

Factors Affecting Employees' Readiness for Knowledge Management

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Abstract

Knowledge plays a critical role in achieving organization strategic objectives and gaining competitive advantage; thus, knowledge like other organizational resources needs to be managed. However, knowledge management (KM) often lacks adequate infrastructure and necessary requirements that makes its implementation difficult and costly. It is argued that the first step to accommodate a KM strategy is to assess organizational readiness that involves identifying factors that affect it. This research is conducted in a public organization and assesses employees' readiness to implement KM initiatives. It examines the impact of individual, context, content and process variables on commitment and pessimism prior to KM implementation. To measure these variables, a questionnaire was distributed among staff members of a large municipality, using stratified random sampling. Comparison of means, correlation analysis and the hierarchical regression analysis were performed to test the study hypotheses. Research findings revealed that individual variables are related to pessimism and affective, continuous and normative commitment toward KM. However, while context variables and process variables affect pessimism and affective commitment, the content variables affect commitment to KM. Furthermore, only individual variables, including positive and negative affects, efficacy and innovativeness affect pessimism and the three dimensions of commitment toward KM. Given the importance of individual variables on the employees' attitudes toward KM strategy, HR policies and practices need to play a central role in facilitating effective KM programs. They should promote active participation, open communication and organizational and management supports.

Keywords: Knowledge management, Change, Readiness, Commitment, Pessimism, Enablers

Introduction

Knowledge in today's modern economy is regarded as the most critical elements of competitive advantage strategy. The prominence of knowledge in organization strategy comes as no surprise in a knowledge economy where activities, products and services are knowledge-driven and knowledge-based (Drucker, 1993; Nonaka and Takeuchi, 1995). At the same time, free market economy and globalization assisted by technological and information revolution have led to knowledge explosion and unrestricted access to knowledge. The emergence of some of the most successful and influential companies ever come to being is the direct result of the new era of knowledge-driven economy. Companies such as Microsoft, Dell, Google and Nokia, to name a few, compete primarily on the knowledge-based strategy whereby knowledge and knowledge-based products drive their global strategy. In fact, the core competency of these companies is to commercialize knowledge faster and more efficiently than their competitors. They achieve their strategic goals through organizational structure, processes and culture that are integrated to support knowledge workers and knowledge-driven strategy. However, knowledge is both a blessing and a curse. It is a blessing, because knowledge is the only organization source, which is neither depletable nor depreciable. It is a curse, because it is easily available and accessible to others, including competitors, and hence shortens the life of organization competitive advantage. This implies that sustainable competitive advantage comes from the extent that knowledge is utilized and maximized rather than how it is monopolized or protected. Maximum utility of knowledge is geared to its effective management, i.e. how to create, acquire, capture, share and use knowledge faster, better and cheaper than competitors. This requires the organizational ability to design and implement systems, structures, processes, cultures and tools to improve and support organization knowledge for effective decision-making' (DeLong and Fahey, 2000).

Knowledge Management

Knowledge Management (KM) and its various aspects has become the subject of much debate amongst scholars of diverse fields (Nonaka and Takeuchi, 1995). This has contributed to the plethora of frameworks, models or even definitions that often reflect author's own perspective and interests. However, there is a general agreement on the underlying purpose of KM, which is to enhance organizational performance and competitiveness. O'Dell and Jackson (1998) argue that KM strategy aims to ensure that knowledge reaches the right people at the right time, and that these people share and use information to improve organizational functions. Despite the appeal of KM concept, the establishment of KM encounters several structural, personnel and managerial barriers, and many organizations that have embraced KM strategy have failed to implement it successfully, since they have failed to pay proper attention to its potential problems and setbacks. Furthermore, as Haggie and Kingston (2003) state, organizations will not survive in the modern knowledge era unless they have a strategy for managing and leveraging value from their intellectual assets. They also suggest that failure in practicing KM strategy may waste scarce resources in developing capitals, tools or policies that will not benefit organizations. An increasing number of scholars argue that fundamental to any KM strategy is the organizational and individual readiness to accept and support it, otherwise as Mohammadi et al. (2009) point out, it might result in a significant loss of managers' time and energy in dealing with employees' resistance to KM, and failure to achieve its proposed goals. The employees' resistance and opposition is often the result of significant organizational changes required by KM strategy. Therefore, it is suggested that managers need to assess their organizations' readiness to adopt a KM system as a proposed change, prior to taking any definite decision regarding its implementation (Holt et al., 2007). Siemieniuch and Sinclair (2004) consider the KM readiness as a critical precursor to the successful implementation of KM in different industrial settings. In fact, readiness assessment can be described as a feasibility map for managers as to whether to promote and deploy a KM strategy.

