

Ana Martins¹, Donald Ah Pak², Isabel Martins³¹ Faculty of Economics and Administrative Sciences, Zirve University, Turkey.² International Business School, Xi'an Jiaotong-Liverpool, University, Suzhou, China.³ Harold Pupkewitz Graduate School of Business, Polytechnic of Namibia, Namibia.

Communication and Leadership – Dialectical Tensions in Virtual Communities of Practice.

UDC: 005.57:[007:004.451.6 ; 005.94:004.9

DOI: 10.7595/management.fon.2013.0021

The paper aims to evaluate the significance of leadership in communities of practice in terms of sharing knowledge and to ascertain how to improve performance through trust and communication. A virtual travel community of practice is selected to be the target via purposive sampling. Through case study methodology, the leaders' practical performance and members' reaction will be observed appropriately. In the studied virtual community of practice, five main measures including regulations, information technology, performance appraisal, incentives and culture are taken by the leaders to establish a free, open and effective communication environment. Their leadership style is characterized by contextual strategy, democratic decision-making and partition management. Through the research, a virtuous cycle arises between trust and communication which is adopted by the leadership to achieve successful knowledge sharing naturally. Small scale of research targets and pre-determined characteristics of the community of practice can be considered a limitation. The paper could provide a guideline for those highly-involved, sophisticated members who intend to enhance the performance of knowledge sharing in their communities of practice.

Keywords: Communities of practice, knowledge sharing, leadership

1. Introduction

A popular, highly valued platform for knowledge management is a community of practice (CoP), according to Lave and Wenger (1991) and is regarded as a group of people learning from each other through sharing information and experiences to gain knowledge and develop practices. High performance in CoPs can stimulate social capital and accelerate knowledge flow, leading to an efficient and effective environment. A notable characteristic is its spontaneous-formation in that people are informally bound together due to their shared expertise (Wenger and Snyder 2000). Under the leaders' intervention, the act of sharing knowledge may result in differences; moreover, the surroundings and attributes of communities are considered to be indispensable factors in the plurality of work. This paper endeavours to discuss these factors, aiming to evaluate the significance of leadership in communities of practice in terms of sharing knowledge and to ascertain how to improve performance through trust and communication. This paper could give a preliminary understanding of how leadership influences the efficiency of knowledge sharing and how subjective factors are fostered and positively impact communities of practice. The case study methodology is adopted to emphasize the comprehensive analysis of certain unities and their mutual interrelations considering the behaviour-pattern relationship, Kothari (2004). This method is appropriate to observe leaders' performance and members' reaction in a community of practice.

2. The concept of communities of practice

CoPs originated from a study of situated learning by Lave and Wenger (1991, p. 98) who defined these as 'a system of relationships between people, activities, and the world; developing with time, and in relation to other tangential and overlapping communities of practice'. Wenger (1998a, 1998b) elaborated the dynamic operation of CoPs and characterized these in terms of practice (what activities are performed) and identity (who they are). Zhang and Watts (2008) revisited Wenger's theory about the effect of a shared history of learning: the power of knowledge that CoPs possess is realized through the evolution of practice and iden-

tity. They postulated that members improve practices and gain new identities grounded on past experience and identities through learning. Several practices incorporated in CoPs were demonstrated by Davenport and Prusak (2000) as being, namely, the finding of, sharing, transferring, archiving knowledge, and producing tacit knowledge, the practice-based approach to knowledge creation.

Defined as fundamentally self-organizing systems, CoPs develop and evolve through multiple stages which are classified according to different levels of interaction between members and different types of activities, according to Wenger (1998), and are labeled as five stages of development, namely, (i) 'potential', (ii) 'coalescing', (iii) 'active', (iv) 'dispersed' and (v) 'memorable'. Wenger (1998a, 1998b) summarized that the practices that the community undertakes mirror the participants' individual understanding of what is important as a result of which practices will change according to different external influences such as outside limits and commands, causing the entire community to be developed due to its encompassment of practices.

