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Weblog Impact on Organizational Intellectual Capital and Innovative Capabilities

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ABSTRACT

Weblogs have been proposed as a highly effective means for organizations to communicate with customers, suppliers, and employees. This paper provides a conceptual model of the relationships among weblog use, intellectual capital--the cumulative knowledge resources possessed by organizations-- and both radical and incremental innovative capabilities. We argue that in enabling the transfer of knowledge, the creation of connections among individuals, and the storage of repositories of knowledge, weblogs have become tools that positively impact the three dimensions of intellectual capital--human, social and organizational capital. We also explain how intellectual capital facets are able to differentially affect two types of innovative capability.

Keywords

Weblogs, Social Capital, Organizational Capital, Human Capital, Intellectual Capital, Radical Innovation, Incremental Innovation.

INTRODUCTION

Weblogs are increasingly being used in organizations as a way to provide internal teams with frequent project updates or to deliver product support information to customers (Charlene, 2004). Some industry executives believe that blogging is a more effective means of communication with customers, suppliers, and employees. Weblog has been considered as a powerful tool to facilitate hearing naive voices that may have not been heard in the absence of this tool in organizations and society (Silva, Mousavidin, and Goel, 2006). Furthermore, given that the majority of weblog users are in the eighteen to thirty-five years old age group, one would expect that the new workforce is going to be more familiar with weblogs and interact with them more than the current work force does (Vaezi, 2007). Therefore, there is a clear need in research and practice to empirically investigate this phenomenon in the organizational context. Although there is some research about the risk and benefits of weblogs in different aspects of organizations (e.g. marketing, human resource management, trust and social connections), there has been no research to investigate the influence of weblogs on organizational intellectual capital and in turn on organizational innovative capabilities.

The linkage between weblogs and innovation is of critical interest because of the strong relationship between organizations' innovative capabilities and knowledge exchange among employees. Any phenomenon that can impact knowledge combination and exchange processes is expected to affect innovative capabilities of an organization as well. Thus, in this study we first consider the effects of weblogs on knowledge creation and intellectual capital, and then we explore how the three dimensions of intellectual capital, namely social capital, human capital and organizational capital, influence two different types of innovation (radical and incremental). Past research has suggested that knowledge creation processes and the nature of knowledge differentially affect radical and incremental innovation (Subramaniam and Youndt, 2005). Accordingly, this study has two objectives. First, we examine how weblog use affects and contributes to knowledge creation processes, and second, we explore the effects of different kinds of knowledge on innovative capability types.

This paper seeks to contribute to innovation and organizational theory research by highlighting the importance of the weblog phenomenon and by describing how weblog use impacts innovative capabilities by affecting knowledge creation processes in an organizational context. This paper also contributes to research in management information systems (MIS) by showing the

significance of weblog communications - as a computer mediated type of interaction - in organizations and how it would affect organizational outcomes.

We start with a brief review of the literature on weblogs and influential work on intellectual capital and innovative capabilities. Then, we present our conceptual model of the impact of weblogs on intellectual capital, and ultimately, on innovation. Finally, we will present our conclusions and discuss ways to operationalize our constructs and collect data to empirically test the proposed model.

CONCEPTUAL BACKGROUND

A Review of Weblogs

Silva et al. (2006) define weblog (also known as “blog”) as a self-publishing website which is being updated regularly. Research in journalism (Johnson and Kay, 2004) describes weblog as “diary style websites that generally offer observations and news listed chronologically on the site as well as commentary and recommended links, surged in popularity after the events of 9/11.” Human resource scholar Ross (2005: 4) describes weblog as an “informal online journal with chronological entries that are usually short and often includes news summaries and link to other sites”. Ross also suggests that weblog entries can be about anything from world events to how weblog owner’s morning coffee tasted. Furthermore, Smudde (2005) views weblogs as a personal website which contains its owner’s ideas and opinions as well as internet links. The community and collection of weblogs in cyberspace is named “blogosphere” and “blogger” is the person who keeps a weblog.