Another difficulty in trying to leverage knowledge to improve organizational effectiveness is how to utilize what is called explicit knowledge and implicit knowledge. These two types of knowledge, only when combined, can truly capture the essence of the organization knowledge. Explicit knowledge is the knowledge that has been or can be articulated, codified, and stored in certain medium and can be readily transmitted to others. Similarly, Pan and Scarborough (1999) believe that the explicit part of knowledge is systematic and easy to communicate in the form of hard data or codified procedures. This means that explicit form of knowledge can be formally and easily transmitted across individuals. Implicit or tacit knowledge, on the other hand, entails knowledge that is difficult to express, formalized or shared (Sveiby, 1997). Tacit knowledge is embedded in action, commitment, and involvement in a specific context, and it is also derived from personal experiences; it is subjective as well as difficult to formalize (Nonaka et al., 2000). However, while the organization explicit knowledge can be managed through procedural and technological changes, it is the management of tacit knowledge that poses the greatest challenge and benefit to successful KM implementation, as it requires a significant cultural, structural and leadership style changes. Too often, organization knowledge strategy and management is mainly devoted to promote and expand existing processes and tools related to explicit knowledge at the expense of more complex tacit knowledge. Clearly, the management of explicit knowledge alone cannot fully reflect the concept of KM on its own and the benefits expected to be derived from it. Thus, managers are cautioned to avoid the tendency to preoccupy themselves with the organization known and observable knowledge for which the rate of return is relatively low. Instead, they should focus their attention on the organization invisible and hard-to-copy tacit knowledge, since it is this knowledge that allows them to see the KM big picture and ripe the benefit of a powerful source of sustainable competitive advantage with its exceptionally high rate of return.

Readiness for KM

Readiness is a necessary precondition for a person or an organization to succeed in facing organizational change (Holt, 2000). According to Mohammadi et al. (2009), KM readiness is the ability of an organization, department or workgroup to successfully adopt, use and benefit from KM. Thus, it is important for companies seeking to adopt KM to analyze their businesses to ensure its productive and beneficial implementation. But KM strategy is not easily and smoothly implemented in an organization, as it requires a significant structural and cultural change at all levels of the organization which inevitably culminate resistance to change. In other words, KM readiness is largely dependent on readiness for change. Holt (2000) describes readiness for change as “a comprehensive approach that is simultaneously raised by content (what is changing), process (how change comes into force), context (the conditions under which change has occurred) and individuals (whom their features is being asked to change)”. Given that it is people who implement organization change strategies, the KM readiness is a paradigm that needs to be evaluated at individual level. Eby et al. (2000) argue that the perception of organization’s readiness for change is based on a unique interpretation of organizational context by employees and generally evolves over time. They further emphasize that management interventions (i.e. communications, participation and active support) can help shaping those perceptions. Thus, the assessment of readiness for KM requires attention to two essential aspects of the change process; first the extent of existing abilities and capabilities of organization KM prowess, and the other is the changes that have to occur before the KM initiative begins. This assessment enables organizational leaders to recognize potential gaps between their expectations, and the perception of change agents and members toward change.

Researchers in the light of many KM initiatives that did not evolve as successfully as their designers and supporters had hoped for, have attempted to identify the potential barriers and facilitators of KM in organizations (Damodaran and Olphert, 2000; Desouza, 2003; Pumareja and Sikkal, 2005). Lee and Choi (2003) identified the critical enablers of KM and organized them in an integrative framework along with organizational processes and performance. Mohammadi et al. (2009) in a

