SUPERIOR-SUBORDINATE KNOWLEDGE TRANSFER: WHAT SUPERIOR-SUBORDINATE KNOWLEDGE TRANSFER STRATEGIES ARE FAVORED BY HIGHLY EFFECTIVE GENERAL MANAGERS TO CREATE VALUE FOR THEIR ORGANIZATIONS?

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ABSTRACT

This qualitative study of 20 General Managers working in Canadian organizations found that understanding the nature of General Manager-subordinate knowledge transfer is critical to understanding how value-creating knowledge is acquired, created, transferred and applied in an organization. The following 10 characteristics of knowledge transfer strategies between GMs and their subordinates were identified: All of the GMs studied work in the presence of a strong information technology (IT) infrastructure; GMs believe that effective knowledge transfer creates value for organizations and their clients; GMs view value-creating knowledge transfer as part of a virtuous cycle : (as knowledge is brought to the cycle by the GM or a subordinate the total knowledge residing within the dyad increases, knowledge sharing within the dyad increases, knowledge creation is accelerated and the cycle continues); GMs treat knowledge as an asset that needs to be cultivated, managed, and shared; GMs treat value-creating knowledge as a corporate resource and not an individual one; GMs are clear about their knowledge transfer strategy; GMs link knowledge transfer to performance and provide incentives; GMs operate within a knowledge-friendly culture; they create a flexible knowledge transfer structure; finally, GMs have senior management support for their knowledge transfer initiatives.

INTRODUCTION

With the half-life of new knowledge becoming ever shorter, and the proliferation of books, articles, consulting groups, academic conferences, web sites, and so on dealing with knowledge management (KM), we need an effective means of identifying how successful managers and companies manage their knowledge acquisition and flow strategies. According to Lank (1997), knowledge and its manifestations in the expertise of people is nowadays seen as the greatest asset of organizations. In a recent survey by Ipsos-Reid and Microsoft Canada, a majority of Canadian business leaders indicated that KM practices had created value by improving organizational effectiveness, delivering customer value, and improving product innovation and delivery. The survey revealed that 65% of Canadian companies practicing knowledge management believe it has given their organization a competitive advantage. This paper identifies how 20 highly effective General Managers of Canadian organizations have shaped and clarified their knowledge acquisition and flow strategies with their subordinates to help create value for their organizations.

LEVEL OF ANALYSIS

Jablin (1985, p. 625) has observed, "Probably one of the most consistent findings in superior-subordinate communication research is that supervisors spend from one-third to two-thirds of their time communicating with subordinates." Writers of both theoretical and pragmatic persuasions insistently refer to the critical nature of "communications" in understanding how organizations function. For example, the executives discussed in Mintzberg's (1973) now classic study of managerial work spent 78% of their working time interacting with others, and as much as 50% of that time in interactions with subordinates. Later studies by Stewart (1982) and Kotter (1982) also support the importance of two-person "dyadic" communications in managerial work.

According to Dansereau and Markham (1987), contemporary communications literature reveals that in the communications research tradition, four different levels of analysis (or entities) have received the lion's share of attention: (1) the person, (2) the dyad, (3) the group, and (4) the collectivity. Moreover, each of these schools of thought appears to consider the level of analysis in two ways. First, a school of thought may focus on inter-group communications such as communications between dyads or between individuals and the collectivity. Second, a school of thought may focus on intra-group communications such as communications between the two members of a dyad, or between the collectivity as a whole, for example. Since knowledge management has become a very prominent concept in business and organizations, most of the attention currently focused on it seems to be directed at managing information flows within the group or collectivity. This paper seeks to add to that body of knowledge the results of research into the superior-subordinate dyad in general, and the General Manager-subordinate dyad in particular. We believe that the critical nature of the General Manager's (GM) role in shaping and clarifying an organization's knowledge transfer strategy is pivotal to understanding knowledge acquisition and flows within an organization. Consequently, we consider this dyad to be an extremely important domain of examination in the analysis of knowledge acquisition and flow within an organization.