Ross (2005), a human resource management scholar, also divides weblogs into four types. First, Organizational weblogs which serve several purposes such as facilitating communication between managers and employees, hosting work group discussion, maintaining communication among employees, providing a forum for CEO, developing customer relations, and recruiting new employees. Second, Professional Interest weblogs which are about specific profession and discuss that profession related issues. Third, Personal Employee weblogs that are kept by individuals, independent of any organization, as means of self expression. Fourth, Hostile weblogs that by definition spread rumor and negative news about a specific entity or person.

Weblogs possess some features that make them a different communication tool in an organizational context. The most prominent features of weblogs are their simplicity and low maintenance cost. The high level of simplicity in both reading and creating a weblog allows participation of people with limited technical knowledge. Weblogs usually have a powerful search feature that lets individuals dig into their archive. A weblog can have more than one author with an indicator that relates any post to its respective author(s). This feature gives group of like-minded people the ability to maintain one single weblog. Another helpful technology available for use in weblogs is called Really Simple Syndication (RSS) feed. RSS allows weblog users to read new posts simultaneously as a blogger publishes the post without a need to use browser software to visit the weblog (Silva et al., 2006).

There are some risks associated with the use of weblogs. Employees may use weblogs to damage their company’s reputation or waste company’s resources and work-time by reading and updating weblogs for non-business purposes (Silva et al. 2006). The other threat relates to taking advantage of weblogs as a source of documented information which can cause legal problems. This risk is particularly for bloggers who identify themselves as an employee of a specific company.

In order to measure the weblog impact on intellectual capital and knowledge creation processes we need to measure the weblog use. By weblog use we mean the extent of and the frequency in which internet users read, write, share, and comment on weblogs’ posts. The purpose of this paper is to investigate effects of weblog use on organizations’ innovative capabilities through the organization’s intellectual capabilities. Thus, we would only consider those weblogs that can influence intellectual capital levels in an organization, such weblogs are categorized by Ross (2005) as organizational weblogs. As long as a weblog officially associates with an organization it can be categorized as an organizational weblog, whether it is being kept by a single employee, a group of employees, a department, or a project team.

Knowledge Creation and Intellectual Capital

Intellectual capital has been described as the cumulative body of knowledge that is available to organizations (Subramaniam and Youndt, 2005). The process of creating new knowledge involves active conversions of tacit and explicit knowledge by individuals. Explicit knowledge is defined as codified knowledge that is transmittable through formal and systematic language while tacit knowledge is a kind of personal experience that is hard to formalize and communicate (Nonaka, 1994).

Nonaka emphasizes “communities of interaction” play a major role in amplification and development of new knowledge and knowledge creation is not possible without social interactions. He also suggests that, as more people in and around organizations interact with each other, the knowledge creation scale and rate would increase. In addition, Sheremata (2000) believes that the most necessary condition for organizations to be creative and efficient in new product development is to increase the quantity of ideas, knowledge, and information that are being exposed to an organization.

The concept of intellectual capital has been associated with organizational knowledge and intangible resources. For Edvinsson and Malone (1997), intellectual capital refers to the cumulative value of the organization’s intangible assets. According to the knowledge based view of the firm (Grant, 1996; Spender, 1996), all intangible assets can be categorized into different types of knowledge. Similarly, Brooking (1996) conceptualizes intellectual capital as combined intangible assets of market, intellectual property, human capital, and firm’s infrastructure that all together enable a company to function.

Given the fact that weblogs by definition are communication tools (Silva et al., 2006; Ross, 2005; Smudde, 2005), the question that arises is about the role of weblog use can play in knowledge creation and development of new intellectual capital. To answer this question, it is necessary to understand the different types of intellectual capital.

Maeques, Simon, and Caranana (2006) divide intellectual capital into three dimensions of human, structural and relational capital, based on the knowledge source and structure. Human capital comprises of all individual knowledge, both tacit (knowing how) and explicit (knowing what) knowledge. Structural capital is composed of organization’s routines, procedures, strategies, and policies that are in charge of organization’s daily operations. Relational capital refers to all knowledge acquired by organizations because of their interaction with the environment such as competitors, partners, customers, regulators, etc.

