

Leadership activities and their impact on creating knowledge in organizations

***Abstract:** Leaders play a central role in the process of knowledge creation. While researchers have emphasized a strong link between leadership styles and knowledge creation, the role of leadership in knowledge creation activities has attracted scant attention. We argue that decoding the relationship between leadership and knowledge creation is important as it helps identify leadership activities that facilitate knowledge creation, and thus build competitive power for organizations. Based on extant literature, we develop five propositions underscoring the role of leadership in knowledge creation processes. Ultimately a theoretical model establishing links between leadership, knowledge creation activities, and possible outcomes of these leadership activities is attempted.*

Keywords: leadership, knowledge creation, knowledge networks, knowledge inventory, leadership activities

Knowledge is considered the most important resource for organizations working in dynamically-competitive environments (Grant, 1996). In a high competition environment, an organization's ability to assimilate members' knowledge and construct new knowledge determines its competitive power (Smith, Collins, & Clark, 2005). That knowledge creation activities help build competitive power, has been well demonstrated by scholars who have studied a wide range of organizations (Berman, Down, & Hill, 2002; Murmann, 2003; Tallman, Jenkins, Henry, & Pinch, 2004).

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In any organization, leaders who have the power to incite and influence knowledge creation activities are at a natural advantage in their ability to play a central role in the process of knowledge creation and thus build competitive power for organizations. While scholars have emphasized a strong link between leadership styles and knowledge creation, the role of leadership in knowledge creation activities has attracted scant attention (Mitchell & Boyle, 2009; Tse & Mitchell, 2010). Researchers investigating the role of leadership on knowledge creation have focused on issues such as finding and differentiating the role of transformational and transactional leadership in knowledge management and creation (Bryant, 2003); examining the extent to which transformational leadership contributes to creativity inside organizations (Pieterse, Knippenberg, Schippers, & Stam, 2010; Shin & Zhou, 2003); depicting the role of transformational leadership in facilitating constructive cognitive effects on team knowledge creation (Mitchell & Boyle, 2009); and investigating how open-mindedness and Leader-Member Exchange (LMX) quality help in underpinning the effect of transformational leadership on knowledge creation (Tse & Mitchell, 2010). Researchers have also examined the influence of transformational leadership style on employee's innovative behavior at both individual as well as organizational level (Gumusluoglu & Ilsev, 2009; Jung, Chow, & Wu, 2003).

As evident, while extant literature probes the effect of leadership style on knowledge creation activities, little attention has been paid to identifying leadership activities that help in knowledge creation. This paper fills an important void by identifying such leadership activities that have the potential to affect knowledge creation processes inside an organization. For the purpose of this paper, a leader is one who is entrusted with decision making powers, i.e. the one

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who has power to incite and influence certain activities that can affect the process of knowledge creation inside an organization.

COMPLETING THE CHAIN OF KNOWLEDGE CREATION

The ability of managers to transform available information into knowledge that can be put to action is a serious impediment that affects the process of decision making inside organizations (Churchman, 1964). As improper decision making affects creation of knowledge, employees who are better able to transform data into knowledge are an important asset for any organization. As Churchman (1964) argues, the major impediment in any decision making process is the failure to understand the basic model of knowledge creation.

Insert Figure 1 about here

As evident from the model, proper attention, collection, and communication of data leads to information available for analysis. A thorough analysis of the available information helps turn it into ‘knowledge of how to act’ but not ‘knowledge’ per se. This knowledge of how to act can next be turned into ‘knowledge’ through proper decisions. A closer look at the model suggests the importance of ‘attention’ and ‘communication’ in the chain of knowledge creation: they are common constituents at each level of transformation. Furthermore, both these factors can be equated with what Nonaka (1994) describes as employee’s commitment to the knowledge creation process.

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For an organization, the process of conversion of data into knowledge through the process of ‘chain of knowledge creation’ does not happen at a single stage. In almost all cases, the conversion process involves multiple levels (i.e. individual, group, organizational, and inter-organizational) with different people getting involved at each level (Nonaka & Takeuchi, 1995, pp. 56-57); this in turn demands commitment from each member involved in the whole process: such commitments can only be found in what Davenport and Prusak (1998, pp. 153-155) identify as a ‘knowledge oriented culture’. A defining characteristic of a knowledge oriented culture is employees’ positive orientation to knowledge and their readiness to share it (Davenport, De Long, & Beers, 1998). As recruiting and retaining the right talent is the key to establishment of such cultures (Haesli & Boxall, 2005), leaders should encourage recruiting, retaining, and rewarding employees who are committed to knowledge creation processes.