Information technology has changed the form of knowledge exchanging and management and boosted the emergence of virtual CoPs. Online communities are referred to as "a cyber-place with associated group computer-mediated communication (CMC)" as Zhang and Watts (2008, p. 57) postulated. They questioned the appropriateness of authorizing online communities to be standard CoPs, where "several features of online communities are raised including CMC-relied, relaxed membership criteria, widely-varied levels of participation, as well as naturally-reified and stored participation history" (Zhang and Watts 2008, p. 57-58). These authors acknowledged the possibility of online CoPs facilitated by the virtual environment, resembling and extending conventional CoPs. Limited by the generalizability and temporal frames, Zhang and Watts (2008) suggested potential further research streams such as the relationships between three dimensions - the domain of communities, member characteristics, and the extent of the communities' attained status. The aim of this paper is to address some of the limitations highlighted by Zang and Watts (2008) analyzing an online CoP as the target sample and investigate the effect of leadership behavior on the knowledge-sharing performance.

3. The importance of CoPs and knowledge management

Knowledge management comprises a range of strategies of capturing, organizing and retrieving information, evoking notions of databases, documents, inquiry discourse, and data mining (Thomas et al. 2001). The extensive literature in this field highlights the importance of CoPs in knowledge management. Yang and Wei (2010) corroborated that CoPs provide a platform for knowledge management and may determine organisational performance and success. Yang and Wei (2010) further opine that, the initial concern of CoPs is to enhance the level of knowledge that knowledge workers have which can be susceptible to the elements of benefits and reward. However, this aforementioned research neglects the insight into the communication and interaction between community members. Hildreth and Kimble (2002) consider tacit knowledge to be particularly important in CoPs since it is considered to be the valuable context-based experiences, which are difficult to capture, codify and store. Cabrera and Cabrera (2005) examined how to foster knowledge sharing (an activity of exchanging knowledge including information, skills or expertise among people within a family, a community or an organization), which offers a sound understanding about multiple strategies and practices in CoPs such as work design, training and development as well as culture.

4. Trust, communication and community leadership

Lazaric and Lorenz (1998, p. 3) maintain that the concept of trust entails three dimensions, namely, (i) a member's individual belief rather than behavior, (ii) beliefs about others' probable behavior, and (iii) pertaining to situations where the complex relationship impedes the interdependence to accomplish contingent contract enforced by a third party. Roberts (2006) argued that, with regard to the critique about the CoPs approach, the lack of trust is one of the limitations as "without trust, members of a CoP might be reluctant to share knowledge" (2006, p. 628). Furthermore, mutual trust between members is referred to as a prerequisite for achieving deeper mutual understanding under a presupposition that a shared social and cultural context is commonly appreciated (Roberts 2000). Other studies showed that trust promotes a higher degree of openness which nurture cooperation, and eventually effective transfer of knowledge (Wathne et al. 1996).

Researchers in the field have highlighted the reciprocity between trust and communication. Cabrera and Cabrera (2005) proposed several practices which have a positive influence on the relational dimensions of social capital, one of which is open communication through enhancing mutual trust and consolidation. Contributing to social networking, communication is considered as a tool for providing a rich medium of information exchange, which is the key for establishing a trusting relationship (Cabrera and Cabrera 2005, p. 729). The distinction between the role of leadership in CoPs in organizations was analysed by Brown and Duguid (2001a). Leadership can facilitate the transfer of knowledge across the organization through encouraging alignments of changing practices between communities. Complementary to the uniqueness of leadership styles in CoPs, Wenger et al. (2002, p. 49) opined that the determinant of success to CoPs is "their ability to generate enough excitement, relevance, and value to attract and engage members' due to their property of voluntary-formation". Communities require the invitation of the interaction making them alive – this aliveness cannot be contrived or designed and it does not occur automatically. Robert (2006, p. 625) maintains that management cannot build a CoP; instead, it can facilitate the spontaneous emergence of CoPs and support their development. Moreover, the performance of leaders is dependent on various situations in which different communities find themselves which implies a flexible strategy is required in practice.

