Organisational Change Elements of Establishing, Facilitating and Supporting CoPs

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INTRODUCTION

Although knowledge management (KM) is often proposed as a viable means to enhance business performance by facilitating knowledge creation and sharing, there is serious concern that it frequently fails to deliver on its promise (Despres & Chauvel, 2000; Fuller, 2001; Newell, Scarbrough, Swan & Hislop, 1999; Pietersen, 2001; Brown & Duguid, 2000; Storey & Barnett, 2000).

Smith and McLaughlin (2003) posit that KM's lacklustre performance can often be traced to non-rational emotion-based "people-factors" that negatively influence interpersonal relationships, and that are ignored during typical KM implementation. These authors argue that the success of any significant change initiative, including KM, will be critically dependent on understanding, and improving as necessary, the collaborative characteristics of the organisation's culture.

This article adopts the notion that effective KM is largely people-centric, and that communities of practice (CoPs), *when suitably grounded*, provide a practical framework for assisting in the development of appropriate "people-factors" and the nurturing of collaborative relationships. It builds on the work of Smith and McLaughlin (2003) by proposing an extension of their approach that helps ensure the presence of a truly collaborative culture in the target community.

BACKGROUND

Smith and McLaughlin (2003) describe in detail a number of practical remedial initiatives, including establishing CoPs, that may be undertaken to help "get the people factors right" when trying to ensure successful KM implementation. These initiatives are grounded in chaos theory and relate to three systemic "performance drivers":

1. **KM Focus:** A clear "who, what, where, when, and why" of the KM performance envisaged
2. **KM Resources:** The wherewithal to support KM Focus
3. **KM Will:** The intent to perform KM Focus

There are typically serious endemic barriers to optimising or even balancing these performance drivers. Four workforce development initiatives are recommended by Smith and McLaughlin (2003) to overcome these shortcomings:

1. community-wide collaborative development of a Vision *for the KM initiative* since this provides excellent Focus and Will for relationship-building through sharing of the individual yearnings of all employees;
2. management initiatives to address the physiological needs of individual employees (need for belongingness, esteem, and striving to be the best a person can be) based on Maslow's (1943) theory such that Will to form relationships is strengthened;
3. the nurturing of voluntary CoPs (Wenger, McDermott & Snyder, 2002) in order to promote formation of appropriate relationships based on conversations and activities of interdependent people in complex responsive processes (Stacey, 2001); and
4. introduction of CoP members and others to Action Learning methodology (Gaunt, 1991) as a means to:
    - enhance understanding of the "people-factors" that enhance or hinder relationship building, and provide participants with a process and the skills to further develop

their learning and collaborative capabilities; and

- improve the way people meet (and form relationships) by helping them become sensitised to the semiconscious and unconscious impulses that operate as individuals and groups struggle to come together.

Recent KM literature reflects this emphasis on the people-centric nature of KM implementation, particularly where knowledge is tacit and not easily shared (Hildreth, *Kimble & Wright*, 2000). Comments by authorities such as Wiig (2000; p. 4) are typical:

There are emerging realisations that to achieve the level of effective behaviour required for competitive excellence, the whole person must be considered. We must integrate cognition, motivation, personal satisfaction, feelings of security, and many other factors.

Wiig (2000, p. 14) cites a number of authors to support his contention that "overall KM will become more people-centric because it is the networking of competent and collaborating people that makes successful organisations." He goes on to say: "One key lesson to be learned is that we must adopt greater people-centric perspectives of knowledge…Technology only goes so far" (Wiig, 2000, p. 25).

Snowden (2000, pp. 237-238) notes that organisations:

…are gradually becoming aware that knowledge cannot be treated as an organisational asset without the active and voluntary participation of the communities that are its true owners. A shift to thinking of employees as volunteers requires a radical rethink of reward structures, organisational forms, and management attitudes.

Even where the KM focus is essentially technology based, the importance of people to the process is acknowledged. For example, Davenport and Prusak (1998, p. 129) wrote: "The roles of people in knowledge technologies are integral to their success."

