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Critical Success Factors of Communities of Practice in an Asian Leading Educational Institute

¹M.S. Zanjani and ²F. Alami

¹Department of Information Technology Management, School of Management, University of Tehran, Room No. 136, Jalale-Ale-Ahmad Ave, Tehran, Iran

²Master of Art in Educational Management, School of Psychology and Education, University of Tehran, Tehran, Iran

Abstract: This study aims to examine Critical Success Factors (CSFs) of Communities Of Practice (COPs) in an Asian leading educational institute. For this purpose ten semi-structured interviews with the COP leaders have been conducted and two community meetings were attended in the period of eight months (attendance with observation). The investigation led to the discovery of five critical factors that lead to the successful COPs. The theoretical-based case study provides practitioners with a complex perspective of the reasons of COP success in educational environments and adds originality to the study.

Key words: Knowledge management, education, learning

INTRODUCTION

In today's world, organizations have to learn constantly, in order to respond flexibly to changes in the environment and to stay competitive. For becoming or sustaining a learning organization, management has the task to make the best possible use of the knowledge of the people in the organization. There is a growing consensus that the best way to improve organizational learning is not to simply focus on capturing, codifying and documenting knowledge of individuals, but rather to concentrate on ways, through which knowledge can be shared, discussed and innovated (Mittendorff *et al.*, 2006).

Knowledge sharing among group members, especially through Communities Of Practice (COPs), is one of the most direct and effective means of elevating the knowledge level of the organization. Being part of knowledge diffusion activities, new members can rapidly become acquainted with skills and techniques through discussion and sharing of knowledge among members. They do not have to learn by making mistakes from the beginning again and can accumulate work knowledge naturally and rapidly (Huang *et al.*, 2007).

The concept of community of practice, which was introduced by Lave and Wenger in 1990, has received much attention in the area of Knowledge Management (KM). In particular, the concept is deemed useful by both practitioners and researchers to account for the learning processes taking place within an organization (Dupou and Yıldızoğlu, 2006).

A community of practice is best described as a group of people who interact, learn together, build relationships and also develop a sense of shared commitment and belonging (Schrum *et al.*, 2007). More precisely, a community of practice is a group of individuals who shares their interests and problems with a specific topic and gains a greater degree of knowledge and expertise on a topic through their regular interaction (Probst and Borzillo, 2008). COP is defined more by the knowledge than by the task and exists because participation is valuable to its members (Oberty and Saa'-Pe'rez, 2006).

Corresponding Author: Mehdi Shami Zanjani, Department of Information Technology Management, School of Management, University of Tehran, Room No. 136, Jalale-Ale-Ahmad Ave, Tehran, Iran

The main objective of establishing a community of practice is to share essential knowledge and upgrade the knowledge levels of group members. A COP represents a process of social learning whereby learners with a common interest in a subject collaboratively share ideas, find solutions and build innovations (Chang *et al.*, 2008).

The literature tends to focus on the common features of COPs rather than differences between different communities. There are many factors that could be used to distinguish between communities of practice. For example, COPs differ in terms of size, permanence, geographical dispersion and the most challenging factor, the degree of support received from beyond the community (Klein *et al.*, 2005).

An increasing number of studies have debated whether organizations can play an active role in constructing and supporting COPs. Initially, COPs were presented as spontaneous, self-organizing and fluid processes that management cannot intentionally establish. Later studies, however, suggest that COPs are amenable to manipulation and thus must receive institutional support for strategic advantage. These studies have caused a growing tension in the literature regarding COP's manageability (Probst and Borzillo, 2008).

Regarding to the inherent capabilities of COPs in handling knowledge, organizations are applying this concept to their knowledge management practices, attempting to cultivate such knowledge-embedded communities (Zhang and Watts, 2008). In numerous firms across the globe, managers are expending considerable resources to support or even formalize and construct these informal organizational forms in the hope of improving the firm's competitive advantage based on knowledge (Schenkel and Teigland, 2008).

More recent studies suggest that while organizations need to foster and participate in COPs to leverage their full potential, they cannot fully own or control them (Probst and Borzillo, 2008).

Despite the profusion of research about COPs, fewer studies tried to systematically analyze the reasons of COPs success and failure.

Critical Success Factors (CSFs) can be defined as areas in which results, if they are satisfactory, will ensure successful competitive performance for the organization. We can view them as those critical areas of managerial planning and action that must be practiced in order to achieve effectiveness. In terms of KM, they can be viewed as those activities and practices that should be addressed in order to ensure its successful implementation (Wong, 2005).