DEFINING KNOWLEDGE

Both scientific and practitioner literature present numerous definitions of knowledge, but none seem to be universally appropriate, as the definitions depend on the context in which they are used (Sveiby, 1997). Furthermore, several authors (Davenport and Prusak, 1998; Wiig, 1993; Sveiby, 1997; Roehl, 1997; Court, 1997; Husemann and Goodman, 1999) emphasize the importance of differentiating between data, information and knowledge. For example, Husemann and Goodman (1999) define data as objective facts describing an event without any judgment, perspective or context. Davenport and Prusak (1998) describe data as discrete and objective (manifestations) about facts and events, that says nothing about the data's own importance or lack thereof.

By adding meaning and understanding to data, it becomes information that has shape and is organized to some purpose (Davenport and Prusak, 1998; Wiig, 1993). For Drucker (1998), information is data endowed with relevance and purpose while Husemann and Goodman (1999) describe information as data points, drawn together, put into context, added perspective and delivered to people's minds.

As information is manipulated by an individual in order to convince, describe and provoke, the individual transforms information into knowledge by incorporating personal experience, values and beliefs (Wiig, 1993). Knowledge then must be viewed as originating in the person, as it is shaped by one's initial stock of knowledge and the inflow of new information (Fahey and Prusak, 1998).

Consequently, every person builds his or her own knowledge. Court (1997) illustrates this by suggesting that the knowledge created by an individual reading a book will differ from another person reading the same book. This is caused by the differences in background and experiences of each person reading the book. For the purpose of this paper, knowledge is defined as follows:

Knowledge originates in the mind of an individual and builds on information that is transformed and enriched by personal experience, beliefs and values. It reflects information interpreted by an individual and applied to a context-specific situation that has meaning for the individual. As such, the knowledge formed by one individual will likely differ from that of another person receiving the same information. The characteristics of knowledge described above emphasize the strategic significance of knowledge sharing by individuals in the same organization in order to continue to develop a competitive advantage.

The researcher's knowledge base needs to be clarified when conducting research of a qualitative nature

The researcher's personal involvement in a qualitative investigation such as this suggests that his worldview should be explicated early in the study to clarify, for the reader, the ontological (nature of reality) and epistemological (nature of the knower to the known) perspective which has guided the conceptual and methodological development of the study.

An ontological perspective

Morgan and Smircich (1980) suggested that before framing a conceptual or theoretical foundation or a methodological direction for a research study, the researcher should first assess his/her ontological and epistemological point of view, or in their words, "world view." Combining this worldview with the research question(s) will guide the researcher in the choice of a favored methodology for the study.

Ontologically, my worldview of reality represents a blend of symbolic discourse and social construction. In other words, my conception of reality is that it is created through human interaction as suggested by both the social construction and the symbolic discourse literature. But contrary to social constructionists, for whom there is no such thing as concrete reality outside of human interaction, the symbolic discourse perspective, which also supports the perspective that reality is created by human interaction, allows for a certain degree of stability of meaning through the operation of archetypes or rule-like activities which establish boundaries for a specific social milieu. This combination allows us to capture both the reality that is created within the moment and that reality which seems to be somewhat more stable across human interaction.

The philosophical debate over whether humans actually create reality to make sense of their world (social construction) or are merely actors interpreting their milieu and orienting their actions in ways that are meaningful to them (symbolic discourse) is beyond the scope of this study. However, my assumption is that the reality observed and reported by humans interacting in context is the legitimate reality.

The ontological perspective of qualitative research

An increasing number of organizational scholars (Bryman, 1984; Mintzberg, 1973; Morgan, 1983; Morgan & Smircich, 1980) and others have advanced a worldview which assumes that humans are not merely interacting with concrete, environmental reality, but actively contributing to its creation. Accordingly, humans behave according to the meaning they attribute to a situation at the time it occurs. Data about this type of reality are less likely to be obtained by having subjects fill out a survey or an assessment instrument. Rather, data of this type require a qualitative or naturalistic research method to provide exposure to the complexity of human meaning within the environment in which it occurs. In other words, one must belong to a world to claim to know it.

"Naturalistic inquiry" (Lincoln & Guba, 1985) is designed to develop or generate social theories and concepts by formulating hypotheses and propositions directly from data rather than working from assumptions or existing frameworks. The naturalist paradigm is built upon the following broad axioms (Lincoln & Guba, 1985): realities are multiple, constructed, and holistic as opposed to single and fragmentable; the inquirer and the object of inquiry are interactive and inseparable; all working hypotheses must be time- and context-bound (idiographic statements); entities are in a state of constant simultaneous shaping, making cause-and-effect relationships difficult to distinguish; finally, values form an integral part of the process of inquiry.