As noted in the Introduction, this article adopts the notion that successful KM is largely people-centric, and that CoPs, *when appropriately grounded*, provide a practical framework for nurturing suitable relationships. Furthermore the article builds on the work of Smith and McLaughlin (2003) by proposing that there is a critical additional "fifth" development initiative that must be undertaken if a truly collaborative social fabric is to develop. This initiative involves the visualisation, optimisation, and utilisation of a variety of social networks across the organisation as the basis for establishing CoPs and other relevant groups (e.g., a KM Steering Committee). Issues that heighten the need for this initiative are presented in the next section. Identification of, and assessment of the influence of, the organisation's formal and informal opinion leaders is included in the initiative, as are efforts to involve them at all stages of KM design and implementation. The fifth initiative is based on Social Network Analysis (Wasserman & Faust, 1997), which is also described.

MAIN BODY: ISSUES CONCERNING CoP AND RELATIONSHIP BUILDING

As discussed above, success in the new knowledge economy, for a public or private organisation, is critically dependent on having an organisational culture that is characterised by ready and effective communications across voluntary collaborative partnership-networks of all kinds. It is no longer "*what you know*" or even "*who you know*" that leads to viability and well-being; it is "*who you know well enough to trust for advice, or have confidence in to get things done efficiently and effectively.*" In other words, the extent to which formal and informal conversations, storytelling, and interactions of all kinds can take place across stakeholder communities will be critical to learning and the widespread sharing/generation of knowledge (Stacey, 2001). The concept of *social capital* (SC) (Coleman, 1990; Burt, 1992; Putnam, 1993) is useful for representing the collaborative status of relationships across an organisation. Although there is no uniformly accepted definition of SC, its meaning in an organisational setting has been captured by Gabbay and Leenders (1999, p. 3): "The set of resources, tangible or virtual, that accrue to a corporate player through the player's social relationships, facilitating the attainment of goals."

Each individual's relationships with other individuals in an organisation form that individual's SC for better or worse; close relationships enhance SC, whereas distrust and lack of openness cause low SC (sometimes termed *social liability*). Furthermore, the SC of individuals aggregates into the SC of organisations. This is an important attribute since, as Burt (1992, p. 52) points out, a critical property of SC is that it creates opportunities for, or blocks, the transformation of human capital and financial capital into profit.

The formation of SC clearly depends on having positive individual attitudes with respect to forming and sustaining interpersonal relationships, and one might anticipate that nurturing SC could be fruitfully undertaken within a CoP framework (O'Donnell et al., 2003). Wenger et al. (2002, p. 4) have provided a widely accepted definition of CoPs as "groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis." These authors add that "these people don't necessarily work together every day, but they meet because they find value in their interactions" (Wenger et al., 2002, p. 4), and go on to make it clear that in their view, the emphasis in CoPs is on "shared practice" where only behaviours and abilities *with respect to that practice* are enhanced (Wenger et al., 2002, pp. 41-44). Even though SC should be locally enhanced, this definition would seem to seriously constrain opportunities for overall relationship building, and be more conducive to development of "tight" cliques where group members become locked into like-minded close partnerships established in early community formation (Burt, 1992; Haythornthwaite, 1998).

There are issues related to whether more than a few viable CoPs can ever become established by simply allowing them to emerge as is normally recommended (Wenger et al., 2002; Saint-Onge & Wallace, 2003). For example, the formation of CoPs will be hampered where individuals lack networking skills, although workshops have been developed to address this issue (Smith & Godkewitsch, 2004). Indeed the stress of new networking cannot be overemphasised:

…our experiences of being and working in groups are often powerful and overwhelming. We experience the tension between the wish to join together and the wish to be separate; between the need for togetherness and belonging and the need for an independent identity. (Stokes, 1994, p. 19)

Even when CoPs do become established, authorities say little about how members really interact (Wenger et al., 2002; Saint-Onge & Wallace, 2003; Kimball & Ladd, 2004). If such groupings are to help nurture a broad-based collaborative organisational culture, members must focus on the attitudinal and behavioural nature of the various formal and informal group settings in which they meet. Smith and McLaughlin (2003) detail how effectively structuring such meetings provides a natural systemic way to shape the quality of interpersonal relationships through self-reflection, self-disclosure, and emotion, whilst energising individuals to act. These authors also indicate how these "meeting" issues may be explored through various group dynamics approaches (Egan, 1973; Nevis, 1987; Gabriel, 1999).