systematic study of KM readiness in SME sector found several organizational antecedents for effective KM implementation, including vision for change, infrastructure, structure for change and culture of knowledge. Hung and Chou (2005) propose a three-dimensional KM Pyramid Model (KMPM) for assessing the maturity of the organizational capabilities. KMPM comprises three components, including maturity levels, KM processes, and KM capabilities or enabling infrastructures. Cho et al. (2000) suggest that KM enablers are related to employees, processes and technology. Similarly, in a model suggested by O'Del et al. (1998), infrastructure, processes, culture and technology are identified as enablers of KM. Jalaldeen et al. (2009) propose a model to assess KM readiness and its contributing factors for KM process adoption by integrating KM infrastructure and unified theory of acceptance and use of technology, and suggested that organizational readiness needs to be assessed by taking into consideration both organizational and individual factors. Finally, Gold et al. (2001) introduce infrastructure capabilities (such as technology, structure and culture) and process features (such as processes of gain, conversion and use) as preconditions for effective KM. These enablers provide a KM framework which emphasizes the role organization members play in such a project (Cho et al, 2000; employees), the place where KM is created (O'Del et al. 1998; culture), the parts of the organization that are involved (Havens and Knapp, 1999; content) and the way KM is being created (Gold et al, 2001; process). Given the critical role of peoples' involvement and support in organizational changes, it is argued that KM system has a chance to succeed, only if members and managers are committed and excited about it

In this study, it is hypothesized that when organization is ready for KM, individuals, contents, contexts and process variables can explain variances in commitment and pessimism toward KM. It specifically assesses the effects of critical success factors, including positive and negative affects, innovativeness, perceived organizational support, communication climate, appropriateness, personal valence, management support, participation and quality of information on the affective, continuous and normative commitment and pessimism for determining the extent that an organization is ready to embrace KM initiatives.

It is argued that to understand people's work related attitudes fully, one must go beyond the concept of job satisfaction, also consider people's feelings toward their organizations. Such attitudes referred to as organizational commitment, reflects the extent to which people identify with and are involved with their organizations. Whether employees are motivated by self-interest or goal congruence, they display different behaviors toward work, colleagues and management wants, including change. According to Meyer and Allen's (1991) three-component model of commitment, there are three "mind sets", including affective commitment, continuance commitment and normative commitment, which can characterize an employee's commitment to the organization. Affective commitment is defined as the person's positive emotional attachment to the organization. An employee who is affectively committed strongly identifies with the goals of the organization and desires to remain a part of the organization. This employee commits to the organization, because he/she "wants to". Continuance commitment, on the other hand, is the congruence of a person's desire to continue working for an organization, because he/she perceives high costs of losing organizational membership, including economic costs (such as pension accruals) and social costs (friendship ties with co-workers) that would be incurred. Therefore, the employee remains a member of the organization because he/she "has to". Finally, normative commitment means that the person commits to and remains with an organization, because of feelings of obligation. These feelings may derive from many sources. For example, the organization may have invested resources in training an employee who then feels a 'moral' obligation to put forth effort on the job and stay with the organization to repay the debt. It may also reflect an internalized norm, developed before the person joins the organization through family or other socialization processes, that one should be loyal to one's organization. The employee stays with the organization, because he/she "ought to". Similarly, pessimism, i.e. perceiving things negatively, affect people's attitude toward change (Wanous, et al. 2000). High pessimism might result in more adversarial position over time (Robinson-Whelen, et al, 1997; Burger and Palmer, 1997). Thus, it is argued that the employees' perception that nothing good come out of managers' change efforts creates a

pessimistic attitude toward KM initiatives. Such perception may be the result of previous unsuccessful change programs, distrust in managers' ability to design and implement the KM initiative effectively, or suspicions about management real motives for any kind of change.

As Watson and Clark, (1997) states, those that are high in positive affects desire change and variety in their lives, and become bored or dissatisfied when change is absent". Thus, in this study, positive affects measures the extent to which respondents tend to experience positive emotional states. Similarly, negative affects measures the extent to which respondents tend to experience negative emotional states. According to Malhotra (2003), managers would need to facilitate the confidence of knowledge workers in acting on incomplete information, trusting their own judgments, and taking decisive actions for capturing increasingly shorter windows of opportunity. In the new world of business, the control over employees will be ultimately self-imposed. Consequently, individuals and teams are rewarded for creativity and new ideas – not necessarily for performing solely according to the manager's edict. Furthermore, lack of knowledge or skill to handle the change may lead to insecurities and subsequently resistance to change. Rather than admit their ignorance, employees try to save face and desperately hold on to the old way of doing things. As Stewart, (1994) states, change is easier, if managers and employees are rewarded for taking risks, being innovative and looking for new solutions. While positive and negative affects measure emotional states, efficacy measures the extent to which respondents feel they are capable of fulfilling the roles and behaviors associated with KM initiatives, and innovativeness measures the extent to which respondents feel they can creatively confront organizational challenge. Thus, the hypotheses relevant to individual variables (positive affects, negatives affects, efficacy and innovativeness) are as following:

Hypothesis 1a: Individual variables affect affective commitment toward KM.

