

Communities of Practice and their role in the process of knowledge

exchange: the Bulgarian case

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Abstract

Many contemporary knowledge-oriented organizations focus on the informal relationships among their members, appreciate their importance, support and stimulate them. Thereby a generally shared view is established which maintains that building and supporting informal knowledge networks are the most important mechanisms for knowledge improvement in the organization. The present research paper elucidates the results of research efforts, devoted to Communities of Practice (CoPs) and their contribution to the competitiveness of international companies. The paper presents arguments which give grounds to be assumed that CoPs are factor which facilitates the knowledge sharing process in international business area. On the basis of the interim results of an ongoing research programme being conducted among Bulgarian companies involved in international business, the authors outline the practical solutions for effective and efficient knowledge management in these companies by means of supporting and developing CoPs.

Key words: Communities of Practice, CoPs, Knowledge management, International business, International companies, International management, Knowledge sharing, Knowledge creation, Knowledge acquisition.

1. Introduction

Many contemporary knowledge-oriented organizations focus on the informal relationships among their members, appreciate their importance, support and stimulate them. Thereby a generally shared view is established which maintains that building and supporting informal knowledge networks are the most important mechanisms for knowledge improvement in the organization, contributing to the accumulation of a new and specific knowledge. The research paper presents the Communities of Practice (CoPs) as a fundamental component of the contemporary practice of knowledge management in companies participating in international business, and discusses CoPs' contribution to the competitiveness of international companies. The authors argue that CoPs are factor which facilitates the knowledge sharing process in international business area. In order to outline the practical solutions for effective and efficient knowledge management in Bulgarian companies involved in international business by means of supporting and developing CoPs, an ongoing survey has been initiated. The survey aims to fill the existing gap in knowledge management literature with regard to the management of knowledge in small and medium enterprises actively participating in international business, and in the Bulgarian business practice in particular. The present research paper is structured in two main parts: theoretical and empirical. The theoretical part addresses the fundamental literature, related to the nature of CoPs and their role as facilitators for knowledge sharing in the international business domain. The empirical part introduces the results of the survey conducted among Bulgarian companies, and formulates conclusions based on these results. With this paper the research team makes an attempt, for the first time in the knowledge management literature, both Bulgarian and international, to shed some light on the potential for application, within the realities of the Bulgarian business practice, of an universally acknowledged instrument for knowledge management, represented by the CoPs

2. Concept of CoPs

The concept of a Community of Practice (CoP) is first introduced by Lave and Wenger in 1991. These authors originally describe a CoP as "a set of relations among persons, activity and world, over time and in relation with other tangential and overlapping CoPs" (Lave & Wenger, 1991). Central to their notion of a CoP as a means of acquiring knowledge is the process called Legitimate Peripheral Participation (LPP), by which a newcomer moves from peripheral to full participation in the community as he/she learns from others. Thus, they view the apprenticeship as a form of socialisation into a community, where the newcomer gradually becomes a legitimate member of the CoP by learning the practice, the language, and the conventions of the community by having access to and interacting with established members. The key point in this concept is the emphasis on the social element. The authors view the acquisition of knowledge as a social process where people can participate in common learning at different levels depending on their level of authority or seniority in the group, i.e. whether they are newcomers or have been members for a long time. The learning a newcomer undertakes is situated in and cannot be separated from the practice of the community. In explaining this, Lave and Wenger emphasise the importance of the context of the community for learning and knowledge, which is situated in the culture of the community.