There are also issues concerning the true nature and extent of "sharing" relationships in CoPs. Individuals often resist sharing their knowledge in CoPs (Ciborra & Patriota, 1998), and knowledge is not shared easily even when an organisation makes a concerted effort to facilitate knowledge exchange (Szulanski, 1996). The success of knowledge sharing depends on the organisational KM system's social and technological attributes (Holsthouse, 1998), and on organisational culture (De Long & Fahey, 2000). Ardichvili, Page, and Wentling (2003, p. 29) report that employees in the virtual CoP they studied:

…view knowledge as a public good belonging to the whole organisation, [and] knowledge flows easily. However, even when individuals give the highest priority to the interests of the organisation and of their community, they tend to shy away from contributing knowledge for a variety of reasons. Specifically, employees hesitate to contribute out of fear of criticism, or of misleading the community members (not being sure that their contributions are important, accurate, or relevant). To remove the identified barriers, there is a need for developing various

types of trust, ranging from the knowledge-based to the institution-based trust.

Knowledge-based trust emerges on the basis of recurring social interactions between individuals, and is formed when the individuals get to know one another well, and are able to predict what to expect of one another, and how each will behave in a certain situation (Tschannen-Moran & Hoy, 2001). *Institution-based trust* is related to employees' trust across the whole organisation. Specifically, CoP members would need to have trust in the integrity of the organisation as a whole, and the competence of its members. This is based on the belief that necessary structures are in place to ensure trustworthy behaviour of individual members, and protect the members from negative consequences of administrative and procedural mistakes (McKnight, Cummings & Chervany, 1998). Institutional trust is enhanced by providing clear directions on what constitutes useful knowledge that can be posted on a CoP network, and by widely advertising examples of successful contributions by individuals. Clear communication is not enough; the organisation must demonstrate that it trusts its individual employees (DeLong & Fehey, 2000).

The work of Ardichvili et al. (2003) indicates that a virtual CoP, and indeed most CoPs, will function best when they: (a) are founded on, or have members that are drawn from, existing collaborative social networks; and (b) are part of an organisation that not only espouses trust in employees, but "walks the talk."

An organisation wishing to nurture KM and collaborative relationships through CoPs will almost certainly know the answer to (b), but they are not likely to know (a)—the patterns and nature of social networks in their organisation. This is because an organisation's social fabric is a complex mixture of closely-knit and more loosely woven formal, and informal, interpersonal and community relationships; the fabric may also display holes where community trust and collaborative knowledge sharing are absent.

Social Network Analysis (Wasserman & Faust, 1997) is therefore an important element in the "fifth" development initiative because it makes possible the identification of the patterns and the nature of social networks in an organisation, and their existing or latent influential potential from a knowledge-trust standpoint. Given this insight, a CoP or other grouping may be encouraged to take root on one or more prior social networks where appropriate relationship capabilities and institutional-trust have already been demonstrated.

Social Network Analysis (SNA)

Special techniques are required to visualise the complexities of how people communicate and interact in social networks, and SNA provides this capability. Although it is a highly mathematical approach, a number of simplified descriptive texts exist, for example Scott (2000). SNA is a very rich theoretical methodology that is only recently emerging as a practical and dynamic approach to real organisational problems (Kilduff & Tsai, 2003). Because of its highly mathematical nature, computers are typically used for calculation and display (Borgatti, Everett & Freeman, 1999).

In practice, data regarding an attribute of interest are first collected from a target organisational population, or the whole organisation. The appropriate SNA is then applied to these data, and local interpretation of results undertaken. In this way key informal and formal players may be identified, the relationship networks visualised and compared to optimal patterns, and actions undertaken as necessary to realise the potential envisaged for the initiative at hand. In addition, the various influential network agents have recognisable characteristics that can be identified (e.g., individuals who link networks across organisational boundaries). Networks themselves may be characterised as displaying effective social communications and collaborative archetypes (Buchanan, 2002).