Hypothesis 1b: Individual variables affect continuous commitment toward KM.

Hypothesis 1c: Individual variables affect normative commitment toward KM.

Hypothesis 1d: Individual variables affect pessimism toward KM.

Rolland and Chauvel (2000) argue that trust is, after all, the single most important precondition for knowledge exchange, while lack of it creates feelings of resentment toward those introducing the change, leading to resistance. The perceived organizational support measures respondents' perception that the organization treats them well, values their contributions, and cares about their wellbeing. Furthermore, according to Davenport and Prusak (1998), clarity of purpose and terminology is a critical factor in any type of organizational change project, but it is a particularly important element of good knowledge management. The communication climate measures the extent to which respondents feel that they generally receive necessary information. Thus, the relevant hypotheses for context variables (perceived organizational supports and communication climate) are as following:

Hypothesis 2a: Context variables affect affective commitment toward KM.

Hypothesis 2b: Context variables affect continuous commitment toward KM.

Hypothesis 2c: Context variables affect normative commitment toward KM.

Hypothesis 2d: Context variables affect pessimism toward KM.

The most important factors in deciding where to start are the specific knowledge domain to the firm and the feasibility of the project (Davenport and Prusak, 1998). Therefore, the discrepancy aspect of the message communicates information about the need for change and should be consistent with relevant contextual factors (e.g. increased competition, changes in governmental regulations, depressed economic conditions). Thus, appropriateness is considered as a content variable, which measures the extent to which respondents feel that KM will benefit the organization and address organizational needs. Further, as Holsapple and Joshi (2000) highlight the coordination of the management of knowledge as a key managerial influence. Coordination approaches suggested and used to manage dependencies in a knowledge-based organization include linking reward structures to knowledge sharing, establishing communications for knowledge sharing and constructing programs to encourage learning. Accordingly to Grimaud (1994), this is the position, which some individuals believe "there's nothing in it for me". Individuals who perceive that a change will not benefit them personally are fairly certain to resist it. Therefore, valence is a considerable content variables, which measures the

extent to which respondents feel they will benefit from the implementation of KM. The relevant hypotheses for content variables (appropriateness and personal valence) are as following:

Hypothesis 3a: Content variables affect affective commitment toward KM.

Hypothesis 3b: Content variables affect continuous commitment toward KM.

Hypothesis 3c: Content variables affect normative commitment toward KM.

Hypothesis 3d: Content variables affect pessimism toward KM.

According to Hiebeler, (1996) one crucial reason why organizations are unable to effectively leverage knowledge is the top leadership lack of commitment to share organizational knowledge or too few role models who exhibit the desired behavior. Thus, the single most important determinant of success is strong committed leadership in the earliest stages of change (Trahan and Burke, 1996). Management support is considered a process variable, which measures the extent to which respondents feel the organization's leadership and management are committed to and support the implementation of KM. Furthermore, as Malhotra, (2003) indicates, managers would need to facilitate the confidence of knowledge workers in acting on incomplete information, trusting their own judgments, and taking decisive actions for capturing increasingly shorter windows of opportunity. In the new world of business, the control over employees will be ultimately self-imposed. Therefore, participation, another process variable, measures the extent to which respondents feel that they have opportunity to participate in the change process. Finally, Davenport and Prusak (1998) highlight that many reengineering initiatives we have observed, were sidetracked when the hype about what they were going to accomplish raised expectations well beyond what was actually possible. This implies that a communication-based program, such as KM project, cannot be ideal when there is resistance to change due to inadequate or inaccurate information and analysis. Thus, quality of information, as the last process variable, measures the extent to which respondents feel confident that they will receive useful and meaningful information in a KM is initiative. The relevant hypotheses for process variables (management support, participation and quality of information) are as following:

Hypothesis 4a: Process variables affect affective commitment toward KM.