Lave and Wenger (1991) mention that CoPs are not restricted to the apprenticeship model, and other researchers have attempted to extend the concept in order to apply it in a knowledge management setting, considering them as a new organizational form in commercial organizations. For example, Lesser & Storck (2001) define CoPs as a group, based on a common interest, whose members are constantly occupied with knowledge exchange and learning. This definition does not limit CoPs to professional environment, nor yet to the limits of a single organization. On the other hand, Nickols (2003) offers a narrower definition, connecting CoPs with the organizational context: the CoP is a group of people in the organization, who get together in order to exchange their knowledge through mutual training in the specific aspects of their professional activity, and through

social interaction during training activities. The author defines two types of CoPs: self-organized and organized from the outside. Manville & Foote (1996) put their version for CoPs in a strong organizational context and emphasize their informality. The CoP is not based on an obligation, because the membership is completely voluntary. The basic objective of CoPs is to resolve common problems, which leads to creation of common knowledge in the group.

In spite of the variety of definitions and understandings, there are several distinguished features of the CoPs, which are common to all definitions:

- The CoP is an informal group of people, i.e. a group, which is not connected with official or organizational obligations and responsibilities;
- There is a mutual theme or common area of interest, knowledge and practice, i.e. the members of CoPs have a shared set of interests and are motivated to do something about them. It is important to emphasize that a CoP cannot be created without the internal motivation and the relationships that the members develop. Therefore the social aspect of the CoPs is of particular importance for their creation and evolution;
- The goal of CoPs is to exchange, acquire and improve knowledge and expertise, and to create new knowledge;
- CoPs are self-generating, the membership is self-selecting and CoPs are not necessarily co-located.

On the basis of the definitions and features mentioned above, the research team adopts and uses the following definition of the concept of CoPs:

The Community of Practice is a group of people, informally committed to mutual problems, who have common experience and wish to communicate in order to exchange knowledge, practical experience, ideas and best practices, and to improve their own knowledge base by learning from

their colleagues. The strong willingness, the commitment and the identification with the experience of the group are among the main factors which unite and support the integrity of the community.

3. The role of the communication process for knowledge sharing within CoPs

The type of the CoP and the technologies for communication used by its members, predetermine the volume of knowledge and expertise exchanged in the community. Often CoPs operate on the base of the so-called “questions-and-answers” model: when a member of the community encounters a specific problem, he/she addresses a question and a description of the problem to all members of the community. The other members can formulate additional questions or make comments. As a result, a discussion begins in the community, and all members can participate and share their comments and knowledge. However, it is not necessary for such discussion to be initiated by a question or problem. A situation is possible in which a member of the CoP decides to share his/her experience or a new idea, and in that case the message is transmitted to all community members and a request is addressed to them to make comments or notes. During the process of sharing of ideas and suggestions community members get an inspiration to exchange more ideas and put them into practice. Therefore, informal and frequent communication is an efficient way of transferring this type of knowledge to the other community members. As a result, the existing knowledge is developed and a common knowledge is created in the CoP.

4. Importance of CoPs for international companies and individuals

The analysis of many publications, dedicated to CoPs and their contribution to successful knowledge management in international companies (Lave & Wenger, 1991; Brown & Duguid, 1991, 2001; Wenger, 1998, 2004; Gongla & Rizzuto, 2001; Lesser & Storck, 2001) gives an opportunity to outline the benefits of building and supporting CoPs in these companies. The

communities play an important role in effectively creating, sharing and implementing knowledge in organizations (Lesser et al., 2000). On the other hand, CoPs provide benefits for their members.

Under the conditions of a knowledge-based economy, knowledge is a valuable resource of every modern organisation, especially for international companies which are in a good position to create a sustainable competitive advantage. For example, Nonaka (1991) describes knowledge as the "one sure source of competitive advantage". As a strategic asset, knowledge has to be managed like any critical organizational asset. There is a type of knowledge, called explicit (Polanyi, 1966), which can be easily captured in manuals, books, documents, reports, instructions, databases, etc., and then be shared in this codified form. However, there is another type of knowledge, called tacit (Polanyi, 1966), which is more subtle, less structured, and not so easily codified and stored for sharing. Examples of such knowledge include skills, expertise, and human intuition. This type of knowledge cannot be directly managed. Thus, the concept of CoPs, as facilitators of tacit knowledge sharing among individuals in the international organization, emerges. By sharing ideas and interests, and by mentoring each other, members of CoPs share their tacit knowledge and improve the way the organisation does business. That is why, as the APQC says, CoPs are becoming the core knowledge strategy for international organizations, and particularly the global ones. CoPs could result in the following benefits to international companies and their knowledge strategies (Wenger et al., 2002):