Probst and Borzillo (2008) conducted an investigation based on a questionnaire survey of 57 COP leaders from major European and US companies. The results revealed ten governance mechanisms linked to strategic objectives, an active collaboration between a sponsor from top management and a COP leader, networking routines, a risk-free environment and the measurement of a COP's success. The results also revealed a number of reasons for failure: absence of a core group, weak one-to-one connections between members, rigidity of competencies, lack of identification with the network and practice intangibility.

Some literatures attributed the success of COPs in handling knowledge to the face-to-face communication and the close connections fostered through the personal interactions (Zhang and Watts, 2008).

The serial researches of Allen showed an inverse relationship between the distance among people and the likelihood of knowledge flow. The proportion of interaction decreases with increasing distance (Huang *et al.*, 2007).

As highlighted by Loyarte and Rivera (2007), to integrate the COPs in organizations, it is important to understand the four challenges for the cultivation of COPs which are: management challenge, community challenge, technical challenge and personal challenge (Loyarte and Rivera, 2007).

Huang *et al.* (2007) argued that it is important to identify factors hindering the implementation of the community of practice to increase the possibility of successful knowledge sharing. They

proposed a mathematical model to vividly demonstrate the process of knowledge diffusion activities in the community of practice by considering various factors such as distance, knowledge gap, learning ability and willingness to share.

Kimble and Hildreth Dualities (2005) mentioned that all members of COPs must have the desire, motivation and will to work together.

Communities of practice have attracted much attention from scholars and practitioners interested in the area of knowledge management, especially sharing of experiences and best practices across organizational units. Although COP has been discussed in various circles, fewer studies tried to analyze the reasons of COPs success and failure systematically. Also, the literature has neglected so far the CSFs of COPs in educational environments.

In order to bridge this gap in the literature, this study aims to examine CSFs of COPs in an Asian leading educational institute.

MATERIALS AND METHODS

Since, the theory about knowledge management still represents an emergent and sometimes confusing field, the case study method seems to be the most suitable research strategy in this area. Due to its special characteristics, the case study method allows us to take a closer look at the unit analyzed.

The case selection was based on a non-random sampling in which a case that could potentially provide better learning opportunities was chosen. As a result, one of the leading educational institutes in Asia was selected.

The Vision of the institute for the next five years is: "The institute intends to become the most reliable Asian educational institute, pioneer in offering educational services with the aim of training students who are responsible, creative, long-life learners, efficient and morally oriented".

The institute also is characterized by its proactive attitude with regard to knowledge and by the efforts to be a learning organization especially through COPs. Proactivity in the matter of knowledge can be reflected in the fact that this is an organization where knowledge management forms part of everyday life and where, in a deliberate or emergent way, the very best is done to create, transfer and apply knowledge (Claver-Corte's *et al.*, 2007).

For three years the members of the institute's network (about 300 members) have gathered at least once per week. These events start at 3 pm and usually last until at least 5 pm Every community forum starts with 30 min presentation supported by powerpoint files. After the presentation, the leader facilitates a debate that supports knowledge creation and dissemination. For the purpose of this study two community meetings were attended in the period of eight months.

Data Collection and Analysis

We conducted present research with 10 COP leaders of the institute. In order to identify successful COPs, we started with a perception analysis of COP leaders, using the elite interviewing technique to collect qualitative data. This method is aimed at gathering data from individuals who are the most informed about and experienced with the phenomenon under research. COP leaders were therefore the most elite choices, since it is presumed that they have the best knowledge of their groups. The success of a particular COP was assessed by having the leaders describe whether: proven or best practices were regularly communicated in the community's sessions and members often presented their feedback in the sessions after having used one of these practices in their tasks (Probst and Borzillo, 2008).

In the second phase of data collection, we conducted semi-directed interviews with the 9 leaders of successful COPs. During the in-depth interview, we asked theory-driven questions related to the critical success factors of their COPs. The interviews lasted one hour on average and all of them were

recorded, with the interviewee's consent and later transcribed. Until the final report on each case was completed, telephone and face to face contact was maintained in order to clarify any potential doubts that might arise.

The data analysis was conducted in two phases. In the first phase, the researchers used the open-coding technique to code the interview transcripts and other information collected (Boh, 2007). In order to obtain this, the following steps were followed according to Probst and Borzillo (2008): first, the factors were labeled as closely to the original wording as possible, which created a set of categories for each of the 9 successful COPs. Each category was then captured in a short descriptive sentence. Second, a consolidation was done of the 9 sets of categories, which resulted in a single set of 7 grounded categories. However, the grounded categories still contained a number of redundancies related to the content. Then, each grounded category was consequently analyzed and then compared to the others to eliminate content redundancies. The final result was a set of 5 non redundant categories labeled critical success factors.

Based on the CSFs identified in this first round of coding, two additional coders were recruited to recode all the interview documents. This second phase of coding highlighted the text relating to each SCF. The inter-rater reliability between the two independent coders was good ($\kappa = 86.2$). Based on the results of this phase of coding, one of the SCFs identified in phase 1 were collapsed. No additional CSFs were identified in this second round of coding.