Naturalistic inquiry provides a discovery-oriented framework for eliciting and analyzing substantive data. It is a form of inquiry that takes place in a natural setting and requires the use of a fully adaptive human instrument (the researcher). It is an ongoing process involving the repetition of four essential elements: purposive sampling, inductive analysis of the data obtained from the sample, development of a grounded theory based on the inductive analysis, and elaboration of next steps toward an emergent design using tacit and propositional knowledge. The process is repeated until sufficient redundancy occurs to indicate stabilization of the emergent design and theory. Based on information theory, redundancy is the repetition of behaviors over time. As redundancy increases, uncertainty decreases – thus, through tracking the repetition of behaviors over time, researchers can ascertain patterns of message behavior and the probability that a sequence of behaviors will recur. A case report is then developed to serve as an idiographic expression of the findings. Trustworthiness is tested throughout the process of the study and receives a final critical review by a panel of local respondents.

Hence, in this study, no attempt is made to explain or generalize about superior-subordinate knowledge transfer through hypothesis testing; rather, the aim is to understand and interpret it through discovery and interaction.

Initial sampling plan

Data were collected from a maximum variation sample of highly effective superiors until "qualitative informational isomorph" (Lincoln & Guba, 1985) was achieved, that is, a sample that expands until information redundancy is achieved, at which point the sampling is ended. The initial sample consisted of five subjects (superiors) recognized as highly effective superiors by their superiors. The superiors were informed that the study was for a doctoral dissertation on superior-subordinate relationships, and that participants were being asked for permission to be interviewed, observed and audio-taped over two working periods. The confidentiality of the research was confirmed to the respondents, and they were assured that the contents of the interviews were to be used strictly for the compilative needs of the researcher and would not be directly transmitted to any other individual or organization. Publication of information resulting from interviews would take the form of aggregated anonymous information. Additional subjects, if required, were to be contacted based on superior referrals until qualitative information isomorph was achieved.

To provide gender balance to the study, we subsequently decided to bring the initial sample size to six highly effective superiors, three males and three females. Information isomorph became apparent after four interviews, but the study was brought to six to reconfirm information redundancy. Following the initial study, another fourteen highly effective GMs were studied (ten males and four females); this study confirmed the initial findings.

Rationale for selection criteria used in identification of highly effective superiors

Most studies on measures of leader effectiveness suggest that peer ratings generally met acceptable standards of reliability (Dobson, 1989; Latham & Wexley, 1981; Harris &

Schaubroeck, 1988; Muchinisky, 1986). Accordingly, we decided to use peer referrals to identify highly effective superiors.

Subordinates of the general managers

Subordinates of the GMs were interviewed to provide information that would corroborate, refute or provide a new perspective on the data provided by their superiors. One of the GMs had just completed a 360° performance evaluation, which provided the data used to compare against the information provided by the GMs and her subordinate.

The research sites

Nineteen different organizations were identified, through business contacts, as potential research sites, thereby increasing the possibility of maximum sample variation. All of the sites were large public and para-public sector organizations operating in the Canadian business environment.

Data collection-interview process

Open-ended extensive interviews were conducted with the subjects (superiors) to provide a context for the researcher regarding the superior's perceptions of his/her relationships with subordinates. The purpose of these interviews was to identify units of information with which to begin the coding process. Included in the open-ended questions were:

- Tell me what the phrase "superior/subordinate work-based communications" means to you.
- Describe the types of work-based communications you have with your subordinates.
- How do you identify the information that is important to you?
- How do you identify the information that is important to your subordinates?
- How do you identify the information that is important for you to transmit to your subordinates?
- How do you identify the information that is important for you to transmit to your superior?
- How do you get the information you need from your subordinates?
- How do you get the information you need from your superior?
- etc.

To confirm the understanding of the participants' comments and to reconsider the interpretations of the data made by the researcher, member checks were conducted periodically with the subjects to insure the trustworthiness of the data.