Previous research has focused on appropriate practices that leadership can take on to maintain and develop CoPs successfully. Research demonstrated leadership practices, of which the most frequent are discussed below:

(I) Culture and Social Capital

In a CoP, social and intellectual capitals are regarded as intangible. The value of social interpersonal relationships, the role of cooperation and confidence are highlighted in their contribution towards performance. Social capital is a valuable organizational resource according to Leana and Van Buren (1999). Cabrera and Cabrera (2005) postulated two propositions, (I) social ties and shared language will help create an environment conducive for knowledge sharing, and (II) trust and group identification will encourage positive attitudes towards knowledge sharing. These authors further opined that these two propositions are positively related to knowledge-sharing intentions or behaviors, whereas they did not indicate how to employ social connections or deepen mutual trust. Roberts (2000) corroborates that a common appreciation of a shared social and cultural context is the foundation for the existence of trust relationships between members which are aligned with a high degree of mutual understanding, and both of them are prerequisites for successful implicit knowledge exchange. Furthermore, implicit knowledge is vital for the member identity, Wenger et al. (2002). These authors further postulated that leaders may take measures to promote the emergence of members' potential value and assist them to learn how to achieve individual value.

Stuckey and Smith (2004) raised the theory of maintaining clear, permeable and meaningful boundaries around the community which is a significant leadership practice to sustain the community identity. These authors further postulated the clarity and integrity of community boundaries on the one hand, while mentioning that some changes in contextual environment would have an influence on boundaries that leaders should make appropriate adjustments to ensure the meaningfulness of community boundaries.

(II) Contextual Strategies

Wenger et al. (2002) posit the dynamic nature of CoPs as the core of their development. In terms of the development of the community, contextual changes to environment and participants can result in a changeable community core and flexible members' demands. Leaders should develop and cultivate CoPs dependent on the development stage, environment, member cohesiveness and shared knowledge. Roberts (2006) considered individual interests including personal preferences and predispositions which always accompany members participating in communities. Influenced by those specific interests, members can be innovative and flexible when sharing and creating knowledge based on those the communities would evolve.

(III) Incentive and Performance Appraisal

Serrat (2008) postulates that incentives, such as reward and recognition, are a success factors for CoPs. Cabrera and Cabrera (2005) incorporated reward system into performance appraisals with compensation systems, in order to motivate knowledge sharing activities. Bekkum (2010) postulated that sustaining a close connection between respective reward and individual performance on knowledge sharing or other relevant activities, during conversations on evaluation, would lead to members' recognition of the importance of knowledge sharing and also the degree of involvement and contribution. On the other hand, Bekkum (2010) further maintains that peer pressure results from underpinning participants' divisions on respective

behavior on knowledge sharing. He further posits that leaders highlight or evidence the gaps between those who do a great job on sharing and those with poor performance, which may stimulate the latter to make a progress under pressure.

(IV) Other practices

In addition to the previous practices, information technology is pervasively mentioned in the literature. Serrat (2008) and Cabrera and Cabrera (2005) support information technology in that it complements the cultivating and sustaining of CoPs. The main role of this practice is in the simplification of tasks, time-saving for knowledge sharing activities, and enhancing social networks. Apart from IT, other practices can be provided by leaders, according to Wenger (1998a, 1998b), such as external experts to the organization as well as and meeting facilities.

The following table summarises these practices.

Table 1: Five Leadership Practices

Practices	Characteristics		Authors
Regulations	Communication norms	Provide a shared communicative context	Roberts (2006); Cabrera and Cabrera (2005)
	Privacy protection	Ensure safety for open communication	
Technology	Search engine, buttons, message column	Facilitate information flow; achieve effective communication	Wenger (1998a, 1998b); Cabrera and Cabrera (2005); Serrat (2008)
Performance appraisal	Point System, length of login time, posted messages	Recognize high extent of involvement and contribution; members' prestige	Bekkum (2010)
Incentives	Offline activities	Increase interactions, tighten interpersonal relations	Wenger et al. (2002):
	Competitions with rewards	Involve different levels of participants	Bekkum (2010); Wenger et al. (2002)
	Regular interview with sophisticated members	Share rich experience, develop trust	Cabrera and Cabrera (2005)
	Free-download of travel strategy collection	Help members with low level of knowledge; attract potential external members	
Culture	Community identity	Value travel attitude more than travel ways - implicit knowledge, focus on value	Wenger et al. (2002):
	Member identity	UGC-oriented (User Generated Content), encourage free communication; respect different ideas; human-oriented	Vries et al. (2010):

