

Influencing knowledge workers: The power of top management

Sharmila Jayasingam^a, Muhamad Jantan^b, Mahfooz A. Ansari^c, Kavitha Raman^d

^aFaculty of Business and Accounting
Universiti Malaya, 50603 Kuala Lumpur, Malaysia
Tel : 03-79673833, Fax : 03-79673810
E-mail : sharmila@um.edu.my

^b Center of Policy Research,
Universiti Sains Malaysia, Penang, Malaysia
E-mail : mjantan@usm.edu.my

^cFaculty of Management
University of Lethbridge
4401 University Drive W
Lethbridge, AB T1K 3M4, Canada
Tel: 403.329.2069; Fax: 403.329.2038
E-mail : mahfooz.ansari@uleth.ca

^dFaculty of Business and Law
Multimedia Universiti, Jalan Ayer Keroh Lama, Melaka.
Tel : 06-2523103, Fax: 06 - 2318869
E-mail : kavitha.raman@mmu.edu.my

ABSTRACT

Leadership is known as the major factor that can influence and motivate knowledge workers to contribute and participate actively in creating, sharing and using knowledge effectively. A survey of 180 Multimedia Supercorridor (MSC) status firms was conducted to identify what leadership characteristics (in the form of social power) are needed in a knowledge-based firm. The results showed that knowledge leaders should embrace personal power and avoid information power. Position power must be exercised with caution because it not only encourages knowledge sharing but also impedes knowledge acquisition. Careful use of power can successfully influence k-workers to apply knowledge management practices (KMP).

Keywords

Leader's bases of power, knowledge management practices (KMP), knowledge workers.

1.0 INTRODUCTION

With the rising competition in the business field, firms are not only depending on its accounting value but also on the contribution of its knowledge (Lin & Tseng, 2005). Most researchers strongly advocate that the acceptance and implementation of KMP are central in building the firm's competitive advantage and maximize organizational performance. Thus, most firms are in the race of implementing the best KM systems to avoid being left out and to earn the promised benefits (Lam & Chua, 2005).

Despite the trend of implementing KM enabling technologies, many KM initiatives fail to achieve what

they set out to do (De Long & Fahey, 2000; Smith, Blackman, & Good, 2003). Disturbingly, KM experts disclosed that KM failure rates are projected to be between 50 to 70 percent (Ambrosio, 2000). Additionally, about 84 percent of KM projects implemented bore no notable result on the firms, which indicates failure of these projects (Lucier, 2003).

The primary cause for dereliction would be the failure of firms to understand that the success of KM systems does not merely rely on technology, but also on the knowledge workers' (k-workers') acceptance and commitment towards the KM system (Ambrosio, 2000; Davis, Subramaniam, & Westerberg, 2005; Lam & Chua, 2005; Malhotra, 2002). Although information technology plays an essential role in establishing KM systems, human capitals are the ones who create, share and use the knowledge to contribute towards organizational effectiveness (Malhotra, 2002). Fundamentally, simply boasting of a technologically advanced KM system and providing access to it will not initiate changes in behavior or lead to greater understanding (Smith et al., 2003).

Changing the k-workers' attitude and behavior to be more supportive of KM system implementation requires excellent leadership skills (McCrimmon, 1995; Ribiere & Sitar, 2003). Dynamic interactions should exist amid leadership and KM to encourage k-workers to espouse KM supportive behaviors (Politis, 2001). While it is apparent that leadership permeates as the foundation for KM system success, there is very little empirical research to support the relationship between leadership behavior and KM (Politis, 2001).

One may argue that the earlier researches and theories of leader behavior would be applicable in this knowledge

era. This may not be acceptable, as essentially, k-workers are different from other workers, thus requiring idiosyncratic people management practices (Ribiere & Sitar, 2003). K-workers are highly knowledgeable and thus confidently exercise self-control and self-learning (Amar, 2004). In line with k-workers' wider skills, expertise and work responsibilities, they have an increasing need for autonomy and empowerment (MacNeil, 2003). Fundamentally, leadership and management styles have undergone significant changes under the system of profound knowledge (MacNeil, 2003). Therefore, transformation of leader behavior is required to achieve the desired behavior among k-workers. So far, besides the studies by Politis (2001, 2005), Dfouni (2002), Ribiere and Sitar (2003), and Crawford (2005), only a handful of researchers have attempted to discover the underlying leader behavior needed to encourage the practice of KM supportive behavior.