Subramaniam and Youndt (2005) believe that intellectual capital consists of three highly interdependent facets of human, organizational, and social capital. Human capital consists of individuals’ knowledge, skills and abilities whereas organizational capital is the collective and institutionalized knowledge and experience residing within and utilizing through databases, patents, manuals, structures, systems, and processes of an organization. Finally, social capital is defined as knowledge embedded within, available through and utilized by interactions among individuals and their social network. For the purpose of this research, we build on Subramaniam and Youndt’s (2005) classification of intellectual capital, because it is based on the types of interactions that are required for accumulation of different dimensions of intellectual capital. Weblogs are communication tools and, hence, they are expected to influence interactions and exchange of knowledge.

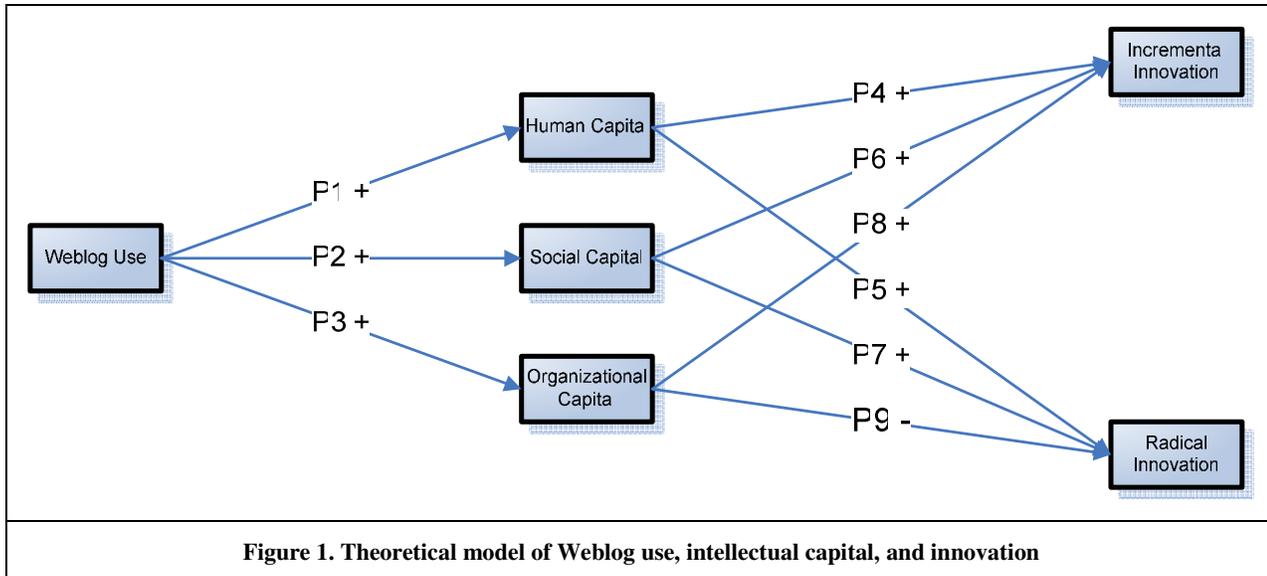
Innovation

According to Nonaka (1994: 14), innovation can be better understood “as a process in which organizations create and define problems and actively develop new knowledge to solve them”. Also, innovation is defined as introducing and adopting a new--either internally generated or externally acquired--product, device, service, system, policy, procedure, or process to an organization. Some scholars have proposed the distinction between administrative and technical innovations (Daft, 1978; Damanpour, 1987; Kimberly and Evanisko, 1981), while others classify it into incremental and radical innovations (Dewar and Dutton, 1986; Nord and Tucker, 1987; Subramaniam and Youndt, 2005). Administrative innovations are those that are related to organizational structure and administrative processes. Technical innovations involve innovations in products, services, production technology, processes and any other activities or processes that are directly related to daily organizational operation and basic work activities (Damanpour, 1991). Administrative versus technical innovation distinction is more concerned with where in the organization or product life cycle innovation will take place rather than how innovation happens and what factors affects innovative capabilities.