Source: Martins et al. (2013)

With a responsibility of developing and nurturing CoPs, leadership has to take different and specific tasks to legitimize the community as a platform for knowledge sharing and creating, Wenger (1998a, 1998b). Vries et al. (2010) further corroborate that CoPs should harness charismatic and human-oriented leadership. Furthermore, Bourhis et al. (2005, p.23) ascertain the leadership element, particularly regarding virtual CoPs showing that the decisions made by the operational leadership have a crucial contribution “to counteract the challenges arising from its structuring characteristics”. Moreover, Bourhis et al. (2005) traced the relationship between leadership actions and the overall success of communities, showing that a higher degree of involvement and motivation results in better performance. The table below demonstrates these styles.

Table 2: Leadership Styles

Characteristics-Style	Authors
Contextual strategies: cost-effective – travel value	Wenger et al. (2002)
Democratic decision-making with mass participation;human-oriented	Vries et al. (2010)
Partition Management diverse and distributed tasks	Wenger (1998a, 1998b)

Source: Martins et al. (2013)

5. Method, findings and discussion

For this case study, the main actor is an online travel CoP, founded in China, 2004. This network is an on-line supplier providing tourism information of world-wide multi-destinations through the Internet, which serves for travel knowledge exchanging and vibrant discussions on travel issues. Based on a qualitative analysis, five structured interviews were conducted in February 2012. One online interview was conducted with a team leader. The other four face-to-face interviews were conducted with participants with a high degree of involvement and who are regularly and actively engaged in group discussion.

From the data gathered, the findings are analysed in accordance with the leadership practices. In view of this, *Regulations* are set on the basis of laws and ethical standards to specify appropriate norms pertinent to members’ behaviour. With a predetermined speech norm, a social and cultural context is appreciated so that knowledge sharing is performed in an efficient and protected way and mutual trust, as is fostered, Roberts (2000). Furthermore, leaders protect members’ private information from illegal unities. Security is provided for communicating openly and comfortably. As a guarantee redeeming to potential dangers incurred by virtual networks, environment of trust to ensure communication becomes a foundation of cultivating knowledge sharing. As for *Information technology*, it is installed in the form of various functional buttons which allow members to give feedback and evaluate others’ messages. Furthermore, a search engine is utilized to help members search for specific topics or information in a convenient way. This finding is also in agreement with the fact that information technology is utilized in CoPs as an accelerator of information delivery that can place more value to communication (Serrat, 2008). Thus, leaders take full advantage of technology to facilitate information flow and cultivate an efficient knowledge-sharing environment.

As for *Performance appraisals*, these are adopted in the form of the Point System which quantifies the extent of the individuals’ contribution and engagement in order to evaluate their performance. The quality of posted messages or articles is more valued, assessed by the extent of enthusiasm of others’ responses. A consensus has been reached to the extent one’s prestige is dependent on the degree of one’s engagement in and contribution to the community, although rewards are not linked to individual performance (Cabrera and Cabrera, 2005). Contrary to the literature on ‘peer pressure’ (Bekkum, 2010), these findings reveal that members are motivated through positive reinforcement.

Leadership serves a positive and valid guidance for members through which a competitive atmosphere in knowledge sharing is created. Regarding *Incentives*, these are offered through four channels, namely (I) face-to-face activities whereby members' interpersonal relationship can be strengthened apart from virtual communication, which brings excitement to members and enhances the social ties (Wenger et al. 2002). In line with this theory, different levels of participants become involved, competition with rewards can facilitate knowledge sharing achieved through members' disseminating their work thereby learning from each other; (II) by holding these activities, leadership contributes motivating and raise the morale in the virtual CoP; (III) regular interviews are held in which members are given an opportunity to know each other's personality and insightful values so that they can build trust grounded on mutual comprehension. Leadership here plays an inductive role by leading conversations revolving around tacit knowledge; (IV) searching and collecting valuable knowledge accumulated from personal experience leaders launch a series of travel strategy covering all specific travel tips. It contributes to the efficiency of knowledge sharing.