Furthermore, most of these researchers have not attempted to expand the leadership behavior dimension to include bases of power and influence. It is evident that leadership in the knowledge firm involves the ability to influence others to work towards the realization of a common goal (MacNeil, 2003; McCrimmon, 1995; Ribiere & Sitar, 2003). For example, much knowledge is tacit and locked within the k-workers mind (Davis et al., 2005). Therefore, leaders should be able to influence their k-workers to be more willing to part and share their implicit knowledge. Leaders also need to be able to exercise influence to persuade and rejuvenate the outlook of k-workers towards successful knowledge acquisition (Politis, 2001, 2005). It is clear that the ability to influence is crucial in developing the desired KMP among k-workers.

Thus, this study intends to bridge this gap by identifying the relevant bases of power needed by knowledge leaders in order to successfully influence and persuade their workers to adopt KMP primarily knowledge creation, sharing, and utilization.

2.0 LEADER POWER AND KM

A study of various leadership styles reflects that bases of power are the underlying ingredients within any leader behavior. In fact, leadership is broadly described as influence processes that affect the action of followers (Ansari, 1990; Yukl, 2006). However, one must take note that the ability of a leader to influence stems from his or her perceived ability to exercise power (Yukl, 2006; Hinkin & Schriesheim, 1989).

Many different frameworks and classification schemes are available to understand power relationships, but that of French and Raven's (1959) seems to be the most widely used taxonomy. Their original taxonomy, defined five bases of power: reward, coercion, legitimate, referent, and expert. In 1965, Raven added the sixth base of power,

"information power". Subsequently, "connection" was added as the seventh base of power (Ansari, 1990; Bhal & Ansari, 2000; Hersey, Blanchard, & Natemeyer, 1979). A review of earlier studies on leader's bases of power revealed outcomes as presented in Table 1.

Table 1: Summary of outcomes of leader's bases of power

Bases of power	Outcome		
	Positive	Negative	Unrelated
Reward	v	#	v
Coercive		#	
Legitimate	v	#	v
Referent	#		
Expert	#		
Information	#		
Connection	#		

Note: v= Weak; #=Strong relationship

To date, besides the study by Politis (2005) we are aware of no research that has investigated the effect of leaders' bases of power in encouraging KMP. Our study intends to discuss the possible effects and enlighten leaders on which are the appropriate bases of power to employ and which should be shirked.

2.1 The influence of reward power on KMP

In a knowledge-based environment, Politis (2001, 2005) stated that leaders who provide rewards if k-workers perform in accordance to leader's desire, disable rather than enable knowledge acquisition. Contrary to this finding and results of previous studies, we believe reward is a powerful motivator in influencing k-workers' behavior. K-workers typically indulge in KMP for their own interest rather than for the betterment of the firm (Gal, 2004). Hence, the following hypothesis is developed for our study: **H1: Leaders use of reward power positively influences k-workers to adopt KMP.**

2.2 The influence of coercive and legitimate power on KMP

In line with previous studies, we hypothesize that in a knowledge-based environment, coercive and legitimate powers are associated with leader ineffectiveness. Managers can no longer depend on the traditional command and control mechanism to influence k-workers (MacNeil, 2003; McCrimmon, 1995). K-workers enjoy greater autonomy and power at work due to their wider skills, expertise and work responsibilities (MacNeil, 2003). Thus, they do not enjoy working under close supervision or direct control (Kubo & Saka, 2002). Accordingly, we hypothesize that: **H2: Leaders use of coercive and legitimate power will negatively affect KMP among k-workers.**