Proposition 1: Leaders advocate recruiting, retaining, and rewarding those employees who are committed to knowledge creation processes.

RENDERING A COMMON PLATFORM FOR SHARING EXPERIENCES

Knowledge and its two dimensions – Tacit and Explicit

Michael Polanyi’s (1997) identification of the two dimensions of knowledge (viz. tacit and explicit) is a major contribution to organizational studies in the field of knowledge management. Polanyi, in opposition to the prevalent thought in western tradition (Gill, 2000; Polanyi & Sen, 2009), argued that ‘we can know more than we can tell’. His arguments lead us to an intriguing situation: If we know more than what we can say, then there should be some way to share what we know so that new knowledge is created: effectively, mobilization and

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conversion of tacit knowledge should lead to some form of knowledge creation (Nonaka & Takeuchi, 1995). It has been argued that conversion of tacit knowledge into explicit knowledge is a prerequisite to knowledge amplification so that it becomes a part of organization's knowledge network (Herschel, Nemati, & Steiger, 2001). Nonetheless, we should not see the process of knowledge creation as a one-way linear process between tacit and explicit. In fact, knowledge creation process involves a four way flow between tacit and explicit modes (Nonaka, 1994):

Tacit to Tacit: Knowledge is created through the process of Socialization where individuals share experiences through observation, imitation, and practice

Explicit to Explicit: Knowledge is created through the process of Combination where individuals exchange and combine knowledge through exchange mechanisms

Tacit to Explicit: Conversion of knowledge through the process of Externalization; metaphor (imaginative and intuitive learning through symbols) plays an important role

Explicit to Tacit: Conversion of knowledge through the process of Internalization; reflection in action (reflecting while experiencing) plays an important role

Here we focus on the process of 'socialization' in a context where an individual interacts with a group in order to gain tacit knowledge shared by its members. Such tacit knowledge could be knowledge of how to act in a given context, for example 'practical consciousness' that are held tacitly by actors are often hard to explain (Evans & Brooks, 2005). Many facets of organizational culture are shared tacitly by groups, and if someone wants to get incorporated in a group one must learn those facets. The key to learning such facets lies in tacit to tacit knowledge

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transfer: a process that determines extensive socialization and further internalization of knowledge through proper analysis of received inputs.

Apart from being a powerful cultural communication process, socialization and combination are considered processes that emphasize knowledge creation: the rest two processes (viz. externalization and internalization) emphasize knowledge utilization (Nonaka & Reinmoeller, 2000). Moreover, as the process of socialization involves spending times together inside the same environment rather than sharing of knowledge through written and verbal instructions (Nonaka & Konno, 1998), a common platform for interaction would be a prerequisite: such platform could include group meetings and activities where members can share their experiences.

Proposition 2: In rendering a common platform to employees for sharing experiences, leaders expedite the process of knowledge creation

PROVIDING ADEQUATE AND SAFE MEANS OF EXPRESSION

Sloan (2006, pp. 77-79) argues that providing explicit means of expression helps in challenging deep rooted beliefs and traditional knowledge that might have become obsolete: this in turn helps develop innovative and strategic capacities for organizations. Nonetheless, there are challenges with any means of expression in terms of their adequacy and suitability.

In large organizations, employees often come from varied backgrounds differing in the way they prefer to speak out their minds: in such cases, it becomes the responsibility of a leader to open many 'doors of communication' like public forums, and shape 'conversation rituals' so that new participants are incorporated easily (Von Krogh, Ichijo, & Nonaka, 2000, pp. 132-134);

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such doors of communication can also take the form of technology mediated communication processes as their role in proper dissemination of existing and new knowledge has been well established (Shu-hsien, 2003). Scholars have also stressed the importance of computer-mediated communication in belief sharing and consensual interpretations leading to knowledge creation (Alavi & Leidner, 2001; Henderson, Sussman, & Thomas, 1997). Such technological infrastructures, apart from helping organizational members, help create new knowledge through inter-organizational networks as well (Malhotra, Gosain, & Sawy, 2005).