The practice of *Culture* is emphasized, encouraging members to establish their own understanding and develop their individual travelling style. Members can have a trustful relationship by sharing this common community identity, according to the literature (Cabrera and Cabrera 2005). The establishment of member identity not only encourages individuality and initiatives, but is also an indication of human-oriented leadership style. Members feel respected as the literature corroborates (Vries et al. 2010). Regarding partition management, certain leaders with differing expertise are in charge of delegating tasks to achieve effectiveness and they keep the right of offering suggestions or different viewpoints. It is consistent with the theory of diversification of leadership's responsibility (Wenger 1998a, 1998b). This flexible management regulation cultivates trust and supports relaxed communicative environment. As a consequence of cooperation and sharing, mutual trust can be fostered and solidified through consolidation and mutual understanding which leads to tight interpersonal relationships and broad social networks. This arises from the interviewee findings which can be characterized as a 'virtuous cycle'. Taking multiple practices to establish an effective and open communication, leaders motivate members to foster cultural identity in order to show trust and respect thus enhancing interpersonal relations. Thus improving social capital in the CoP takes effective and open communication forward. This virtuous cycle between trust and communication is cultivated in the CoP raising performance and knowledge sharing.

Conclusion

This paper aimed at evaluating the role of leadership in the sharing of knowledge and its application in CoPs in order to depict leaders' practices and styles; a case study was used to demonstrate practical leadership performance. The results highlighted how leaders enable the CoP members to raise performance through knowledge sharing. The discussion observed how the five main leadership practices are taken to establish a free and effective communication environment. This study also observed that contextual strategy, democratic decision-making, and partition management dominate the leadership style. Trust and communication create a virtuous cycle further harnessed through community leadership to achieve knowledge sharing naturally. Nevertheless, a limitation of this paper relates to the small scale target size. The results may be moderately distorted as details or poor practices are excluded when being researched, and leadership practices could be variable regarding different types and fields of communities. Further research is required on the evaluation of different practices of leadership with regard to certain types and features of CoPs.

REFERENCES

- [1] Bekkum, E. (2010). How to incentivize knowledge sharing and knowledge exchange. Retrieved 25 April, 2012, from . <http://www.efios.com/node/119>.
- [2] Bourhis, A., Dubé, L. & Jacob, R. (2005). The success of virtual communities of practice: the leadership factor, *The Electronic Journal of Knowledge Management*, 3(1), 23-34.
- [3] Brown, J.S. & Duguid, P. (2001a). Structure and spontaneity: knowledge and organization. In Nonaka, I. & Teece, D. (Eds), *Managing Industrial Knowledge*. (pp.44-67). London: Sage.
- [4] Cabrera, E.F. & Cabrera, A. (2005). Fostering knowledge sharing through people management practices, *The International Journal of Human Resource Management*, 16(5), 720-735.