According to Subramaniam and Youndt (2005) and Jansen, Van Den Bosch and Volberda (2006), incremental innovations are based on incremental growth of knowledge stock. Incremental innovations involve the refinement of current products, services and technologies refinement. In contrast, radical innovations are based on the sudden growth or transformation of knowledge stock that often causes a major transformation that will likely make the existing products, services, or technologies obsolete. The primary distinction between incremental and radical innovations is based on how differently they utilize organizational knowledge. Incremental innovations build on current knowledge of organization and reinforce its applicability, while radical innovations virtually destroy the value of exiting knowledgebase by adding or creating fundamentally new knowledge.

THEORETICAL FRAMEWORK

In this paper we focus on the role of knowledge creation (through combination and exchange of existing knowledge resources) in organizational innovation. Figure 1 illustrates our theoretical model. Each of our propositions is discussed in the next sections.



Weblogs and Intellectual Capital

According to the definition and features of weblogs, any person with an internet access is a potential weblog user. This implies that each and every organizational affiliate with adequate permissions to content of a weblog would be able read the posts and express his or her opinion given that the individual has the sufficient technological access. This should level up members’ involvement and in turn should increase the flow of ideas and information, which is a necessary condition for knowledge creation (Sheremata, 2000). Furthermore, because all organizational members and possibly outsiders are potential weblog contributors, we can anticipate that more people will have the opportunity to get involved in the process of exchange and combination of information, which would lead to an increase in pace and scope of knowledge creation according to Nonaka (1994).

Weblog use, therefore, is a potential contributor to the knowledge creation process. However, in order to better understand the effects of weblog use on intellectual capital we need to investigate the relationship between weblog use and different dimensions of intellectual capital. As mentioned previously, intellectual capital consists of human, social and organizational capital, so our propositions focus on the relationship between weblog use and each of these dimensions.

Weblogs and Human Capital. Human capital is the knowledge, skills and abilities that reside in individuals. As people gain more experience and education their levels of human capital is expected to increase. Human capital is mostly accumulated through education and experience that requires interactions with others to bring in extra knowledge and experience for individuals who are involved.

Along with traditional means of communication, such as face to face and telephone conversations, weblogs, with their ease of accessibility through the Internet, provide a new communication tool for individuals. The difference between weblogs and other means of communication is that weblogs are not limited to one-on-one conversations and interactions. Weblogs support the communication between one individual and many others, thus, providing a unique opportunity for individual’s ideas and opinions to get exposed to many people and potentially receive valuable and diverse feedback. The feedback process will lead to accumulation of knowledge and experience in both weblog keeper and weblog reader. This loop of interaction and communication between weblog keepers and weblog readers can infinitely continue which leads to accumulation of human capital among weblog users.

Proposition 1: Weblogs use is positively associated with human capital among the community of users.

Weblogs and Social Capital. By definition, the knowledge that is created through social capital is only available through networks of communication and interactions (Subramaniam and Youndt, 2005). Social capital is created by social interactions and connections and it is utilized through social networks. Nahapiet and Ghoshal (1998: 243) believe that social capital is jointly owned by a group of people in a relationship and define it as “the sum of the actual and potential resources embedded within, available through and derived from the network of relationships possessed by an individual or social unit”. Putnam (2000) categorizes social capital into bridging and binding. Binding social capital is associated with strong social ties among like minded people and bridging social capital is associated with weak social ties among a group of individuals. Putnam (2000) argues that bridging social capital is more valuable than binding social capital in terms of knowledge creation, because bridging social capital facilitates the flow of information among groups and people that are usually disconnected or have less shared knowledge. Bridging social capital can potentially bring in new knowledge to the network of social connections.

Weblogs are able to connect people that are usually unaware of each other’s existence and ideas or have limited intellectual interactions. However, these connections would typically be asymmetric without the opportunity of having a face-to-face conversation. Considering the limitations of this type of interaction among people over the Internet, one would expect that majority of connections that are created through weblog use would be of bridging type with a slight chance of becoming a strong tie in future. Furthermore, Vaezi (2007) believes that weblog use can promote norm of reciprocity, trust, and social connectivity among community of users. Thus, we expect that weblog use would contribute to knowledge creation processes by increasing the connectedness among organizational affiliates and in turn it would support development of social capital in such communities.