While providing adequate means of expression is important, even more important is the presence of mutual trust as lack of trust inhibits organizational members from expressing themselves (Morrison & Milliken, 2000). Even in the wake of adequate means of expression, employees may prefer to remain silent if they feel a lack of psychological safety arising out of beliefs that voicing ideas and concerns would lead to negative consequences (Detert & Burris, 2007). As Detert and Edmondson (2011) argue, leaders must remain proactive by dismantling beliefs that foster silence and build up an environment where speaking up is invited and rewarded. Once such an environment is built, a proper system could be put in place that makes it easy to save representations of what is learned and makes it accessible to all (McInerney & Mohr, 2007).

In an organizational setting, providing such means of expression and initiating a trustworthy environment comes under the purview of leaders (Dirks & Ferrin, 2002); thus it can be reasoned that by providing safe and adequate means of expression to employees, leaders help create knowledge through the process of combination.

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Proposition 3: Leaders help in the process of knowledge creation by providing organizational employees various safe ways of expressing themselves

FORGING KNOWLEDGE LINKS BETWEEN UNIQUELY CAPABLE COMPANIES

Though researchers have focused a lot on the dichotomy of knowledge in terms of tacit and explicit forms, there are other ways to look at it: a prominent one though of a similar nature is expressed by Badaracco (1991, p. 34) who defines organizational knowledge in terms of its mobility – migratory and embedded knowledge. Badaracco (1991) terms migratory knowledge as that kind of knowledge which can be transferred from one firm to another firm easily. The prerequisites to migration of knowledge are: a) ability of knowledge to be packaged; b) employees' ability to open that package; c) incentives for opening the package; and d) absence of barriers that would otherwise stop employees from opening the packages. As opposed to migratory knowledge which resides in 'tidy, mobile packages like books and formulas, in machines, and in minds of individuals', embedded knowledge is personal to the firm and resides primarily in 'specialized relationships among individuals and groups and in the particular norms, attitudes, information flows, and ways of making decisions that shape their dealings with each other' (Badaracco, 1991, pp. 79-80). Considering that embedded knowledge is specific to a firm, it is hard to transfer it to any other firm. Moreover, since all firms have some kind of specific embedded knowledge, firms might like to share their specialized capabilities with other firms in order to create knowledge. In such a scenario, firms may like to explore the possibility of having knowledge link alliances for mutual benefit. Such knowledge links help create new knowledge by helping a company combine its special capabilities with that of other(s) (Badaracco, 1991, pp. 107-109). In this backdrop, it is worthwhile to mention the work of proponents of 'industrial

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district', i.e. the concentration of specialized industries in particular localities where each firm specializes in its own activity and coordinates with other firms as an organism through a complex web of closely knit network ties. The contention is based upon the idea that geographical proximity facilitates knowledge sharing and knowledge creation through interactive learning and innovation activities. Findings from industrial district are now being extended to formal associations, and business organizations have become a popular subject of study due to research documenting the importance of network ties on business success and survival (Corolleur & Courlet, 2003; Grabher, 1993; Szarka, 1990).

The knowledge links can also be visualized as links inside the 'knowledge networks': a concept that punctuates the importance of 'organizations-as-networks' rather than organizations as 'inventories of knowledge' (Contractor, 2002). The knowledge networks contain collective competencies that help create new products and services (Contractor & Monge, 2002). As Li (2002) contends, these knowledge networks should not be restricted to organizational boundaries but should be expanded to include judicious information and knowledge sharing with other organizations. As organizations have scarce resources, leaders should try developing knowledge links with organizations that share common goals, even in cases where the organizations are in a competing relationship (Hackney, Desouza, & Irani, 2008). Nonetheless, knowledge sharing practices are reported to be obstructed due to policy constraints and restrictions arising out of differences in organizational cultures and these challenges must be countered before the practices are put in place, else knowledge sharing might be hindered (Pardo, Cresswell, Jing, & Thompson, 2001). However once the challenges to knowledge sharing are sorted out, inter-organizational collaboration leads to successful transfer of knowledge from one organization to

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another, in effect creating knowledge mutually beneficial for one another (Hardy, Phillips, & Lawrence, 2003).