Clarifying terminology

Organizational scholars and practitioners from a variety of disciplines including communications, management science, strategy, and economics all agree that knowledge is at center stage in value creation. Knowledge is information combined with experience, context, interpretation, and reflection. In other words it is a value-creating advantage in

the competitive marketplace. Organizational knowledge transfer is the process through which new knowledge is created, acquired, synthesized and applied throughout the organizational network. If a company stops creating, acquiring, synthesizing and applying new knowledge, it runs the risk of applying yesterday's solutions to today's challenges. In this sense, Lank (1997) argues that organizations need to adapt quickly to the changing environment and must commit to permanent learning. Gilbert and Cordey-Hayes (1996) also suggest that the process of knowledge transfer is not a static one, it is dynamic, and as such knowledge management becomes part of the process of continuous learning. This view is further emphasized by Allee (1997), who suggests that renewal of knowledge is the key to competitive advantage, which includes not only creating new knowledge but also letting go of old knowledge.

For Davenport and Prusak (1998), the transfer of knowledge involves both the transmission of information to a recipient and absorption and transformation by that person or group. For knowledge transfer to be of value to organizations it must lead to improvements in behavior, practices and policies and to the development of new ideas, processes and policies. This makes it imperative for GMs and their subordinates to become masters in the efficient use and application of knowledge transfer strategies.

According to Gupta & Govindarajan (2000), "The task of accumulating knowledge can be disaggregated into three subtasks: *Knowledge creation* (learning by doing), *knowledge acquisition* (internalizing knowledge), and *knowledge retention* (minimizing the loss of proprietary knowledge). The task of mobilizing or transferring knowledge can also be disaggregated into a set of subtasks: *knowledge identification* (uncovering opportunities for knowledge sharing), *knowledge outflow* (motivating potential senders of knowledge to share it), *knowledge transmission* (building effective and efficient channels for transfer of knowledge) and *knowledge inflow* (motivating potential receivers to accept and use the incoming knowledge)."

This paper focuses on the practical realities of how GMs, in their dealings with their subordinates, create a knowledge transfer strategy in which new value-creating knowledge is created, acquired and applied.

FINDINGS

1. IT infrastructure

All of the GMs studied had installed or were in the process if installing sophisticated IT data management infrastructures, adapted to their specific needs, to help process existing information. They had three basic types of information repositories: one for external knowledge such as competitive intelligence; a second for formal internal knowledge such as marketing materials, policies, procedures, research reports, etc.; and a third for informal internal knowledge, like shareware, best practices, lessons learned, know-how databases, etc. But all expressed the underlying belief that their IT infrastructure itself did not produce, evaluate, understand, or add meaning to information. Only humans have that ability, and the GMs consider those human or social dimensions of communications as critical to an effective communications strategy. While a sophisticated IT infrastructure is

considered essential to effective communications, it is just the first step in the process and none of the GMs acknowledged spending much time on this infrastructure. They considered IT as the mechanistic aspect of knowledge management and preferred leaving it to the specialist in IT or within the respective departments. They all indicated, however, that a very large portion of their work day was focused on the social aspects of knowledge management which we refer to as communications. Those social aspects are addressed in the following nine characteristics of communications between GMs and their subordinates.

2. Effective communications creates value for the organization and its clients

All of the GMs believed that effective communications creates value for the organization and its clients, but none of them had yet found a way to track the return on investment of knowledge management. In fact, the majority were not able to determine the business value of their investment in this area. Most of them agreed to having lost business opportunities as a result of poor communications.

3. GMs view knowledge transfer as a cycle

As the GM-subordinate dyad is formed, both parties bring new knowledge to the dyad; as that knowledge is shared, the total knowledge residing within the dyad increases; knowledge sharing within the dyad increases; knowledge creation accelerates; the increased level of knowledge attracts more sharing and communications, and so on. I refer to this as the superior-subordinate knowledge transfer cycle. Most highly effective GMs indicated that it was essential for value creation that they take the lead in creating and mobilizing knowledge. They saw their role as pivotal to generating and cultivating the cycle of knowledge transfer as it relates to their subordinates.