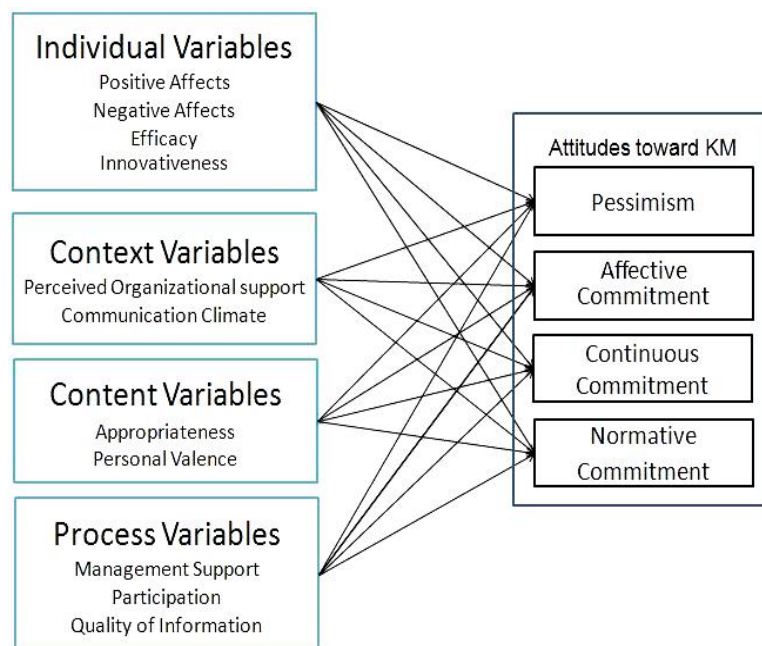
Hypothesis 4b: Process variables affect continuous commitment toward KM.

Hypothesis 4c: Process variables affect normative commitment toward KM.

Hypothesis 4d: Process variables affect pessimism toward KM.

Figure 1 summarizes the relationships between independent variables (individual, context, content and process) and dependent variables (commitment and pessimism) hypothesized in the study.

Figure 1: Relationships between research variables



Methodology

This research is conducted in a large provincial municipality in the city of Mashhad, serving 2.5 million people. A 71 items questionnaire, designed by Holt et al. (2007) was used to gather data. It was divided into three main categories: attitudes toward sharing knowledge, attitudes toward job and attitudes toward self. A 5-point Likert scale was used to assess questionnaire items (5= strongly agreed, 4= agreed, 3= don't know, 2= disagreed, 1= strongly disagreed). A pilot study and the subsequent factor analysis led to the exclusion of 14 items from the final analysis. The amended questionnaire with the Cronbach's coefficient of 0.89 was distributed among 150 municipal staff employees, of which 107 questionnaires was returned, 7% more than minimum sample population of 99.

Findings

Bilateral relations among research variables are shown in Table 1. Based on a pair-to-pair comparison, all values higher than 0.15, as suggested by Holt et al. (2007), are considered significant ($p < 0.05$). Given that "readiness" is the central issue to be investigated in this study, the correlational relationships among research variables are limited to readiness variables.

Table 1: Correlation analysis of relationships between variables

Study variables	Affective Commitment	Continuous Commitment	Normative commitment	Pessimism
Individual variables	.188	.141	.212	.256
Context variables	.140	.090	-.050	.400
Content Variables	.408	.419	.385	.246
Process variables	.319	.286	.126	.175

* Significant at 0.05 level, ** Significant at 0.01 level

As seen in Table 1, for affective commitment, highest correlations are recorded for content variables (.408), process variables (.319) and individual variables (.188) respectively. However, the correlation between affective commitment and context variables is not significant. For continuous commitment, the highest correlations are recorded for content variables (.419) and process variables (.286) respectively. There was no significant relationship between continuous commitment and individual and context variables. For normative commitment, the highest correlations are recorded for content variables (.385) and individual variables (.212) respectively. Furthermore, there is no significant correlation between continuous commitment and context and process variables. Finally, pessimism has a significant correlation with all independent variables, including context variables (.400), individual variables (.256), content variables (.246) and process variables (.175).