Proposition 4: By forging knowledge links between uniquely capable companies, leaders help create new knowledge

INVESTING IN STRATEGICALLY RELEVANT TRAINING PROGRAMS

The importance of training and educating the workforce has been highlighted by leaders from different and diverse sectors. The oft-quoted line: “the only way America can compete and win in the 21st century is to have best-educated, best trained workforce in the world” (Clinton & Gore, 1992, p. 6) only shows how important it is for any country to keep an updated pool of knowledge resources for a healthy survival. Turning to the value of educational and training programs for business organizations; it has been shown that there is a positive relationship between implementation of training programs and productivity growth (Bartel, 1994; Ottersten & Mellander, 1999).

Nonaka and Toyama (2003) reason that training programs help in the process of internalization of knowledge: the explicit knowledge imparted during training sessions (in the form of written documents or lectures) helps enrich the tacit knowledge base of trainees effectively creating new knowledge that can be utilized on the job. Moreover, as training programs often bring people with diverse set of skills under one roof, they provide a mature environment for knowledge creation (Fong, 2003). Training is also beneficial in that it acquaints organizational members with available information repositories and knowledge-sharing systems and teaches their effective use (Cabrera & Cabrera, 2002). Training programs help create smart

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employees who get their work done in a better and more efficient manner because of the acquisition of new skills. Training and development activities also contribute to creating an atmosphere where employees get better opportunities for job success and growth. Better opportunities in terms of job success and growth help create a 'virtuous spiral of success' for both the individual as well as the organization (Lawler, 2003, pp. 114-138). Accordingly organizations should focus on developing a training strategy so that they are better equipped to face the future needs in terms of employee skills and knowledge inventory (Lawler & Worley, 2006, pp. 206-207).

Proposition 5: By investing in strategically important training programs, leaders help in the process of knowledge creation

THE PROPOSITIONAL MODEL

All the five propositions thus far formulated are related to leadership activities that try to set up conditions that allow easy facilitation of knowledge creation; setting conducive conditions is important as any form of leadership cannot directly influence knowledge creation, instead leaders should manage resources and create a context in which knowledge creation can take place (Keursten & van der Klink, 2003). Nonetheless, the role of leaders is important as their task is to support emerging processes and to commit with full responsibility to activities that foster knowledge creation (Nonaka & Konno, 1998). Having identified the leadership activities that help in the process of knowledge creation, we arrive at the following theoretical model underlining the respective activities with their likely outcomes:

Insert Figure 2 about here

The five propositions that we formulated could be put in the following way: leaders help recruit best talent and provide them a common platform for expression. For better utilization of members' knowledge, leaders provide adequate and safe means of expression to organizational members. Owing to limitations in terms of organizational capabilities to develop different kinds of knowledge, leaders forge knowledge links with other organizations. As continual training is a prerequisite for updating one's skills, and developing new competencies, leaders help employees with new training facilities.

We attempted a basic model linking leadership activities to their outcomes and their further effect on knowledge creation. The model, however does not account for all the possibilities in which leaders can affect knowledge creation activities. We mention some studies that have the potential to further our model and give it a comprehensive look.

O'Dell and Grayson (1998) emphasize leaders' role in establishing and reinforcing a supportive culture where knowledge is shared and created. In a similar vein, Zárraga and Bonache (2003) note that an atmosphere of mutual trust, active empathy, lenience in judgment, and high care is essential for knowledge creation and that the presence of a leader in any team helps in creation of such an environment. Orlikowski (2002) underlies leader's role in creating a situation where organizational members would have an opportunity to build and maintain social networks thus leading to a situation where knowledge would be shared and created. Similarly, Moitra and Kumar (2007) underline the role of leadership in development of social interactions

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among team members separated by geographical borders: they argue that by developing social networks that help systematically catalyze social interactions across borders, leaders help facilitate knowledge sharing processes.