When mapped, "real" communications channels are distributed unevenly, since dense clusters tend to form around established relationships (e.g., existing CoPs). The strong ties formed in these clusters have many benefits, but it is also critical to have "weaker" links between clusters to ensure broad-based relationship building, the quick flow across the community of new ideas, and the timely awareness of new opportunities and challenges. For this reason, identification of weak ties and knowledge of their relationship utility (Kilduff & Tsai, 2003) are important aspects of the "fifth" development initiative. SNA is

particularly necessary for pinpointing these weaker links, since such ties are often informal, having little obvious relationship to the official organisational-communications design.

FUTURE TRENDS

One may expect that SNA and related information will have increasing application in organisational optimisation in general, and in the development of SC in particular. It is anticipated that attempting to establish CoPs on a solid foundation of existing supportive relationships will also become a key concern with respect to KM design and implementation. Interpretation of an organisation's emergent social and communication patterns in dynamic and practical contexts (Kilduff & Tsai, 2003) is currently a hot topic that is expected to attract even more interest.

CONCLUSION

The emergence of a CoP is a necessary but insufficient condition when an organisation wishes to nurture a collaborative social fabric and optimise its SC. Practical activities to further nurture collaborative relationships within a CoP framework have been identified, and in particular, the importance of SNA as a precursor to viable CoP development has been explained.

REFERENCES

Ardichvili, A., Page, V. & Wentling, T. (2003). Motivation and barriers to participation in virtual knowledge-sharing communities of practice. *Journal of Knowledge Management, 7*(1), 64-77.

Borgatti, S.P., Everett, M.G. & Freeman, L.C. (1999). *UCINET 6.0 version 1.00.* AnalyticTechnologies, Natick.

Brown, J. & Duguid, P. (2000). *The social life of information.* Boston: Harvard Business School Press.

Buchanan, M. (2002). *Nexus.* New York: Norton.

Burt, R.S. (1992). The social structure of competition. In N. Nohria & R.G. Eccles (Eds.), *Networks and organizations.* Boston: Harvard Business School Press.

Ciborra, C.U. & Patriota, G. (1998). *Groupware and teamwork in R&D: Limits to learning and innovation. R&D Management, 28*(1).

Coleman, J.S. (1990). *Foundations of social theory.* Cambridge, MA: Belknap Press.

Davenport, T.H. & Prusak, L. (1998). *How organisations manage what they know.* Boston: Harvard Business School Press.

DeLong, D. & Fehey, L. (2000). *Diagnosing cultural barriers to knowledge management. Academy of Management Executive, 14*(4), 113-127.

Despres, C. & Chauvel, D. (Eds.). (2000). *Knowledge horizons.* Boston: Butterworth-Heinemann.

Egan, G. (1973). *Face to face.* Monterey, CA: Brooks/Cole.

Fuller, S. (2001). *Knowledge management foundations.* Boston: Butterworth-Heinemann.

Gabbay, S.M. & Leenders, R.T.A.J. (1999). The structure of advantage and disadvantage. In R.T.A.J. Leenders & S.M. Gabbay (Eds.), *Corporate social capital and liability.* Boston: Kluwer Academic Publishers.

Gabriel, Y. (1999). *Organisations in depth.* London: Sage Publications.

Gaunt, R. (1991). *Personal and group development for managers: An integrated approach through action learning.* Harlow: Longmans.

Haythornthwaite, C. (1988). A social network study of the growth of community among distance learners. *Information Research, 4*(1). Retrieved from *http://informationr.net/ir/4-1/paper49.html*

Hildreth, P., Kimble, C. & Wright, P. (2000). Communities of practice in the distributed international environment. *Journal of Knowledge Management, 4*(1), 27-38.

O

Holthouse, D. (1998). *Knowledge management research issues. California Management Review*, *40*(3).

Kilduff, M. & Tsai, W. (2003). *Social networks and organisations.* London: Sage Publications.

Kimball, L. & Ladd, A. (2004). Facilitator toolkit for building and sustaining virtual communities of practice. In P.M. Hildreth & C. Kimble (Eds.), *Knowledge networks: Innovation through communities of practice.* Hershey, PA: Idea Group Publishing.

Maslow, A. (1943). Theory of human motivation. *Psychological Review, 50,* 370-396.