To test the research hypotheses, the hierarchical regression analysis was performed in which independent variables were tested in four phases, including individual variables, (positive affects, negative affects, efficacy and innovativeness), context variables (perceived organizational support and communication climate), content variables (appropriateness and personal valence), and process variables (management support, participation and quality of information). Table 2 shows the values of R , R^2 , and ΔR^2 for all dependent variables.

Table 2: Standardized beta coefficients for attitudes toward KM

Dependent Variables	Analysis steps	R	R ²	ΔR^2	Hypothesis	Test Result
Pessimism	1	.49	.247*	.247**	1a	Accepted
	2	.66	.437**	.190**	2a	Accepted
	3	.67	.457**	.020	3a	Rejected
	4	.69	.481**	.024	4a	Rejected
Affective Commitment	1	.49	.240*	.240**	1b	Accepted
	2	.52	.270*	.180**	2b	Accepted
	3	.68	.460**	.030	3b	Rejected
	4	.74	.540**	.080*	4b	Accepted

Table 2: Standardized beta coefficients for attitudes toward KM - continued

Continuous Commitment	1	.49	.240*	.240**	1c	Accepted
	2	.50	.250*	.010	2c	Rejected
	3	.57	.330**	.180**	3c	Accepted
	4	.60	.360**	.020	4c	Rejected
Normative Commitment	1	.54	.290*	.290**	1d	Accepted
	2	.54	.300**	.004	2d	Rejected
	3	.67	.450**	.140**	3d	Accepted
	4	.68	.460**	.010	4d	Rejected

* Significant at 0.05 level, ** Significant at 0.01 level

As seen in Table 2, R^2 values are significant at 0.05 level for first (.49), second (.66), third (.67) and fourth step (.69), but while the ΔR^2 values are significant for first (.24) and second steps (.19), they are not significant for third (.020) and fourth steps (.024). Therefore, hypotheses 1a and 2a are accepted, but hypotheses 3a and 4a are rejected. This procedure is repeated for the remaining research hypotheses and results are shown in Table 2. The results of this analysis reveal that the hypotheses 1b, 3b, 4b, 1c, 3c, 1d and 3d are accepted, but hypotheses 2b, 2c, 4c, 2d and 4d are rejected.

Discussion and Conclusion

The results show that the analysis of individual factors, including positive and negative affects, efficacy and innovation are the best predictors of employees' readiness to adopt KM system. This implies that the extent that employees feel able to perform their roles related to KM initiatives and to confront organizational challenges pave the way for getting involved in such management actions. Assessing employees' general attitudes toward KM system may reveal critical barriers that management needs to address prior to introducing the system. Results for context variables are somewhat different from results obtained for individual variables. Perceived organizational support and communication climate are related only to pessimism and affective commitment. This suggests that employees' perception of organization, i.e. it cares for them and pays attention to their satisfaction, prosperity and success, predicts their affective dependency on KM initiative (Eisenberger, et al., 1986). Hence, to promote affective dependency and reduce pessimism, managers are encouraged to convey to employees the sense of being important and valued. Such a positive perception can be reinforced by providing employees with useful, timely and adequate information about the KM system. Open dialogue and discussion can also reduce a sense of pessimism. The results obtained from regression model analysis suggest that while there is no significant correlation between content variables and pessimism, these variables are good predictors for explaining variance, occurring in various types of commitment toward KM. For instance, appropriateness has a significant effect on all three types of commitment, which indicates the extent to which employees feel the KM initiative is congruent with organizational goals and is likely to meet them. Therefore, promoting the understanding about necessity, importance and benefits of KM for the organization among employees, and convincing them through discussions and rational reasoning can increase their commitment to such programs. The findings also show management support, participation and quality of information, consistently affect pessimism, affective commitment and emotional commitment. This seems to suggest that managers' actions to encourage their employees to welcome such programs will lead to knowledge sharing, responsibility sharing and reduced sense of pessimism toward KM initiatives. Furthermore, increasing the level of employees' participation in KM initiatives and providing platforms for employees to take a greater interest in the decision-making process, related to knowledge management, play a significant role in instilling positive attitudes and commitment. Timely and adequate information about KM programs can also promote employees' normative commitment to KM, i.e. they tend to stay in the organization, as they feel a heightened sense of responsibility, loyalty or obligation (Holt, 2002; Wanberg and Banas, 2000 and Miller et al., 1994). Finally, the findings underscore the notion that