These studies, as evident, have focused on the role that leadership plays in knowledge creation activities. Our model tries best to incorporate them, but to assert that our model accounts for all possible ways in which leadership affects the process of knowledge creation would be an overstatement. We attempted a basic model as our intention was to fill an important gap in literature: that of identifying leadership activities that affect knowledge creation processes inside an organization. It should be noted that only a generic model was attempted, as such, the model has huge potential to be furthered. All the same, we reason that understanding the link between leadership activities and knowledge creation is important as it would help organizations better shape the leadership behavior of decision makers, thus effectively building a favorable environment for knowledge creation.

FIGURES

Figure 1: Chain of Knowledge Creation

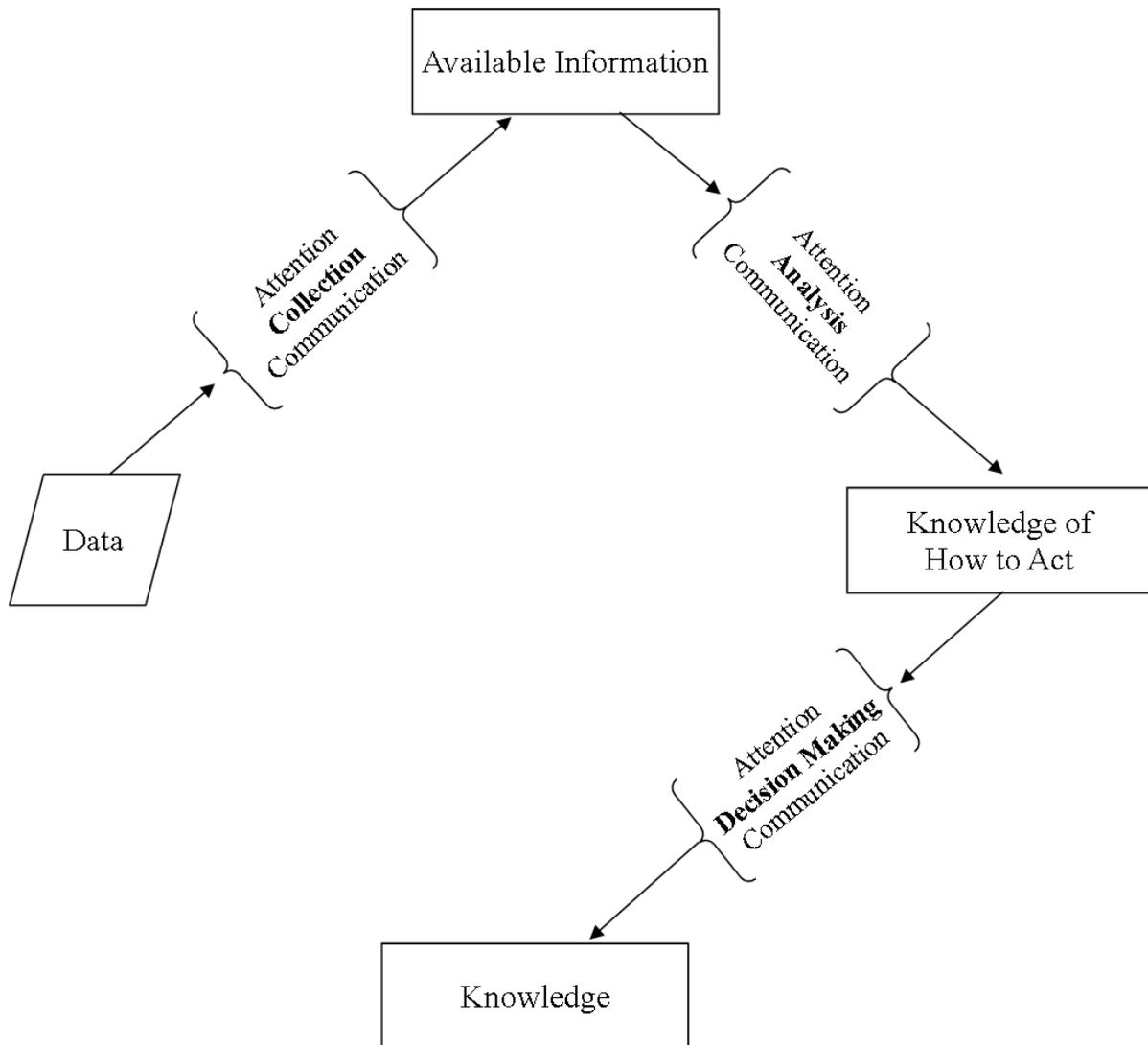
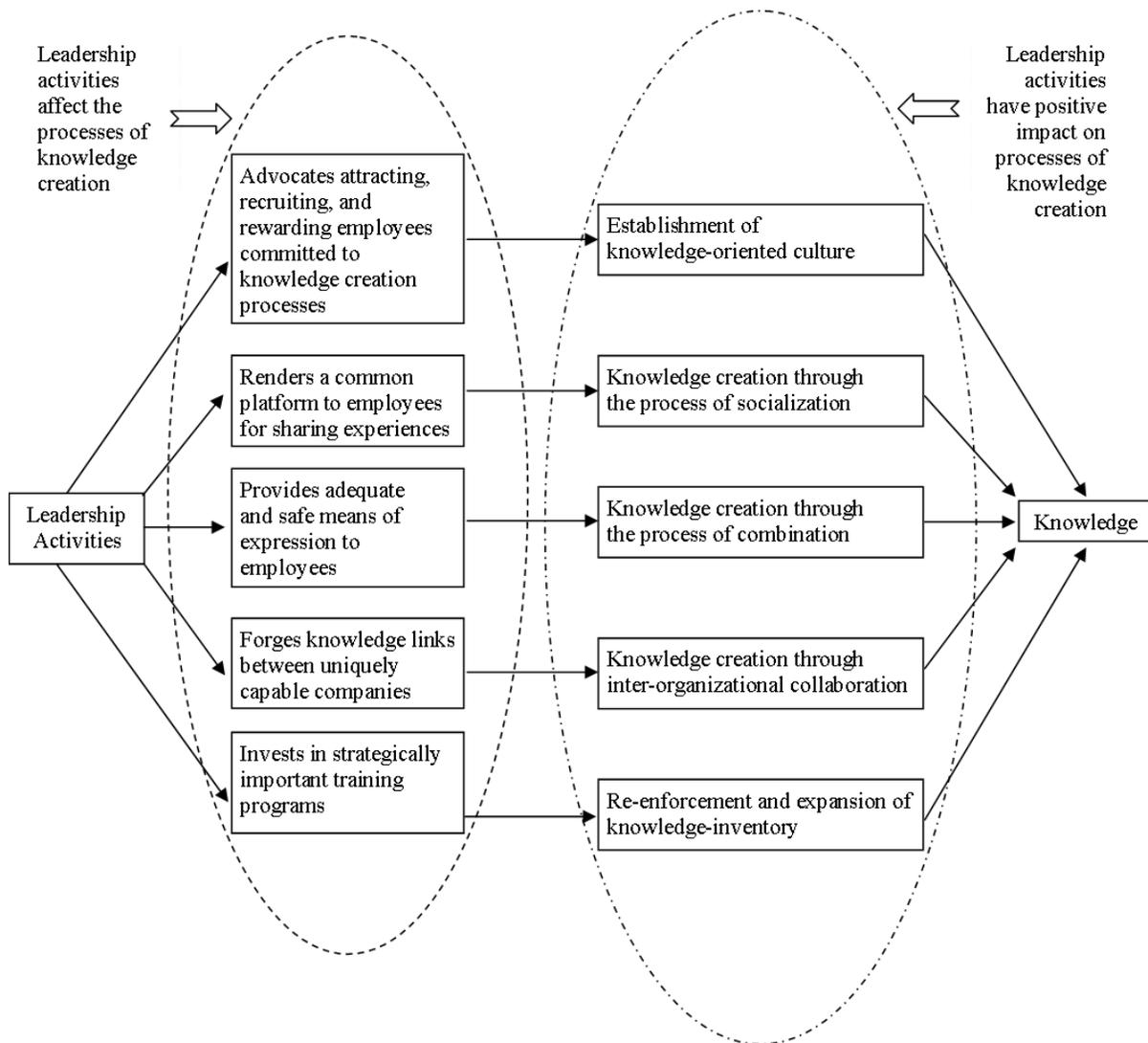


Figure 2: Role of Leadership in Knowledge Creation Activities



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