Proposition 2: Weblog use is positively associated with social capital among the community of users.

Weblogs and Organizational Capital. Organizational capital is constituted of institutional knowledge that resides in organization’s policies, culture, strategy, systems, standards, and procedures. It is also accessible through organizational resources such as knowledge bases and archives.

Weblogs are a repository of organizational knowledge. They include an archive feature and a search engine that allow users to search for their desired key over the entire archives. For example, if a weblog post addresses an organizational standard, the post and all of its related discussions can be retrieved and reviewed any time in the future using the mentioned search engine. Furthermore, frequent weblog discussions can be helpful in developing new ideas as well as in institutionalizing old ideas by recurrently bringing them up to the discussion spot light. Therefore, weblogs use contributes to the creation and maintenance of organizational capital by building on the unique archive and search features of weblogs and by providing a place for discussions around current and new organizational procedures, policies, standards, etc.

Proposition 3: Weblog use is positively associated with organizational capital among the community of users.

Intellectual Capital and Innovative Capabilities

Past research has suggested that the higher the level of intellectual capital in a given organization, the more the organization is capable of innovating both radically and incrementally (Subramaniam and Youndt, 2005; Maeques et al., 2006). However, the specific influence of each intellectual capital dimension on innovative capabilities is yet to be investigated in detail. Subramaniam and Youndt (2005) investigated the effect of organizational capital on incremental innovation, and that of human capital on radical innovation. They also provided some insights on how social capital can affect both types of innovative capabilities in organizations. In the next section, we discuss differential effects of human, social, and organizational capital on innovation types.

Human Capital and Innovative Capabilities. We argued that weblog use would contribute to the development of human capital among organizational members by its inherent learning capabilities. Human capital is consisted of individual’s knowledge and skills that are accumulated through education and experience in his or her lifetime. Human capital is capable of providing much diverse knowledge to organizations because of its nature. It resides in individuals and is utilized through them by communication. Thus, each new member possibly can bring about a variation of an old or a completely new domain of knowledge to organization. Organizations could learn about new ways of addressing existing problems, by being exposed to new knowledge domains through their employees (Rosenkopf and Nerkar, 2001). Individual knowledge and expertise can get exposed to other employees as well as the organization through weblog communications and thus employees may

consequently start questioning their old problem solving methods and developing new ones through newly acquired knowledge, increasing the chance of transforming and reshaping the existing knowledge as well as improving it.

The main features of human capital are talented, creative, skillful and knowledgeable employees who can consistently feed organizations with new ideas (Snell and Dean, 1992). As experienced organizational members get familiarized with the current products, procedures, and organizational policies, one shall expect them to challenge the efficiency and effectiveness of current norms and organizational procedures (Tushman and Anderson, 1986). Therefore, educated and skillful individuals are likely to be able to contribute to the incremental improvement of prevailing procedures, products, or services by questioning their usefulness as well as suggesting ways to improve their efficiency and effectiveness. We expect the process of challenging the current state of organization by its talented members would increase the likelihood of exploitative or incremental innovation.

Proposition 4: Human capital is positively associated with incremental innovative capabilities.

Creative individuals are an inseparable part of human capital. Creativity is the major determinant of innovation and in some sense innovation and creation are equal in meaning. Skillful, educated and creative individuals are able to draw upon a new domain of knowledge to transform the old stack based on the new one. Radical innovations are often associated with creation of novel products, services, procedures and routines (Jansen et al, 2006). We anticipated that weblog interactions would lead to an increase in intellectual capital by publically exposing information that might be unknown to many users and hence improving the human capital in organizations. Therefore, we believe organizations would have more opportunities to get their creative and skillful members exposed to new knowledge which in turn should lead to an increase in their radical innovative capabilities.

Proposition 5: Human capital is positively associated with radical innovative capabilities.

