. It initially appeared in community studies, highlighting the central importance of networks of strong, crosscutting personal relationships developed over time that provide the basis for trust (Nahapiet and Ghoshal, 1998). Putnam (1993) referred to social capital as being akin to a moral resource. He viewed social capital from a community level of analysis and found it to be embodied in what he referred to as networks of ‘‘civic engagement.’’ Communities, Putnam argues, did not forge networks of civic engagement because of their prosperity. Instead, they became prosperous because they were civic (Putnam, 1993; Cohen and Fields, 1999).

The literature suggests that social capital can be separated into five distinct dimensions. They are information channels, social norms, identity, obligations and expectations, and moral infrastructure. Listed below are the separate dimensions and a more complete description of their makeup.

Information channels

Information channels are social networks within the organization and also are the mechanisms that connect them to the outside world. Information channels are the most obvious example of social capital. They are the directly observable inventory of social capital. Information channels also contain the formal structure of an organization. This dimension of social capital consists of personal relationships that people develop with each other through a history of interaction.

Burt (1992) described social capital in terms of networks and discussed ramifications of structural holes. Structural holes are those areas of the network not well connected. Structural holes, while beneficial at an individual level for those able to take advantage of the boundary spanning opportunities presented by them, are not beneficial for an organization to have within itself. Structural holes within organizations hamper information flow and foster competition. One of the benefits of high levels of social capital is the limiting of structural holes within the organizational network. Through high levels of this dimension of social capital, organizations can gain direct access to economic and other resources privately possessed in the network (Portes, 1998).

The major benefits that a well-developed information channel provides are abundant and strong ties within the network. These ties, in turn, provide closure (Coleman, 1988). Closure can be described as the existence of sufficient ties within a social network to guarantee the observance of social norms. A modern day example of closure would be tight communication between parents in a community so that information about misbehaving children almost immediately is communicated to their parents and corrective action is immediately taken. Within an organization, closure provides for more intense adherence to norms, a stronger feeling of obligations and expectations and a heightened sense of identity. In our current society, we also have closure concerning our law enforcement networks. They talk to one another. This enables them to better enforce the laws.

Social norms

Social norms provide for social control in an organization. They are general, internalized sets of accepted behavior for members of the social network. Social norms are a common belief system that allow participants to communicate their ideas and make sense of common experiences (Adler and Kwon, 2000). They are shared strategic visions, systems of meanings, and normative value orientations (Nahapiet and Ghoshal, 1998). Social norms increase efficiency of action and reduce external unknowns. They also contain shared knowledge and history for an organization. They are the accumulated history of the organization in the form of social structure appropriable for productive use by any member of the social network in the pursuit of his or her interests (Sanderfur and Laumann, 1988).

Obligations and expectations

Lesser (2000) viewed this dimension of social capital as the positive interactions that occur between individuals in a network. These interactions have been viewed as positive largely because of the levels of trust and reciprocity that they engendered (Putnam, 1993). The existence of these obligations and expectations of future benefit are nurtured in an organizational environment containing strong social ties and are hampered by the absence of these ties.

One of the manifestations of these obligations and expectations is reputation. Reputation is the expectation of others (outside the network) concerning an organization's future conduct. Reputation cannot arise in an open structure (Coleman, 1988). In order for reputation to occur, there must be closure and supporting social norms. This provides for collective sanctions to ensure trustworthy conduct by employees both within the business and outside the network. Since the need for monitoring is reduced, reputation then leads to reductions in transaction costs, efficiencies in resource procurement, lower costs of capital, and other efficiencies (Uzzi, 1997; Burt, 1992). Reputation manifests itself in organizational dealings with those outside the organizational social network.

Within a network, obligations and expectations lead to collective trust, which becomes a potent form of expectational asset (Knez and Camerer, 1994; Nahapiet and Ghoshal, 1998). Collective trust allows group members to rely on each other more generally to help solve the everyday problems of cooperation and coordination (Kramer *et al.*, 1996). With collective trust present, group members can rely on one another to follow through with things expected of them and obligations owed by them. Group members are then more willing to work for the group with the knowledge and expectation that the group will work for them when the time comes. Collective trust strengthens obligations and expectations.

Charles Sabel (1993) referred to the development of this collective trust as studied trust. It comes about through a process of learning, a process of determining how to create forms of consensus building among economic actors with both competing and mutual interests. There comes from this process a situation of mutual confidence.

Identity

Identity occurs when individuals see themselves as one with another person or group of people (Nahapiet and Ghoshal, 1998). The individual takes the values or standards of other individuals or groups as a comparative frame of reference (Merton, 1968; Tajfel, 1982). Identity with a group or collective enhances concern for collective processes and outcomes, thus increasing and strengthening group norms and collective goals. This group identity increases perceived opportunities for information exchange and enhances frequency of cooperation (Lewicki and Bunker, 1996). In contrast, where identity is not present there are significant barriers to information sharing, learning, and knowledge creation (Child and Rodriques, 1996; Pettigrew, 1973; Simon and Davies, 1996).