- Create new business opportunities by developing internal expertise and relationships with an organization's customer base, resulting in the conversion of insights into new products. Each CoP can be a focus of learning and competence for the organisation;
- Reconstitute expertise that can become lost in a dynamic organization, and create a method of locating such expertise. For example, when a knowledge worker leaves the organisation, his/her skills and expertise are lost for the organization. But if this worker is a member of a CoP, it is most likely that he/she has already shared his/her tacit knowledge with other members, so the knowledge is not lost. Besides this, CoPs

exist separately from organizations, so the worker may continue his/her membership in the community, regardless of his/her resignation;

- Enable companies to compete on talent, and to evolve into home for experts that encourages the development of professional skills and expertise by employees;
- Capitalize on the participation in multi-organizational CoPs – by extending the firm's knowledge resources beyond its traditional boundaries. A recent trend in the knowledge management field is to look for new sources of knowledge beyond the external boundaries of the firm. As communities encompass individuals and knowledge assets located outside the organization (e.g., its partners, suppliers, and customers), the organization will receive further knowledge benefits from CoPs. The process of knowledge sharing among the members of such extended communities will infuse new knowledge into the community and will expand the knowledge creation capabilities of organizations.

CoPs provide benefits for their individual members too. When people choose to participate in a community, they typically do so because they feel they may have something to gain, learn or benefit from their participation. Most people join CoPs to look for some piece of explicit or tacit knowledge: a document, a template, an idea or a solution. By communicating frequently, the community members develop a common language and improve the collective knowledge base, creating new knowledge. Therefore, the personal knowledge of the members is increased, and new competences are gained which are beneficial for improved performance (McDermott, 2002). Due to advanced competences, community members are regarded as experts in a specific field which in its turn leads to a higher reputation within the organization. This has a positive impact on their professional development and, as a consequence, on their work satisfaction (Schoen, 2001). Hence, individuals as members of the community directly benefit from their participation in the CoP.

5. Interactions between CoPs and international companies

An essential issue related to CoPs regards international companies' capabilities for benefiting from communities in order to improve organizational knowledge management. To be able to develop the capacity to create, use and retain knowledge, organizations must initially understand the processes by which CoPs evolve and interact. Most CoPs exist whether or not the organization recognizes them. However, this fact doesn't mean that the organization has to abandon its intentions to influence on CoPs' development. Contrariwise, a good number of communities will benefit from some attention, and some of them might need to be carefully seeded and nurtured, as long as this attention does not smother their self-organizing drive. Therefore, in order to benefit from CoPs, international companies have to identify and recognize their existence and working, and to sustain them by providing technical and organizational support. The technical support finds expression in developing technical and software means for interaction and communication between community members. The organizational support finds expression in providing the CoP organizational and methodological support. Every social group has leaders and active members who tie the group. Whether CoPs arise spontaneously or come together through seeding and nurturing by the company, their development ultimately depends on internal leadership. Certainly, in order to legitimize the community as a place for sharing and creating knowledge, recognized experts need to be involved in some way, even if they don't do much of the work (Wenger, 1998). Therefore, the task of the management staff of international companies is to find such experts and support them. The decision-makers have to devote part of personnel's working time to community tasks. Besides this, other management instruments can foster CoPs, including management interest, reward systems, work processes, corporate culture, and company policies (Wenger, 1998). Hence, management must create and keep a "friendly" environment in which the outputs of communities' functioning are acknowledged and stimulated.