- [5] Davenport, T.H. & Prusak, L. (2000). Working knowledge: how organizations manage what they know. (2nd ed). Cambridge: Harvard Business School Press.
- [6] Fontaine, M. (2001). Keeping communities of practice afloat, *Knowledge Management Review*, 4(4), 16-21.
- [7] Hildreth, P. & Kimble, C. (2000). Communities of practice in the distributed international environment, *Journal of Knowledge Management*, 4(1), 27-38.
- [8] Kothari, C.R. (2004). Research methodology: methods and techniques. New Delhi: New Age International.
- [9] Lazaric, N. & Lorenz, E. (1998). The learning dynamics of trust reputation and confidence. In N. Lazaric & E. Lorenz (eds.). Trust and economic learning. (1-20) Cheltenham: Edward Elgar:
- [10] Lave, J. & Wenger, E. (1991). Situated learning: legitimated peripheral participation. Cambridge: Cambridge University Press.
- [11] Leana, C.R. & Van Buren, H J. (1999). Organizational social capital and employment practices, *Academy of Management Review*, 24 (3), 538-555.
- [12] Lengnick-Hall, M.L. & Lengnick-Hall, C.A. (2003). Human resource management in the knowledge economy: new challenges, new roles, new capabilities. San Francisco, CA: Berrett-Koehler.
- [13] Nahapiet, J. & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage, *Academy of Management Review*, 23(2), 242-266.
- [14] Roberts, J. (2000). From know-how to show-how: the role of information and communication technologies in the transfer of knowledge, *Technology Analysis and Strategic Management*, 12(4), 429-443.
- [15] Roberts, J. (2006). Limits to communities of practice, *Journal of Management Studies*, 43(3), 623-639.
- [16] Serrat, O. (2008). Building communities of practice, Knowledge Solution, Asian Development Bank, Retrieved 10 May, 2012 from, <http://www.adb.org/sites/default/files/pub/2008/building-communities-practice.pdf>
- [17] key, B & Smith, J. (2004). Building sustainable communities of practice. In Paul M, Hildreth, Chris Kimble (eds) Knowledge Networks: Innovation Through Communities of Practice. Idea Group Publications.
- [18] Tellis, W. (1997). Application of a case study methodology. *The Qualitative Report*, 3(3), 1-19.
- [19] Thomas, J.C., Kellogg, W.A., & Erickson, T. (2001). The knowledge management puzzle: human and social factors in knowledge management, *IBM Systems Journal*, 40(4), 863-884.
- [20] Vries, R., Bakker-Pieper, A & Ostenveld, W. (2010). The relations of leaders' communication styles with leadership styles, knowledge sharing and leadership outcomes, *Journal Business Psychology*, 25(3), 367-380.
- [21] Wathne, K., Ross, J. & Krogh, G. (1996). Towards a theory of knowledge transfer in a cooperative context. In von Krogh, G. and Ross, J. (Eds), *Managing knowledge: perspectives on cooperation and competition*. London: Sage.
- [22] Wenger, E. (1998). Communities of practice: learning, meaning, and identity. Cambridge: Cambridge University Press.
- [23] Wenger, E. (1998). Communities of practice: learning as a social system, *Systems Thinker*, Retrieved 10 May, 2012, from <http://www.co-i-l.com/coil/knowledge-garden/cop/lss.shtml>.
- [24] Wenger, E.C. & Snyder, W.M. (2000). Communities of practice: the organizational frontier, *Harvard Business Review*, 78 (1), 139-144.
- [25] Wenger, E., McDermott, R. & Snyder, W.M. (2002). Cultivating communities of practice: a guide to managing knowledge – seven principles for cultivating communities of practice. (2nd ed). Cambridge: Harvard Business School Press.
- [26] Yang, C.L. & Wei, A.T. (2010). Modeling the performance of cop in knowledge management, *Total Quality Management*, 21 (10), 1033-1045.
- [27] Yin, R. (1994). Case study research: design and methods. (2nd ed). Cambridge: Thousand Oaks.

Received: August 2013
Accepted: September 2013

About the Author

Ana Martins

Faculty of Economics and Administrative Sciences, Zirve University, Turkey.
lepazana@yahoo.com

Ana Martins is currently an Assistant Professor in Organisational Behaviour, Faculty of Economics and Administrative Sciences, Zirve University, Gaizantep, Turkey; she has taught in various places such as UK, Germany, Portugal as well as Hong Kong and China. Her research areas are: Leadership, Emotional Intelligence, Strategic HRM and Knowledge Management. She is an associate reviewer of various International Academic Journals.

Donald Ah Pak

International Business School, Xi'an Jiaotong-Liverpool, University, Suzhou, China.
donald.pak@xjtlu.edu.cn

Donald Ah Pak is currently a lecturer in Management, at the International Business School Suzhou, Xi'an Jiaotong-Liverpool University, Suzhou, Jiangsu Province, China. His research areas are: Strategy, Management and International Business

Isabel Martins

³Harold Pupkewitz Graduate School of Business, Polytechnic of Namibia, Namibia.
sabelmartinsmilosev@hotmail.com

Isabel Martins is currently an Associate Professor in Business Management, at the Harold Pupkewitz Graduate School of Business Polytechnic of Namibia, Namibia. Previously she has taught in various places such as South Africa, UK, Germany, Portugal, Hong Kong as well as in the Gulf Countries. Her research areas are: Organisational Learning and Human Capital Development. She is an associate reviewer of various International Academic Journals.