2.3 The influence of referent power on KMP

Leaders in the knowledge network need to adopt personal mentoring and internal consulting (McCrimmon, 1995) and help build a culture of trust by demonstrating concerns, keeping promises, morality fairness, openness, honesty, discretion, consistency, integrity and delivering expected results (Ribiere & Sitar, 2003). These personality elements encourage trust building and social interaction and are therefore essential for knowledge sharing (Connelly & Kelloway, 2003). Naturally, a leader who displays qualities that supports knowledge sharing will become a role model for k-workers to emulate. Thus, we hypothesize that: **H3: Leaders' use of referent power is positively related with knowledge sharing practices.**

On the contrary, research indicates that referent power may not have the intended influence upon knowledge acquisition and implementation. K-workers are independent individuals who decide what knowledge they want to contribute and how they intend to use it (Amar, 2004; Politis, 2005). They trust their personal expertise and do not deem their leader to be correct based on the leader's personal appeal (Politis, 2005). In fact, Politis (2005) found referent power to be negatively related to knowledge acquisition. Thus, the following proposition is formulated: **H4: Leaders' use of referent power is negatively related or unrelated with knowledge creation and knowledge utilization practices.**

2.4 The influence of expert power on KMP

Although it seems that k-workers no longer rely upon their leaders for knowledge, Amar (2002) stated that, in many situations, they still seek expert guidance indirectly from their respective leaders to solve their problems, without even realizing it (Amar, 2002). Hence, influencing k-workers with specialized expertise requires leaders to lead through intellectual power, conviction, persuasion and interactive dialogue (Ribiere & Sitar, 2003). Fundamentally, in order to be an effective facilitator and stimulator in a knowledge based environment and encourage people to create and utilize knowledge, the leader needs to possess highly developed expertise.

On the contrary, the impact of expert power on knowledge sharing cannot be obviously described. It is unclear how leaders' possession of expertise and knowledge could encourage knowledge sharing practices among k-workers. A possible justification could be the willingness of leaders to share their own expertise with subordinates inculcates the values of sharing, which encourages the emulation of knowledge sharing practices among k-workers (Connelly & Kelloway, 2003). Therefore, hypothesis 5 is outlined as: **H5: Leaders' use of expert power positively affects KMP.**

2.5 The influence of information power on KMP

The ability to control the availability and accuracy of information that other people need and do not own themselves creates information power for leaders (Raven, 1992). Therefore, having access to organization knowledge and circulating this knowledge reflects the loss of information power (Gray, 2001; Kelly, 2007).

Basically, in order to possess high information power, one tends to avoid sharing the information they possess (Gray, 2001). When leaders themselves hoard information to increase their indispensability and power, they would pave the way for k-workers to trail. K-workers would follow this practice portrayed by their leaders and knowledge sharing practices would be limited. Leaders need to model the proper behavior to cultivate knowledge supporting culture within the firm (Ribiere & Sitar, 2003).

Although it is unclear how information access can facilitate knowledge application, it can be assumed that information access provides k-workers a frame of reference of what knowledge should be applied and how to apply them. K-workers need to keep up with the happenings in their business environment to ensure the knowledge they apply in their strategies are up-to-date and in-line with the current business conditions. When information availability is controlled, knowledge creation and utilization could meet a dead end.

Basically, the lax control over information availability and accessibility reduces the information power possessed by leader—which implies increased knowledge management practices. Therefore, we hypothesize that: **H6: Leaders' use of information power negatively affects KMP.**

2.6 The influence of connection power on KMP

Knowledge leaders with established connections both inside and outside the firm often have access to unattainable information and expertise which, in return, equips them with integrity and authenticity (Sarin & McDermott, 2003) and facilitates knowledge creation within the firm. Therefore, it is good for senior executives to network outside the firm and pull together groups with likely synergies (McCrimmon, 1995). This brings about our next hypothesis which states that: **H7: Leaders' use of connection power is positively related with the practice of knowledge creation.**