It is important to mention that the organization does not have to manage CoP's activity and membership. Conforming to Gongla and Rizzuto's study of CoPs in international companies as

represented by IBM (Gongla & Rizzuto, 2004), the CoP can become a formal organizational unit in case the organization spotlights it and tries to manage too much of what it is and what it does. This might result in the loss of many of the supposed advantages of a CoP, especially the desire and motivation of the members to share their tacit knowledge. CoPs are of value to international companies precisely just because they are self-managing and self-directed. These are precisely the characteristics which have to be preserve in order to ensure CoPs' adequate functioning.

6. The Bulgarian case: survey and analysis

After Bulgaria's accession to the European Union, the involvement of the Bulgarian companies in the European market is growing. However, to be successful, Bulgarian companies should create sustainable competitive advantages. The research team sticks to the view that one source of competitive advantages could be the effective and efficient knowledge management, and as it has already been stated, CoPs are a reasonable instrument for this purpose.

In order to reveal the role of CoPs in the Bulgarian companies, actively participating in international business, an ongoing research programme has been initiated. The objective of the research is to assess the extent to which CoPs can be used as an effective instrument for knowledge acquisition and sharing in the above mentioned companies. The survey comprises 100 Bulgarian companies from various economic sectors. The first stage of the research was conducted in 2009 by means of an email survey. In the forthcoming stages of the research the team intends to conduct interviews with managers and employees, and to carry out observations in pre-selected companies.

The email survey aims to reveal the spread and the application of the concept of CoPs among Bulgarian companies with active participation in the international business area. The primary data from the email survey are interpreted below.

The first group of questions in the survey refers to the sources of professional information and knowledge for the members of CoPs. All of the respondents use professional literature such as books, magazines and other paper and electronic publications, as a source of information about new

developments in their business field. Over 85 per cent of respondents receive the knowledge needed via personal face-to-face meeting with colleagues and professionals. The respondents take part in social networks, visit specialized web-sites, make contacts with clients and suppliers, and keep an eye on competitor's activities. Fifty per cent of the respondents take advantage of conferences, symposia and other collective business meetings as a source of professional knowledge. Specialized learning activities within the organization or university are not popular and are not used as a source of knowledge. A trend is exhibited to knowledge interchange in international context. Many of the sources of specific professional knowledge for Bulgarian specialists reside across the borders of our country.

The data collected confirms that it is inevitable to use many and different sources of knowledge. Conforming to the theory, different and specific mechanisms and sources for acquiring both explicit and tacit knowledge exist. The results from the survey present that a balance exists between the utilization of sources of explicit knowledge (books and other paper and electronic sources) and tacit knowledge (personal contacts and informal communications). In spite of this, some sources of knowledge are not used actively. For example, collective ways of acquiring knowledge, as specialized professional meetings (conferences, etc.), and training programs organized by universities, are not a common source of professional knowledge. Individual ways of acquiring knowledge predominate.

There is a balance between national and international sources of knowledge, but this depends on the nature of the knowledge. For example, international sources are preferred when searching for new and specific knowledge in the relevant professional area, and national sources are preferred when searching for non-specific and wide-spread knowledge.

One issue that has been relatively neglected by the CoPs' literature is the dynamics of knowledge sharing between communities (Hislop, 2004). However, knowledge sharing between CoPs, while difficult and complex, is by no means impossible. The results from the study suggest that a tendency toward an inter-disciplinary exchange of knowledge is emerging. As many as 50 per

cent of the respondents share their professional experience, ideas and knowledge with colleagues, whose professional activity and interests are different. Nevertheless, the constraints of our empirical research deter us from interpreting these results as definitive of the unfolding of a clear trend of inter-community knowledge exchange. This, in its turn, implies the probability for appearance of difficulties in the process of interdisciplinary knowledge exchange.