4. GMs treat knowledge as an asset that needs to be cultivated, managed and shared

Several of the GMs were engaged in efforts to change the organizational norms and values related to knowledge. Two such efforts involved GMs instructing their Finance subordinates to treat knowledge like any other asset on its balance sheet -- the ultimate goal being to reinforce the value of corporate knowledge in the minds of employees and investors. One of the other GMs was struggling with the concept of measuring knowledge acquisition and transfer. This issue focused on inter-plant transfer of information. The concern was that plant managers were not communicating effectively amongst themselves about knowledge (best practices) which could be very useful to their colleagues. All of the GMs indicated an interest in finding ways to treat knowledge as a corporate asset; however, none had succeeded at institutionalizing such a procedure.

5. GMs treat value-creating knowledge as a corporate resource and not an individual one

GMs view organizational knowledge as a corporate asset and not an individual one. In other words, hoarding of value-creating knowledge was banned by most of the GMs and they were making heroes of knowledge sharers. This ban started with the GMs

subordinates and was cascaded down into the rest of the organization. Conversely, subordinates were recognized for not only discovering or inventing new leading-edge practices but also for facilitating their adoption by other units of the organization.

6. GMs are clear about their communications (knowledge management) strategy

The GMs believed that they clearly articulated their communications strategy to their subordinates. For example, 19 of the 20 GMs had included a statement about the importance of communications in their values statements or mission statements.

7. GMs link knowledge management to performance and provide incentives

Four of the initial six GMs included knowledge management as part of the performance discussion with their subordinates during the annual performance review. Three actually accounted for it in their subordinate pay structure. Of the 14 additional GMs, all reported including communications as a component of subordinate compensation. In total, 16 of the GMs discussed the importance of providing their subordinates with stretch goals in the area of communications

8. GMs operate within a knowledge-friendly culture

All but one GM indicated that they foster a positive orientation to knowledge creation and sharing. For example, they indicated that they value highly such concepts as continuous learning, organizational learning, experimentation, creativity, innovation and the right to make mistakes.

9. Flexible knowledge structure

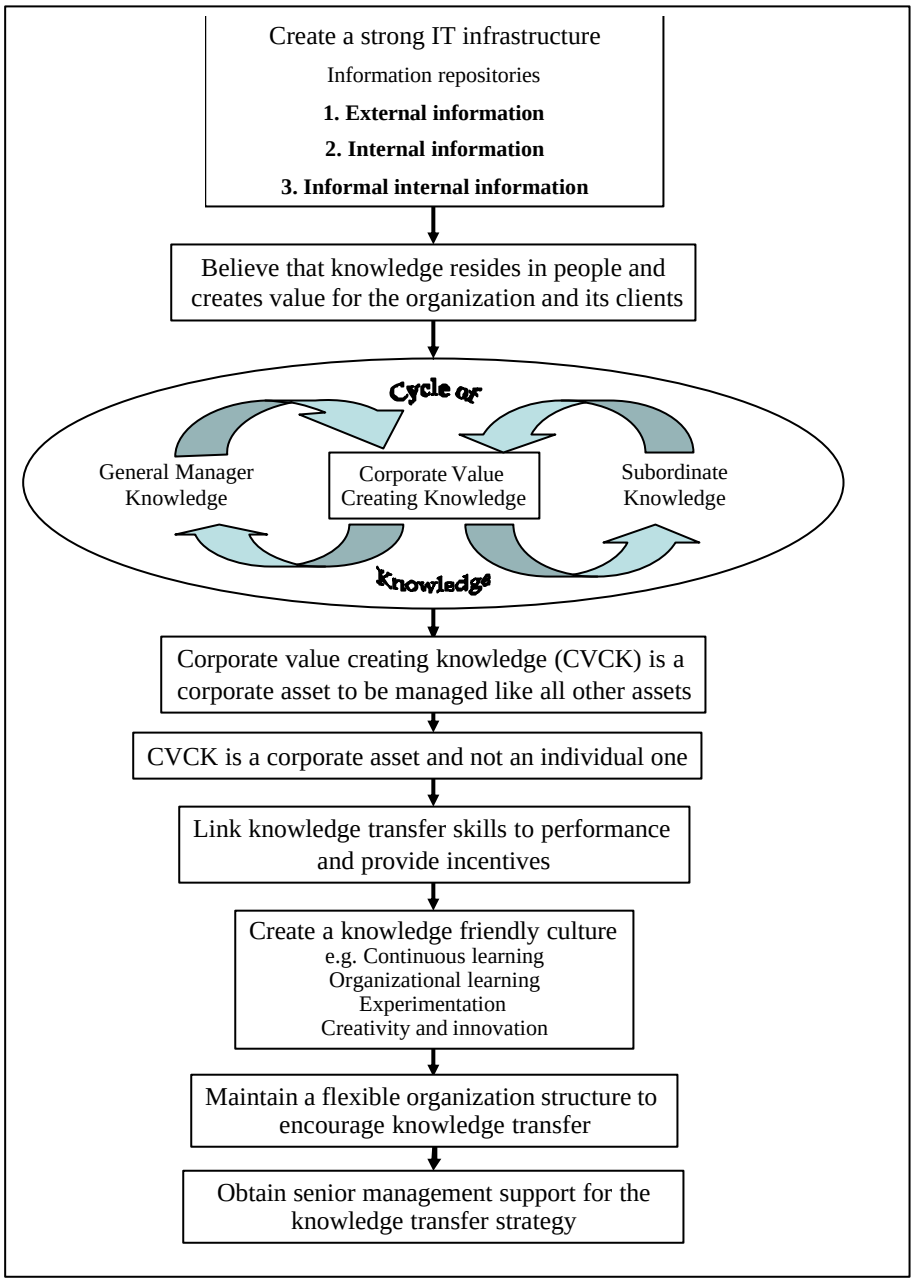
All GMs indicated that they value communications over hierarchy. They have flexible organizational boundaries when it comes to knowledge creation and sharing. For example, one GM insisted that if one of her subordinates had knowledge that could be useful to another GM within the parent company, they were expected to communicate that information directly to that GM.