McKnight, D.H., Cummings, L.L. & Chervany, N. (1998). *Initial trust formation in new organisational relationships. Academy of Management Review, 23*(3), 413-490.

Nevis, E.C. (1987). *Organisational consulting; A gestalt approach.* New York: Gardner.

Newell, S., Scarbrough, H., Swan, J. & Hislop, D. (1999). Intranets and knowledge management: Complex processes and ironic outcomes. *Proceedings 32nd Hawaii International Conference on Systems Sciences.*

O'Donnell, D., Porter, G., McGuire, D., Garavan, T.N., Heffernan, M. & Cleary, P. (2003). Creating intellectual capital: A Habermasian community of practice (CoP) introduction. *Journal of European Industrial Training, 27*(2/3/4), 80-87.

Pietersen, H.J. (2001). The IC/KM movement and human systems well-being. *Journal of Knowledge Management Practice, 2.* Retrieved from *http://www.tlainc.com/jkmpv2.htm*

Putnam, R.D. (1993). The prosperous community: Social capital and public life. *American Prospect, 13,* 35-42.

Saint-Onge, H. & Wallace, D. (2003). *Leveraging communities of practice for strategic advantage.* New York: Butterworth-Heinemann.

Scott, J. (2000). *Social network analysis.* London: Sage Publications.

Smith, P.A.C. & Godkewitsch, M. (2004). *Private communication.*

Smith, P.A.C. & McLaughlin, M. (2003). Succeeding with knowledge management: Getting the people-factors right. *Proceedings of the 6th World Congress on Intellectual Capital & Innovation, ,* January 15-17. McMaster University, Canada.

Snowden, D. (2000). The social ecology of knowledge management. In C. Despres & D. Chauvel (Eds.), *Knowledge horizons* (pp. 237-265). Boston: Butterworth-Heinemann.

Stacey, R.D. (2001). *Complex responsive processes in organisations.* London: Routledge.

Stokes, J. (1994). The unconscious at work in groups and teams: Contributions from the work of Wilfred Bion. In A. Obholzer & V.Z. Roberts (Eds.), *The unconscious at work: Individual and organisational stress in the human services* (pp. 19-27). London: Routledge.

Storey, J. & Barnett, E. (2000). Knowledge management initiatives: Learning from failure. *Journal of Knowledge Management, 4*(2), 145-156.

Szulanski, G. (1996). *Exploring internal stickiness: Impediments to the transfer of best practice within the firm. Strategic Management Journal, 17*(1), 27-44.

Tschannen-Moran, M. & Hoy, W.K. (2001). *A multidisciplinary analysis of the nature, meaning, and measurement of trust. Review of Educational Research, 70*(4), 547-593.

Wasserman, S. & Faust, K. (1997). *Social network analysis: Methods and applications.* Cambridge: Cambridge University Press.

Wenger, E., McDermott, R. & Snyder, W.M. (2002). *Cultivating communities of practice.* Cambridge, MA: Harvard Business School Press.

Wiig, K.M. (2000). Knowledge management: An emerging discipline rooted in a long history. In C. Despres & D. Chauvel (Eds.), *Knowledge horizons* (pp. 3-26). Boston: Butterworth-Heinemann.

KEY TERMS

Chaos Theory: A theory that deals with complex and dynamical arrangements of connections

between elements forming a unified whole, the behaviour of which is simultaneously both unpredictable (chaotic) and patterned (orderly).

Human Capital: The attributes, competencies, and mindsets of the individuals that make up an organisation.

Institution-Based Trust: Trust formed when organisational members believe that their organisation as a whole has their best interests at heart and acts accordingly.

Knowledge-Based Trust: Trust that emerges on the basis of recurring social interactions between individuals, and is formed when the individuals get to know one another well.

Social Capital: The set of resources, tangible or virtual, that accrue to a corporate player through the player's social relationships, facilitating the attainment of goals.

Social Network: A set of nodes (persons, organisations, etc.) linked by a set of social relationships of a specified type (e.g., friendship).

Social Network Analysis: Data acquisition methods and computerised (typically) techniques that enable visualisation of social networks and articulation of their properties.