Hislop (2004) mentions that the lack of consensual knowledge and diverging senses of identity that exist between communities represent two of the most important reasons why such processes are complex and difficult. He suggests that the achievement of effective inter-community knowledge sharing will require the communities involved to develop some level of trust and understanding of each other's knowledge base and assumptions. In order to avoid the potential danger of having exclusionary, inward-looking communities that are unwilling or unable to share their knowledge, organizations' management can play a role in putting in place mechanisms to encourage communication and interaction across different organizational communities. Hislop (2004) concludes that it is important for organizations to facilitate inter-community relations as much as intra-community relations. Hislop sees organizational management staff as a facilitator for the creation of conditions for both types of relations. A way of doing this is creating social forums, which bring staff from different communities together in a social context, and allow them to improve their understanding of each other's perspectives. Besides this, inter-community relations limit their potential to become insular, excessively exclusionary and unwilling to share knowledge outside of the community.

The respondents definitely recognize the benefits from participating in CoPs. They consider that professional contacts and communications with colleagues from the same professional field can help improve their own knowledge. They point out that CoPs can be particularly useful in helping them become aware of the knowledge and skills of other members who perform the same or similar tasks within an organization. The respondents also mention that communities can be particularly useful for individuals who are new to the organization, because they connect newer employees with

experienced subject matter experts. These results confirm the thesis of Lesser & Storck (2001) that “for the knowledge seeker, communities can be seen as a way of making personal connections with more experienced people in the organization”.

The next group of questions is related to the exchange of knowledge between community members in order to resolve a particular problem. The respondents categorically point out that they will refer to the other members for help if the problem is complicated, and also for verification of the rightness of their decisions. In large organizations, a common problem arises when a person is trying to find the expert with the right knowledge. CoPs can be very useful in helping individuals find the knowledge needed. Members of CoPs know each other and thus they help address questions to the people who are able to answer them. The role of the organizations is to provide CoPs with the resources (information and communication technologies), that enable community members to find and connect with the other members, and to encourage both physical and virtual communication and collaboration by building and supporting a knowledge-friendly organizational culture.

The next group of questions pertains to the relation ‘CoPs – organization’, and indirectly, to the organizational capabilities for taking advantage of the positive effects, resulting from CoPs functioning. Respondents’ replies definitely indicate the prevalence of proactive sharing of professional knowledge and experience within the organizations, they represent (Table 1). Respondents are not concerned to share knowledge and to take the initiative in this, i.e. they are not passive, but they are active participants in CoPs. Some of the respondents relate this knowledge-sharing behaviour to the characteristics of the learning organization, such as open culture, team learning, boundary crossing, open communication, shared meaning and understanding, and to the values of the organizational culture – teamwork, transparency, trust, of the companies, they represent.

Table 1: The relation ‘Communities of Practice – organization’ (Respondents, per cent)

	Definitely yes	Tentatively yes	Tentatively no	Definitely no	I find it difficult to give an answer
Do the colleagues in your organization share with you their experience, ideas, knowledge?	71.43	21.43	7.14	-	-
Do you share your experience, ideas and knowledge with the colleagues in your organization?	71.43	28.57	-	-	-

Source: Authors’ survey results

Respondents unquestionably declare inner motivation for being CoPs members (Table 2). They appreciate the importance of tacit knowledge and respectively, the CoPs as a mechanism for its acquiring and sharing. Although the respondents do not clearly understand the nature of the tacit knowledge, they are well aware that it is specific knowledge, which they cannot acquire unless they participate in CoPs. The next most significant motivator for taking part in CoPs, according to the respondents, is their striving for professional and personal development, i.e. their personal motivation. This proves that respondents voluntarily participate in CoPs, and not because of obligation. None of the respondents mentions corporate stimuli (e.g. bonuses) and corporate obligations (e.g. preparing reports, wherein employees are supposed to externalize their experience and to share their ideas) as motivating their participation in CoPs. Respondents are self-motivated for what they are doing as members of CoPs. This clear indication of inner and personal motivation for participation in CoPs is definitely an encouraging conclusion for the future development of CoPs in Bulgarian companies. International practice shows that the compulsory participation in CoPs, to a considerable extent brings along negative effects for the respective community – the employees begin to boycott their participation; the quality of the incoming knowledge decreases; probability for incorrect recommendations and replies to incoming questions is increasing. All this reflects on inferior company results (production errors, customer alienation, etc), leading to direct financial loss. CoPs are united and vital because of their members’ strong desire, the feeling of

mutuality, and because of the identification with the respective group’s experience, and not because of obligations for participation.