Although connection power has been considered important in knowledge-based firms, its impact on knowledge sharing and responsiveness to knowledge has not been clearly emphasized. Connection power actually reflects the attributes that are related with the person with whom the agent is associated (Ansari, 1990). Therefore, it may be possible that connection with important others within the firm could enhance their reward power or coercive power—which in return could influence the extent of knowledge sharing and responsiveness. However, this

study focuses on top management--the highest level of management within the firm. Thus, the possibility of the connection power enhancing their other bases of power is not possible. Hence, we hypothesize that: **H8: Leaders' use of connection power is unrelated with knowledge sharing and knowledge utilization practices.**

3.0 SAMPLE AND PROCEDURE

3.1 Research site and sample

This study focused on MSC status companies. These firms were deemed suitable representatives of knowledge based firms for two major reasons – concentration of k-workers and inclusion of knowledge intensive industry sectors. A total of 180 MSC firms participated in our study.

3.2 Measures

A pre-tested survey questionnaire consisting of questions measuring leader's bases of power (Hinkin, & Schriesheim, 1989; Ansari, 1990; Bhal & Ansari, 2000; Raven, 1992) and KMP (Darroch, 2003) was employed in this research.

A partial test of the construct validity of the scales employed a varimax-rotated principal components analysis. The analysis generated three interpretable factors for bases of power—**Position power - PO** (referent power, coercive power, legitimate power), **Personal power - PE** (expert, connection, and reward power) and **Information power - IP**. On the other hand, KMP factored into five interpretable factors in which knowledge acquisition separated into two factors- **Knowledge acquisition (KA)** and **knowledge acquisition through hiring (KAH)**; Knowledge sharing into another 2 factors- **knowledge exchange (KE)** and **knowledge circulation (KC)**, and finally **Knowledge utilization (KU)** as a unique factor. The reliabilities of the sub-scales were within the acceptable range of .70 and above (Cramer, 2003).

4.0 RESULTS

Multiple regression analysis was used to test the hypotheses outlined earlier. The results are presented in Table 2.

Table 2: Results of regression analysis

IV	Dependent variable					
	KA	KAH	KE	KC	KU	KMP
PE	.70**	.49**	.74*	.62*	.63**	.79**
PO	.15*	.01	*	*	.09	.14*
IP	.16*	.28**	.34**	.29*	.44**	.48**
			.43**	*		
				.64*		
F	70.32	20.78	52.3	45.2	42.16	89.13
R ²	.55	.26	.5	.5	.42	.60
Adj	.54	.25	.47	.44	.41	.60

R ²			.46	.43		

* p<0.05, ** p < 0.01; Values in bold are negative.

Generally, the goodness of model (R²) range of values for the models tested was beyond 40% except for KAH which is least at 26%. This implies that leader behavior is an important factor in influencing most KMP in organizations. In the case of KAH, it is possible that maybe hiring is due to other economic factors rather than leaders.

From Table 2, it is evident that the use of personal power positively influences k-workers. This validates H1, H5, and H7. However, H8 which hypothesized that connection power is unrelated to knowledge sharing and utilization was rejected. The results indicate connection power also has a significant positive effect in promoting knowledge sharing and knowledge utilization practices.

H2 was only partially accepted. The use of position power negatively affects knowledge acquisition validating H2 in part. Surprisingly, position power has a positive effect in promoting knowledge sharing practices (knowledge exchange and circulation) among k-workers- implying position power is needed to promote knowledge sharing practices among k-workers. Lastly, position power had no significant effect on knowledge utilization and knowledge acquisition through hiring. Therefore, H2 is only partially substantiated.

Finally, information power negatively influenced k-workers in terms of practicing KMP. The more information power a leader possesses or uses, the lesser k-worker display KMP. This fully supports H6.

5.0 DISCUSSION

The primary purpose of this research was supported by the results obtained. The relatively high R² values (by standards of the social sciences studies) indicate that leadership behavior is an important factor in influencing k-workers to adopt KMP. As predicted, personal power (reward, expert, and connection power) positively influenced KMP.

Connection power has been considered important in knowledge-based firms, but its impact on knowledge sharing and responsiveness to knowledge has not been clearly emphasized. While, connection power was hypothesized to not have any possible effect on knowledge sharing and utilization, the results indicated otherwise. We believe that connection power may indirectly influence knowledge sharing and utilization. It is possible that a leader's display of effort to source for knowledge from important others and share it with knowledge workers, displays a positive model of knowledge sharing to be emulated. In addition, leaders with connection with important people may bring in new

knowledge to stimulate thinking and subsequently lead towards knowledge application.