RESULTS

We discovered five critical success factors for the development and sharing of best practices in COPs of the educational institute as below:

Powerful Willingness and Motivation to Share Knowledge

Present results show that the members' shared interest, desire and motivation to share Knowledge and best practices is the most crucial determinant factor of COPs success. Willingness to teach and motivation to learn are the preconditions of learning process and sharing knowledge. Some COP leaders highlighted that if knowledge owners have fear of being replaced or want to protect their status of being seen as an expert, they don't have enough enthusiasm to share best practices.

Sufficient Level of Interpersonal Skills

Interpersonal skills are how people interact or deal with others. They are sometimes also referred to as communication skills, people skills or soft skills.

Present data suggest that having positive interpersonal skills increases the productivity of COPs since the number of conflicts is reduced. In informal situations, like COPs, it allows communication to be easy and comfortable. Members with good interpersonal skills can generally control the feelings that emerge in difficult situations and respond appropriately, instead of being overwhelmed by emotion.

COP leaders highlighted as an illustration, it is generally understood that communicating respect for other people or professionals within the COPs will enable one to increase participation or assistance in obtaining knowledge and best practices.

Enough Non Financial Incentives

Employees cannot be possibly forced to share individual knowledge with others; therefore, incentives should be tactically utilized to gain the trust of knowledge owners and produce a much more incentivized, motivated and committed COP members. Present results demonstrate that non financial incentives which provided the satisfaction were identified as: a sense of achievement, recognition, being

given responsibility, advancement and promotion, awareness of prospects for further growth and interesting work.

Adequate Face- to-Face Interactions

Evidence also suggests that high level of one-to-one interaction between members, especially face-to-face, is a critical success factor of COPs. Some COP leaders mentioned that because of the nature of educational activities in the institute, which are often part-time, they have serious issues in finding a suitable time of all members to set COP meetings. This results shows, that COPs in which members are collocated (geographically concentrated) and have more joint working hours are able to build rich personal communication channels that is the base of discussing practice related issues.

Capable COP Coordinator or Leader

Present findings indicate that a capable COP coordinator or leader has an important effect on success of a COP. Results also suggest that capable COP coordinators or leaders act as drivers and control agents for monitoring whether or not the COP effectively develops and shares best practices over a specific period of time. Present data reveal that in successful COPs where the leader or coordinator is able to activate the connections between members, it is more likely that the knowledge flows' density will increase.

DISCUSSION

As the knowledge economy continues to increase in importance, research on communities of practice offers the potential to contribute significantly to our understanding of knowledge-based work.

COPs have been identified as playing a critical role in the promotion of learning and innovation in the organizations and they can be a very powerful tool to generate sustainable advantages. The purpose of knowledge diffusion activities in COPs is primarily to transfer the knowledge that is preserved by members to the one who lacks.

This study was examined critical success factors of communities of practice in an Asian leading educational institute. It can be inferred from the analysis that the institute has managed to recognize the role played by knowledge and best practices. The institute has incorporated knowledge management into its work philosophy, paying special attention to the relevance that the creation and transfer of this valuable resource has for its survival within education sector and for its consolidation as increasingly competitive organizations.

As a result of the research effort, five critical factors, all of which yield success in the development and sharing of best practices in COPs of the educational institute were discovered. The factors considered include the powerful willingness and motivation to share knowledge, the sufficient level of interpersonal skills, enough non financial incentives, adequate face-to-face interactions and capable COP coordinators or leaders.

Three of the success factors discussed as being important for COPs of the investigated educational institute included: enough non financial incentives, the sufficient level of interpersonal skills and capable COP coordinator or leader are not similar to those mentioned in the literature before and we can suppose them as specific CSFs of COPs in educational environments. On the other hand, it seems that the powerful willingness and motivation to share knowledge and adequate face-to-face interactions are analogous to what various researchers like Probst and Borzillo (2008), Zhang and Watts (2008), Huang *et al.* (2007) and Kimble and Hildreth Dualities (2005) have stressed as crucial for COPs and we can suppose them as general CSFs of COPs.

Now that our objective has been met, the main limitations of this study must be highlighted, after which some future research lines will be suggested.

As a single-site case study, which was investigated only communities of practice within one educational institute; the study does not permit the extrapolation of results to a larger population. There is, however, the other limitation to our perception analysis, since it could be argued that the respondents are biased by their COP members perception. This may have led them to be over optimistic about their COP's degree of activity. Consequently, their assessment of success may contain some degree of subjectivity.

It will remain for future research to refine and expand the proposed CSFs of COPs in educational environments.

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