The representatives of the top management - almost 65 per cent of all the respondents, state that by sharing knowledge with their colleagues, they contribute to the effectiveness of the company, thus confirming the role of CoPs as a means for knowledge enhancement within the company. Some of the respondents’ replies allude to the role of the manager as a leader and mentor, who, by her/his personal example promotes the establishment and development of a knowledge-sharing oriented organizational culture. Another contemporary motivator for active participation in CoPs, which the respondents highlight, is that sharing information, experience, knowledge, and ideas is an effective mechanism for boosting personal image and prestige within the organization. More sharing of achievements and ideas with colleagues leads to higher expert image within the organization. CoPs represent an environment, which is conducive to cultivating and developing expert leaders, who, under the conditions of a knowledge-based economy, are a valuable asset for each organization.

Table 2: Motivation for participation in Communities of Practice

Motivators	Respondents, per cent
Strive for professional and personal development	50
If I share my knowledge, experience and ideas with my colleagues, they will reciprocate	35.71
Acquisition of specific practice-oriented knowledge	64.29
Corporate stimuli	-
Corporate obligations	-
Others	14.29

Source: Authors’ survey results

Note: More than one answer is allowed

The next group of questions refers the relation ‘CoPs – wider organizational context’. Respondents declare positive attitude towards sharing professional experience, ideas and knowledge

with colleagues from external organizations (Table 3). This finding proves that CoPs exist beyond organizational boundaries of the researched companies, i.e. CoPs are communities which exist independently from the company. Understandably, a barrier in front of unlimited sharing of professional knowledge and experience, beyond the organizational boundaries of the company, is the existence of corporate secrets and confidential information. Although good international practice and the Bulgarian experience show that CoPs function in a wide organizational context, undisturbed by internal and external corporate boundaries, management staff should recognize the existence of CoPs and should support them. The organization could seek continuous interaction with the respective communities, in order to keep in touch with their activities and development. Management staff should effectively utilize the advantages of the CoPs, including the use of the informal connections within CoPs as a model for rationalizing particular formal relations within the organization. At the same time the organization should restrain itself from interfering with the workings of the CoPs. Namely, the organization's supporting role for CoP development is on the focus of the next group of questions of the survey.

Table 3: The relation ‘Communities of Practice – wider organizational context’ (Respondents, per cent)

	Definitely yes	Tentatively yes	Tentatively no	Definitely no	I find it difficult to give an answer
Do your colleagues from external organizations share with you their experience, ideas, knowledge?	7.14	71.43	21.43	-	-
Do you share your experience, ideas and knowledge with your colleagues from external organizations?	42.86	35.71	21.43	-	-

Source: Authors' survey results

When communicating with colleagues, the respondents mainly use means of communication such as e-mails, individual face-to-face meetings, telephone conversations, and to a lesser degree – group face-to-face meetings, videoconferencing, discussion forums, blogs, and chat rooms (Table 4). It could be inferred that the respondents are inclined to communicate not with all but with

particular members of the CoPs, they participate in. Respondents predominantly communicate one to one but not one to all, what should be the communication model within CoPs. This way the collective nature of the community is lost.