Social Capital and Innovative Capabilities. Social capital is consisted of resources that are jointly owned by a group of people and is available through and utilized by the network of these individuals. It arises from social connectivity, trust and norm of reciprocity among members of a social network (Putnam, 2000; Nahapiet and Ghoshal, 1998). It is asserted that new knowledge is created through combination and exchange of existing intellectual resources. Because combination and exchange of knowledge are complicated social processes, much valuable knowledge is essentially embedded in social interactions and relationships (Nahapiet and Ghoshal, 1998). Thus, one could conclude that knowledge creation depends on social interactions and it is essentially a social phenomenon. Weblogs as a means of communication would act as a facilitator for the social exchange that is necessary in knowledge creation. We argued that weblog use would increase the social capital among organizational members by enhancing and adding to existing communication channels. Enhanced communications would add to quality of information exchange and in turn would benefit knowledge creation processes.

According to Subramaniam and Youndt (2005), several studies signify the role of knowledge creation and exchange in innovation processes by showing how new products rely on organizational knowledge, describing innovation as knowledge management process and most importantly by characterizing innovative companies as knowledge creating. They claim that the ties between research on knowledge and research on innovation are so close that a blurring of boundaries between these areas has been seen in recent years. In this paper we discussed innovation types according to new knowledge creation processes. It is important to understand how innovation takes place, whether through transformation of prevailing knowledge or through reinforcing and incremental improvement of it. Considering the fact that knowledge creation is a social phenomenon, we expect that social capital positively relates to organizational innovative capabilities.

Putnam (2000) divides social capital into binding and bridging. A requirement for binding social capital to be formed, is to have like-minded people linked together. Like minded people are those who have common interests and knowledge. They do not vary by a great deal in the knowledge, experience and skills that they possess. Thus, one would expect that not much new information will be exchanged in networks consisted of strong (binding) ties. However, As we discussed earlier recurrent use of shared knowledge would add to its value and support incremental improvements. Therefore, we expect that binding social capital positively influences incremental innovative capabilities in an organization.

Proposition 6: Social capital is positively associated with incremental innovative capabilities.

On the other side, bridging social capital is associated with the weak ties among network members. Weblogs, in particular, could be considered as effective tools in establishing and maintaining such relationships because first they are not associated

with facilitating communication channels that could have been effective in promoting strong ties and second because of weblogs accessibility and text based features. Weak ties are usually associated with intra-organizational or cross-departmental links. They are named bridging because they often connect two entities that are very different from each other in terms of their interests, goals, and of course the knowledge they possess. It is through these weak ties that novel knowledge and information finds their way to different organizations and organizational units. Thus, we believe that bridging social capital will have a positive effect on radical innovative capabilities.

Proposition 7: Social capital is positively associated with radical innovative capabilities.

Organizational Capital and Innovative Capabilities. An organization's current body of knowledge is claimed to have a grip over the knowledge creation processes and tends to preserve current knowledge and only accept new information that is in accord with what has been proved as useful knowledge for the organization (Katila, 2002). As a result, the more prominent and powerful the role and structure of an organization's current knowledgebase, the more biased the organization's problem solving activities would be toward relying on what has been established as efficient methods in addressing similar issues (Lyles and Mitroff, 1980). Furthermore, according to Katila and Ahuja, (2002) when an organization regularly uses its knowledge and refers back to it in problem solving activities, the knowledge receives more perceived value and legitimacy which leads to reinforcing and reusing the current knowledge.

As mentioned earlier, weblog use is positively associated with organizational capital which is accumulated through policies, procedures, strategies, daily routines, and patents. It is preserved within organization and utilized through databases and archival information such as weblog archives (Subramaniam and Youndt, 2005). Higher organizational capital basically means more effective use of available knowledge through establishing structures and routines that support recurrent use of it (Hansen, Noriha, and Tierney, 1999). Considering the processes that lead to incremental innovation, we expect that organizational capital that is derived partly by recurrent use of weblogs, will promote the reinforcing and improving of the current knowledge and, hence, will support incremental innovative capabilities.

Proposition 8: Organizational capital is positively associated with incremental innovative capabilities.

On the other hand, radical innovation is usually due to a major change or transformation of existing knowledge which leads to production of new products or services (Jansen et al, 2006). A radical innovation may necessitate a complete overhaul of organizational capital. Thus, we do not expect organizational capital to be a valuable resource for radical innovation, but that it will rather serve as a defying force to a fundamental transformation of the structure and type of current knowledge and, thus, will hinder radical innovative capabilities.