Moral infrastructure

The fifth dimension of social capital is moral infrastructure. While support for the dimension of moral infrastructure as a part of social capital is somewhat limited in the management literature, there is support for it in the sociology literature. A moral infrastructure is identified as the structure or network, which allows an organization to encourage norms of conduct within the organization's scope of influence. Putnam (1993) refers to this dimension at the community level as networks of civic engagement. Civic engagement refers to people's connections with the life of their community and includes such things as membership in neighborhood associations, choral societies, or sports clubs (Blanchard and Horan, 1998; Putnam, 1993). These networks, whether existent within an organization, or within a community, provide an additional pathway for network actors to learn of the trustworthiness of individual actors within the network. This provides additional closure for social norms and gives individuals, acting in their own rational self interest, solid reasons to act in ways that adhere to formal and informal codes of conduct in their organization (Blanchard and Horan, 1998).

Portes (1998) notes that members of communities with a substantial stock of social capital find it much easier to work. This is largely a result of the trust engendered through social capital effects such as the existence of closure and social norms (Coleman, 1988). These items, then, provide the structure from which organizations can pin their belief systems and from which formal and informal codes of ethics can flow. This is the moral infrastructure of an organization.

Five dimensions together

While each of the five dimensions of social capital is separate and each provides distinct benefits to the organization, they are mutually dependent on each other for their

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development. For example, without strong information channels that create strong ties between individuals within the organizational network, there is no opportunity for the organization to experience closure (Coleman, 1988). Without closure there is no opportunity for the organization to develop strong social norms and for identity to begin to take hold. And, finally, without strong social norms there is no opportunity to develop a system of obligations and expectations and to provide for the adherence to a set of ethics, both formal and informal (the moral infrastructure). In many ways social capital at its core, is about the value created by fostering connections between organizational members.

How social capital can enhance knowledge management within an organization

It can be theorized that social capital can enhance an organization's ability to manage knowledge because it has the capacity to do a variety of things. In terms of knowledge creation, social capital helps to facilitate the development of collective intellectual capital by affecting the conditions necessary for exchange and combination to occur. In this vein collective intellectual capital is defined as the knowledge and knowing capability of a social collectivity, such as an organization, intellectual community, or professional practice (Nahapiet and Ghoshal, 1998). Social capital can also facilitate the development of intellectual capital. Since intellectual capital depends on the combination of knowledge and experience of different parties, intellectual capital's creation is greatly facilitated by the existence of social capital. Social capital has also been theorized to play a role in the development of core competencies (Kogut and Zander, 1996) that are vital to knowledge creation.

The presence of social capital can also enhance knowledge capture, knowledge codification, and knowledge transfer. Social capital enhances these knowledge management processes because it contributes to a firm's ability to create value in the form of innovation through the facilitation of combination and exchange of resources in a firm (Schumpeter, 1934; Kanter, 1988; Kogut and Zander, 1993). Social capital also increases the efficiency of action (Lesser, 2000) and encourages cooperative behavior (Coleman 1988; Nahapiet and Ghoshal, 1998). Additionally, social capital has been theorized to serve as an important element in the development of human capital (Coleman, 1988) and to provide access to resources through network ties (Burt, 1992).

From an overall perspective social capital can enhance the entire knowledge management process because it makes collective action more efficient, because it becomes a substitute for the formal contracts, incentives, and monitoring mechanisms that are necessary in systems with little or no social capital among organizational members (Fukuyama, 1995; Leana and Van Buren, 1999). In the language of economics, social capital can reduce transaction costs, thus making the knowledge management process more efficient.

Theoretical and practical implications

The idea that social capital is a determinant of an organization's capacity for knowledge management has practical implications for managers of businesses in general, and specifically for managers of organizations that are trying to enhance their ability to manage knowledge. The literature discussed above suggests that organizations with high levels of social capital have more knowledge management capabilities than organizations with low levels of social capital. Since resources within all businesses are relatively limited, and particularly so when the business is small relative to its competitors, the revelation that social capital can lead to more effective knowledge management makes the decision to support and nurture social capital development much more credible. Organizations can then make a more informed decision on whether to commit a portion of their limited resources toward the creation and maintenance of social capital.

From a theoretical perspective, because there is no existing literature that has examined the relationship between social capital, knowledge management, and organizational performance, this article extends prior research of knowledge management by proposing how social capital can positively impact the ability of organizations to manage knowledge. Theoretical work in the field of social capital (Coleman, 1988; Putnam 1993; Nahapiet and

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Ghoshal, 1998; Burt 1992; Adler and Kwon, 2000) provided a solid foundation on which to examine this relationship.

Overall, it is hoped that this study will serve as a point of reference for future research on knowledge management and firm performance. Additionally, it is hoped that this study will serve as a foundation for future studies that examine the relationship between social capital and knowledge management.

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