The results of this study further imply that leadership transformation is needed when dealing with k-workers. Traditionally, referent power was considered as personal power. However, in the case of k-workers in Malaysia, they seem to perceive referent power as position power instead. It is possible that high power distance here in Malaysia (Hofstede, 2001) could have caused k-workers to attribute leader magnetism to position held by the leader. A knowledge leader in a high position (top management) is possibly viewed as successful and highly capable, therefore meriting respect, admiration, and identification among k-workers.

In addition, although research points out that position power such as coercive, and legitimate power negatively affects KMP, our study obtained contradicting results. H2 was partially supported when this form of power had a negative influence only on knowledge acquisition. This finding is in line with Politis (2005) who stated that the use of threat and fear to force knowledge acquisition among k-workers has an adverse effect.

However, interestingly, position power was found to positively affect knowledge exchange and circulation practices. Again, this outcome may be linked to the possibility of cultural influence in Malaysia. With high power distance, Malaysia is characterized as a ‘situation where leaders have virtually ultimate power and authority, and the rules, laws and regulations developed by those in power, reinforce their own leadership and control’ (Hofstede, 2001). Therefore, the use of position power in order to influence k-workers to share their knowledge is generally accepted.

Another possible perspective to this situation is that k-workers here are still grappling with the idea of sharing their unique knowledge with others. Realizing knowledge is power, voluntary sharing of knowledge may not have appealed to k-workers. However, when leaders share (referent power), or if rules and regulations (coercive and legitimate power) that make sharing compulsory are in place, k-workers may embrace knowledge sharing better.

Position power also failed to yield a significant effect on knowledge utilization. It is likely that being independent, k-workers decided when, what, and how they will utilize their knowledge. Any use of force, will not be able to force k-worker to apply knowledge. It must be done at their own free will.

Finally, our hypothesis on the negative effect of leader’s information power was substantiated. Clearly, when a leader has high information power, he or she is portraying a negative image and may stifle KMP. Withholding important information shows that a leader does not share and k-workers will follow suit. In addition, the unavailability of crucial information because the leader controls access to it may dampen the initiative of k-

workers to create and utilize knowledge according to the needs of the business environment.

In summary, leader should use personal power and avoid information power to encourage the adoption of KMP among kworkers. This indirectly influences the firm’s appeal when attempting to hire new k-workers as shown by the results focusing on knowledge acquisition through hiring. Position power can be used when attempting to get k-workers to share knowledge and should be avoided in all other situations.

6.0 CONCLUSION

Successful adoption of KMP in firms is believed to lead to the establishment of competitive advantage and improved organization performance. Therefore, it is crucial for knowledge leaders to transform their leadership behavior in order to successfully influence k-workers to embrace KMP. However, given the possibility of cultural influence in Malaysia, it is suggested that this study may be replicated in other cultures to determine other possibly appropriate leadership behavior to influence k-workers.

REFERENCES

- Amar, A. D. (2004). Motivating knowledge workers to innovate: A model integrating motivation dynamics and antecedents. *European Journal of Innovation Management*, 4, 126-132.
- Ansari, M. A. (1990). *Managing people at work: Leadership styles and influence strategies*. Newbury Park, CA: Sage.
- Ambrosio, J. (2000). *Knowledge management mistakes*. Retrieved November 23, 2005, from [http:// www.computerworld.com/industrytopics/energy/story/ 0,10801,46693,00.html](http://www.computerworld.com/industrytopics/energy/story/0,10801,46693,00.html)
- Bhal, K. T., & Ansari, M. A. (2000). *Managing dyadic interactions in organizational leadership*. Thousand Oaks, CA: Sage Publications.
- Cramer, D. (2003). *Advanced quantitative data analysis*. Trowbridge, Great Britain : Cromwell Press.
- Crawford, C. B. (2005). Effects of transformational leadership and organizational position on knowledge management. *Journal of Knowledge Management*, 9(6), 6-16.
- Darroch, J. (2003). Developing a measure of knowledge management behaviors and practices. *Journal of Knowledge Management*, 7, 41-54.
- Davis, J. G., Subramaniam, E., & Westerberg, A. W. (2005). The global and the local in knowledge management. *Journal of Knowledge Management*, 19(1), 101-112.