Proposition 9: Organizational capital is negatively associated with radical innovative capabilities.

CONCLUSIONS

In this study, we investigated the casual relationship among weblog use, intellectual capital dimensions, and types of innovation. We discussed how weblog use affects human, social, and organizational capital. In short, weblogs are considered as a novel means of communication in addition to other existing means. Weblog users are able to express their personal knowledge through weblog posts and comments and, thus, help to develop human capital in others as well as themselves. By enhancing communication channels and increasing connections among community of users, weblogs contribute to creation and accumulation of social capital. Furthermore, considering weblogs technical capability in recording and restoring all posts and communications, they can serve as information repositories for organizations and hence they would support organizational capital.

We also discussed how dimensions of intellectual capital affect innovative capabilities types. We proposed that human capital is positively associated with both incremental and radical innovative capabilities because this capital depends on creative, skillful, and knowledgeable employees. These employees contribute to knowledge creation processes by their weblog contributions and therefore create more opportunities for both incremental and radical improvements inside organizations. We argued that knowledge creation, specifically innovation, is a social process and, thus, innovation will not take place without adequate social interactions. Binding social capital (strong ties) is expected to contribute to incremental innovations because it tends to connect more like minded people who share much common knowledge and understanding. On the other hand, bridging social capital is expected to promote radical innovations because it helps the flow of information among parties with less shared knowledge and understanding and hence exposing them to novel information which can lead

to fundamental change in products, services, policies, etc. Organizational capital refers to current knowledge and information resources which an organization possesses. It tends to reinforce the use of current policies and procedures and, thus, to support incremental improvement of them and to hinder attempts towards radical change.

This paper contributes to innovation research by advancing the debate on how dimensions of intellectual capital differentially affect types of innovative capabilities. Although Subramaniam and Youndt (2005) started this debate, their work is limited to specific dimensions and outcomes of intellectual capital. We furthered their discussion by looking at the impact of weblogs as an antecedent of intellectual capital, and by including all dimensions of intellectual capital and investigating their impacts on both radical and incremental innovative capabilities separately. In doing so, we advanced research on information systems and technology on how it can help to promote human, social and organizational capital in organizations.

Future research could also build on this paper to explore relationships in our model at a deeper level. For example, Subramaniam and Youndt (2005) have suggested that intellectual capital dimension are highly dependent to each other, but as yet no research has investigated the relationships among these dimensions. A follow-up study could investigate how weblog use affects the interrelationship among human, social and organizational capital. Another interesting question is the relationship between weblog use and individual innovative skills. Interested scholars may investigate whether frequent weblog users are more innovative than others.

In addition to theoretical contributions, our paper has important implications for practicing managers. Our model provides guidelines for supporting and promoting innovation in organizations. For example, we suggest that in order to advocate radical innovation in organizations, managers should promote social and human capital instead of organizational capital. Also, managers need to promote the bridging social capital and the creation of weak ties through weblog use in order to achieve their desired accumulation of social and human capital.