although technological infrastructure and systems are vital for successful KM strategy, the champions of KM initiatives ought to pay greater attention to soft components of organization, including people and culture. As Drucker (1993) suggests, the one contribution a manager is uniquely expected to make is to give others vision and ability to perform. A basic operation in the work of the manager is to develop, direct, encourage and train employees. From this perspective, HR policies and practices, particularly participation, open communication and organizational and management supports, play an important role in facilitating the effective KM implementation. It is argued that because it is the employees who possess the organization knowledge, particularly tacit knowledge, and share or use it to create value for customers and organization, their attitudes prior to introducing KM strategy should be assessed. The extent that management truly believes and acts upon this premise largely determines the outcome of KM initiatives.

References

- 1] Burger, J. M., & Palmer, M. L. (1992). Changes in and generalization of unrealistic optimism following experiences with stressful events: Reactions to the 1989 California earthquake. *Personality and Social Psychology Bulletin*, 18, 38–43.
- 2] Cho G., H. Jerrel, and W. Landay, 2000. Program Management: Know the Way How Knowledge Management Can Improve DOD Acquisition. Defense Systems Management College, Fort Belvoir.
- 3] Damodaran, L. and Olphert, W., 2000. Barriers and Facilitators to the Use of Knowledge Management Systems. *Behaviour & Information Technology*, 19(6): 405-413.
- 4] Davenport, T. H. and Prusak, L., 1998. *Working Knowledge: How Organizations Manage What They Know*, Harvard Business School Press, Boston.
- 5] Delong, D. L. Fahey, 2000. Diagnosing Cultural Barriers to Knowledge, Management. *Academy of Management Executive*, 14: 113–127.
- 6] Desouza, K., 2003. Barriers to Effective Use of Knowledge Management Systems in Software Engineering. *Communications of the ACM*, 46(1): 99-101.
- 7] Drucker, P. F., 1993. *Post-Capitalist Society*. Harper Collins Publishers, Inc, New York.
- 8] Eby L. T., D. M. Adams, J. E. A. Russell and S. H. Gaby, 2000. Perceptions of Organizational Readiness for Change: Factors Related to Employees' Reactions to the Implementation of Team-Based Selling. *Human Relations*, 53: 419–442.
- 9] Eisenberger, R., R. Huntingon, S. Hutchison, and S. Sowa, 1986. Perceived Organizational Support. *Journal of Applied Psychology*, 71: 500–507.
- 10] Gold, A. H., A. Malhotra, and A. H. Segars, 2001. Knowledge Management: An Organizational Capabilities Perspective. *Journal of Management Information Systems*, 18: 185–241.
- 11] Grimaud, A. E., 1994. How to Overcome Resistance to Change: the '7M Model'. *Canadian Banker*, 101: 36–37.
- 12] Haggie, K. and Kingston, J., 2003 Choosing Your Knowledge Management Strategy, *Journal of Knowledge Management Practice*, 4. <http://www.tlinc.com/jkmpv4.tm>.
- 13] Havens, C. and E. Knapp, 1999. Easing Into Knowledge Management. *Strategy and Leadership*, 27 (2): 4–9.
- 14] Hiebeler, R. J., 1996. Benchmarking: Knowledge Management. *Strategy and Leadership*, 24 (2): 22–28.
- 15] Holsapple, C. and Joshi, K. D., 2000 An Investigation of Factors that Influence the Management of Knowledge in Organizations. *Journal of Strategic Information Systems*, 9: 235–261.
- 16] Holt, D. T., 2000. The Measurement of Readiness for Change: A Review of Instruments and Suggestions for Future Research. Paper presented at the Annual meeting of the Academy of Management, Toronto, Canada.