- De Long, D. W. and Fahey, L. (2000). Diagnosing Cultural Barriers To Knowledge Management. *The Academy Of Management Executive*, 14(4), 113-129.
- Dfouni, M. (2002). Knowledge leaders' critical issues: An international Delphi studies (Masters dissertation, Concordia University).
- French, J. R. P., & Raven, B. (1959). The bases of social power. In D. Cartwright (Ed.), *Studies in social power* (pp.118-49). Ann Arbor, MI: Institute for Social Research.
- Gal, Y. (2004). The reward effect: A case study of failing to manage knowledge. *Journal of Knowledge Management*, 8(2), 73-83.
- Hersey, P., Blanchard, K. H., & Natemeyer, W. E. (1979). Situational leadership, perception, and the impact of power. *Group and Organization Studies*, 4, 418-428.
- Hinkin, T. R., & Schriesheim, C. A. (1989). Development and application of new scales to measure the French and Raven (1959) bases of social power. *Journal of Applied Psychology*, 74, 561-567.
- Hofstede, G. (2001). *Geert Hofstede Cultural Dimensions*. Retrieved February 23, 2008, from http://www.geert-hofstede.com/hofstede_malaysia.shtml
- Kubo, I. & Saka, A. (2002). An inquiry into the motivations of knowledge workers in the Japanese financial industry. *Journal of Knowledge Management*, 6(3), 262-271.
- Lam, W. & Chua, A. (2005). The mismanagement of knowledge management. *Aslib Proceedings: New Information Perspective*, 57(5), 424-433.
- Lin, C. & Tseng, S. (2005). The implementation gaps for the knowledge management systems. *Industrial Management and Data Systems*, 105(2), 208-222.
- Lucier, C. (2003). When knowledge adds up to nothing: Why knowledge management fails and what you can do about it. *Development and Learning in Organizations*, 17(1), 32-35.
- Macneil, C. M. (2003). Line managers: Facilitators of knowledge sharing in teams. *Employee Relations*, 25(3), 294-307.
- Malhotra, Y. (2002). Why knowledge management systems fail? Enablers and constraints of knowledge management in human enterprises. In Holsapple, C. W. (Ed.), *Handbook on Knowledge Management 1: Knowledge Matters* (pp. 577-599). Springer-Verlag: Heidelberg.
- McCrimmon, M. (1995). Bottom-up leadership. *Executive Development*, 8(5), 6-12.
- Politis, J. D. (2001). The relationship of various leadership styles to knowledge management. *Leadership and Organizational Development Journal*, 22(8), 354-364.
- Politis, J. D. (2005). The influence of managerial power and credibility on knowledge acquisition attributest. *Leadership and Organizational Development Journal*, 26(3), 197-214.
- Raven, B. H. (1965). Social influence and power: In I. D. Steiner & M. Fishbein (Eds.), *Current studies in social psychology* (pp. 371-382). New York: Holt, Rinehart, Winston.
- Raven, B. H. (1992). A power/interaction model of interpersonal influence: French and Raven thirty years later. *Journal of Social Behavior and Personality*, 7, 217-244.
- Ribiere, V. M., & Sitar, A. S. (2003). Critical role of leadership in nurturing a knowledge-supporting culture. *Knowledge Management Research and Practice*, 1, 39-48.
- Smith, G., Blackman, D. & Good, B. (2003). Knowledge sharing and organizational learning: The impact of social architecture at ordnance survey. *Journal of Information and Knowledge Management Practice*, 4. Retrieved December 20, 2004, from <http://www.tlinc.com/articl50.htm>
- Yukl, G. (2006). *Leadership in organizations*. Upper Saddle River, NJ: Prentice Hall.