REFERENCES

1. Brooking, A. (1996) Intellectual capital: Core asset for the third millennium, London: International Thomson Business Press.
2. Charlene, L. (2004) Blogging: Bubble or big deal, Retrieved 2006, from forrester research: <http://www.forrester.com/Research/Document/Excerpt/0,7211,35000,00.html>
3. Daft, R. L. (1978) A dual-core model of organizational innovation, *Academy of Management Journal*, 21, 2, 193-210.
4. Damanpour, F. (1987) The adoption of technological, administrative, and ancillary innovations: Impact of organizational factors, *Journal of Management*, 13, 4, 675-688.
5. Damanpour, F. (1991) Organizational Innovation: A Meta-Analysis of effects of determinants and moderators, *Academy of Management Journal*, 34, 3, 555-589.
6. Dewar, R. D., and Dutton, J. E. (1986) The adoption of radical and incremental innovations: An empirical analysis, *Management Science*, 32, 11, 1422-1433.
7. Edvinsson, L., and Malone, M. S. (1997) Intellectual capital: Realizing your company's true value by finding its hidden brainpower. New York: Harper Business.
8. Grant, R. (1996) Toward a knowledge-based theory of the firm, *Strategic Management Journal*, 17, Winter Special Issue, 109-122.
9. Hansen, M. T., Noriha, N., and Tierney, T. (1999) What's your strategy for managing knowledge, *Harvard Business Review*, 77, 2, 106-116.
10. Jansen, J. J., Van Den Bosch, F. A., and Volberda, H. W. (2006) Exploratory innovation, exploitative innovation, and performance: Effects of organizational Antecedents and environmental moderators, *Management Science*, 52, 11, 1661-1674.
11. Johnson, T. J., and Kay, B. K. (2004) Wag the blog: how reliance on traditional media and the internet influence credibility perceptions of weblogs among blog users, *Journalism and Mass-Communication Quarterly*, 81, 3, 622-640.
12. Katila, R. (2002) New product search over time: Past ideas in their prime, *Academy of Management Journal*, 45, 5, 995-1010.
13. Katila, R., and Ahuja, G. (2002) Something old, something new: A longitudinal study of research behavior and new product introduction, *Academy of Management Journal*, 45, 6, 1183-1194.

14. Kimberly, J. R., and Evanisko, M. (1981) Organizational innovation: The influence of individual, organizational, and contextual factors on hospital adoption of technological and administrative innovations, *Academy of Management Journal*, 24, 4, 689-713.
15. Lyles, M. A., and Mitroff, I. I. (1980) Organization problem formulation: An empirical study, *Administrative Science Quarterly*, 25, 1, 102-119.
16. Maeques, D. P., Simon, F. J., and Caranana, C. D. (2006) The effect of innovation on intellectual capital: An empirical evaluation in the biotechnology and telecommunication industries, *International Journal of Innovation Management*, 10, 1, 89-112.
17. Nahapiet, J., and Ghoshal, S. (1998) Social capital, intellectual capital, and the organizational advantage, *Academy of Management Review*, 23, 2, 242-266.
18. Nonaka, I. (1994) A dynamic theory of organizational knowledge creation, *Organization Science*, 5, 1, 14-37.
19. Nord, W. R., and Tucker, S. (1987) Implementing routine and radical innovation, Lexington, MA: Lexington Books.
20. Putnam, R. (2000) Bowling alone: The collapse and revival of American community. New York: Simon and Schuster. Wills, Garry.
21. Rosenkopf, L., and Nerkar, A. (2001) Beyond local search: Boundary spanning, exploration, and impact in the optical disc industry, *Strategic Management Journal*, 22, 4, 287-306.
22. Ross, W. (2005) What every human resource manager should know about web logs, *Advanced Management Journal*, 70, 3, 4-11.
23. Sheremata, W. A. (2000) Centrifugal and centripetal forces in radical new product development under time pressure, *Academy of Management Review*, 25, 2, 389-408.
24. Silva, L., Mousavidin, E., and Goel, L. (2006) Weblogging: Implementing communities of practice, In *Social inclusion: Societal and organizational implications for information systems*, E. Trauth, D. Howeroft, T. Butler, B. Fitzgerlad, and J. DeGross (Eds.), Boston: Springer, 295-316.
25. Smudde, P. M. (2005) Blogging ethics and public relations: A proactive and dialogic, *Public Relations Quarterly*, 50, 3, 34-42.
26. Snell, S. A., and Dean, J. W. (1992) Integrated manufacturing and human resources management: A human capital perspective, *Academy of Management Journal*, 35, 3, 467-504.
27. Spender, J.-C. (1996) Making knowledge the basis of a dynamic theory of the firm, *Strategic Management Journal*, 17, S2, 45-62.
28. Subramaniam, M., and Youndt, M. A. (2005) The influence of intellectual capital on the types of innovative capabilities, *Academy of Management Journal*, 48, 3, 450-463.
29. Tushman, M. L., and Anderson, P. (1986) Technological discontinuities and organizational environments, *Administrative Science Quarterly*, 31, 3, 439-465.
30. Vaezi, S. M. (2007) Weblog Effects on Social Capital. Master Thesis, University of Nevada, Las Vegas.