- 17] Holt, D. T., 2002. Readiness for Change, the Development of a Scale. Paper Presented at The Annual Meeting of the Academy of Management, Denver, CO.
- 18] Holt, D. T., S. E. Bartzak, S. W. Clark and M. R. Trent, 2007. The Development of an Instrument to Measure Readiness for Knowledge Management. *Knowledge Management Research and Practice*, 5: 75-92.
- 19] Jalaldeen, N. S. Abdul Karim and N. Mohamed, 2009. Organizational Readiness and Its Contributing Factors to Adopt KM Processes: A Conceptual Model, *Communications of the IBIMA*, 8.
- 20] Lee, H. and Choi, B., 2003. Knowledge Management Enablers, Processes, and Organizational Performance: An Integrative View and Empirical Examination. *Journal of Management Information Systems*, 20 (1): 179-228.
- 21] Malhotra, Y., 2003. Why Knowledge Management Systems Fail? Enablers and Constraints of Knowledge Management in Human Enterprises. In *Handbook on Knowledge Management 1: Knowledge Matters* (Holsapple, C. W., Ed), 1: 577–599, Springer-Verlag, Heidelberg, Germany.
- 22] Meyer, J P and Allen, N J, 1991. A Three-Component Conceptualization of Organizational Commitment: Some Methodological Considerations. *Human Resource Management Review*, 1: 61-98.
- 23] Miller, V. D., J. R. Johnson and J. Grau, 1994. Antecedents to Willingness to Participate in Planned Organizational Change. *Journal of Applied Communications Research*, 22: 59–60.
- 24] Mohammadi, K, A. Khanlari, and B. Sohrabi, 2009. Organizational Readiness Assessment for Knowledge Management. *Journal of Knowledge Management*, 5 (1): 29-45.
- 25] Nonaka, I. and Takeuchi, H., 1995 *The Knowledge Creating Company*. New York. Oxford; University Press.
- 26] Nonaka, I., Totama, R. and Nagata, A., 2000 A Firm as a Knowledge-Creating Entity: A New Perspective On the Theory of the Firm, *Industrial and Corporate Change*, 9 (1): 1-20.
- 27] O'Dell, C. and Jackson, C., 1998 *If Only We Know What we Know: The Transfer of Internal Knowledge and Best Practice*, Free Press, New York, NY.
- 28] O'Dell, C., C. J. Grayson Jr. and N. Essaides, 1998. *If We Only Knew What We Know*. The Free Press, New York.
- 29] Pan, S. L. and Scarborough, H., 1999 Knowledge Management in Practice: An Exploratory Case Study of Buckman Labs, *Technology Analysis and Strategic Management*, 11 (3): 359-374.
- 30] Pumareja, D. and Sikkal, K., 2005. The Role of Dissonance in Knowledge Exchange: A Case Study of a Knowledge Management System Implementation. *Proceedings of the 38th Hawaii International Conference on System Sciences*, 42b.
- 31] Robinson-Whelen, S., Kim, C., MacCallum, R. C., & Kiecolt-Glaser, J. K. (1997). Distinguishing optimism from pessimism in older adults: Is it more important to be optimistic or not to be pessimistic? *Journal of Personality and Social Psychology*, 61, 1345–1353.
- 32] Rolland, N. and Chauvel, D., 2000 Knowledge Transfer in Strategic Alliances. In *Knowledge Horizons: The Present and the Promise of Knowledge Management* (Despres, C. and Chauvel, D. Eds), 225–239, Butterworth-Heinemann, Woburn, MA.
- 33] Siemieniuch, C. E. and M. A. Sinclair, 2004. A Framework for Organizational Readiness for Knowledge Management. *International of Operations and Production Management*, 24 (1): 79-98.
- 34] Stewart, T. A., 1994. Rate Your Readiness to Change. *Fortune*, 129: 106–110.
- 35] Sveiby, K. E., 1997 *The New Organizational Wealth: Managing and Measuring Knowledge-Based Assets*. Berret – Koehler Publishers. San Francisco.
- 36] Trahan, B. and Burke, W. W., 1996. Traveling Through Transitions. *Training and Development*, 50: 37–41.

- 37] Wanberg, C. R. and J. T. Banas, 2000. Predictors and Outcomes of Openness to Changes in a Reorganizing Workplace. *Journal of Applied Psychology*, 85: 132–142.
- 38] Wanous, J. P., Reichers, A. E. and Austin, J.T. (2000) Cynicism about organizational change. *Group & Organizational Management* 25, 132–153.
- 39] Watson, D. and Clark, L. A., 1997. Extraversion and its Positive Emotional Core. In *Handbook of Personality Psychology* (Hogan, R., Johnson, J. and Briggs, S., Eds), Academic Press, San Diego, CA.