10. Senior management support

All of the GMs indicated that while they were fortunate to have senior management support for their approach to knowledge management, they would be managing knowledge in the same way even if that support were not forthcoming. The fact that GMs are willing expose themselves to criticism from their superiors in implementing an efficient communications machine further supports the high value they place on knowledge management.

Figure 1 incorporates these findings into a model of the effective GM's knowledge transfer strategy.

Figure 1: A model of the effective General Manager's knowledge transfer strategy



DISCUSSION

There is no doubt that knowledge management in general, and knowledge transfer in particular, occupies an increasingly important place in the General Manager-subordinate dyad's agenda. While information technology has impacted the amount of information available to GMs and their subordinates, it is the social dimension of how the GM and his/her subordinates mobilize that information that translates it into value-creating

knowledge. The intensity of attention that GMs place on communication and knowledge transfer indicates a need for the academic community to focus on ways to help organizations measure the return on investment of knowledge transfer initiatives. By doing so, we can help managers leverage communications skills into value-creating advantages for their organizations.

Contribution, limitations and suggestions for future research

The primary contribution of this article is to provide further academic support to the continued use of a qualitative research approach to understanding the knowledge transfer construct of superior-subordinate relationships in organizations. The second contribution is that it focuses more attention on how GMs and their subordinates transfer knowledge since the advent of information technology (IT). Finally, I trust that this study provides additional impetus to the idea that the communications community must get increasingly involved in the knowledge transfer debate. Organizations are looking for help to develop innovative approaches to knowledge transfer, and I believe that the academic communications community can provide part of the solution to the challenges faced by organizations.

There are three limitations that condition the contribution of this study. The first is the size of the sample. Twenty subjects represent a relatively small sample of GMs. My research agenda is to expand this study over time. Hopefully, other researchers interested in both knowledge management and knowledge transfer within the superior-subordinate dyad will conduct follow-up research to test these findings in other organizations. A second limitation is the transferability of these findings. As the study stands, transferability of the findings has to be determined by the person intending to make the transfer. Triangulating this study with a more quantitative research approach will provide yet greater support to the notion of transferability of these findings. Finally, a third limitation is that these results are reflective of Canadian GMs working in a mostly-Canadian context. While globalization has a growing impact much more research is required to determine the implications of the current finding for GMs in other cultures.

These and other limitations should be kept in mind when considering the implications of the current findings. However, in this researcher's view, the study results constitute an interesting basis for further longitudinal research. In any research project, choices made by the researcher create limitations for the interpretation of the results. Even so, these results offer new insights and contributions to knowledge theory and practice. They also confirm interest for the subject.

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