Table 4: Frequency of use of different communication means in Communities of Practice (Respondents, per cent)

Communication means	Frequency of use in CoPs		
	Frequently	Seldom	Never
Telephone conversations	71.43	28.57	-
Snail mail	-	21.43	71.43
E-mail	100	-	-
Fax messages	-	50	50
Individual face-to-face meetings	92.86	7.14	-
Group face-to-face meetings	50	42.86	-
Videoconferencing	7.14	35.71	57.14
Discussion forums, blogs, chat rooms	21.43	7.14	57.14
Swift exchange of messages via software applications such as Skype, ICQ, etc.	28.57	14.29	50
Others	7.14	-	-

Source: Authors' survey results

Note: More than one answer is allowed

The development of CoPs is a function of the degree of access and application on behalf of the employees of the organization, of appropriate communication and telecommunication technologies. The survey shows that the majority of managers have already realized the need of CoPs existence and functioning, and make efforts to provide technical support such as hardware and software technologies which to facilitate the communication and interaction among the members of CoPs. Moreover, the respondents recognize management support for CoPs functioning in the face of the preponderance of organizational culture and work environment, which favour the flow of communication and exchange of experience, ideas, knowledge among the employees. Team

building exercises are also included here, although as many as 14 per cent of the respondents do not always fully understand the main function of these activities for uniting the team and forging mutually beneficial and mutually appreciated relationships among team members; some of the respondents perceive these activities only as having fun together with colleagues out of the working environment.

Analysis of the replies of this group of questions of the survey also outlines the conclusion that to a considerable extent the end of the working relationships, of the respondents with the company, marks the end of the relationships within the CoPs, as well. This indicates that Bulgarian communities are not completely authentic yet – internal organizational relationships prevail over personal and professional relationships within CoPs. The change in the status of CoPs members impairs the sustainability of CoPs. All these lead to the conclusion that the Bulgarian practice is still in the early stages of application of the CoP concept, when these communities are still unsustainable.

7. Conclusion and avenues for further research

With this paper the research team makes an attempt, for the first time in Bulgarian and international knowledge management literature, to reveal the potential for application of CoPs within the knowledge management practice of Bulgarian companies participating in international business. The primary results from the ongoing survey conducted among these companies, lead to the conclusion that CoPs are still a novelty both as a concept and as a practical instrument for knowledge management in the companies in question. If CoPs intertwine more convincingly with the Bulgarian business practice, they could add to the effectiveness and efficiency of the utilization of knowledge resources. This represents one part of the solution of the problem of the resource insufficiency, which invariably confronts every international company. Undoubtedly, an array of difficulties and limitations to the application of the concept of CoPs in Bulgarian companies, actively participating in international business, should be recognized and overcome by them.

Future research on the CoPs within the Bulgarian business realities should use more empirical evidence of the practice of the Bulgarian companies, and a more diversified research methodology as well. The question regarding the universal application of the concept of CoPs in various economic sectors should also be addressed. Future research should also pay attention to the probability for distortions and limitations of the positive effects which are traditionally attributed to CoPs.

References

1. Brown, J. S. & Duguid, P., *Knowledge and organization: A social-practice perspective*, *Organization Science*, 12 (2), 2001, pp. 198-213.
2. Brown, J. S., & Duguid, P., *Organizational Learning and Communities of Practice: Toward a Unified View of Working, Learning, and Innovation*, *Organization Science*, Vol. 2, No. 1, 1991, pp. 40-57.
3. Gongla, G., & Rizzuto, C. R., *Evolving communities of practice: IBM global services experience*, *IBM Systems Journal*, Vol. 40, No. 4, 2001, pp. 842-862.
4. Hislop, D. (2004), *The Paradox of Communities of Practice: Knowledge Sharing Between Communities*, in: Hildreth, P., Kimble, Ch., *Knowledge Networks: Innovation through Communities of Practice*, Idea Group Publishing, 2004, pp. 36-46.
5. Lave, J., Wenger, E., *Situated learning. Legitimate peripheral participation*, Cambridge University Press, Cambridge, 1991.
6. Lesser, E. L., Storck, J., *Communities of practice and organizational performance*, *IBM Systems Journal*, 40 (4), 2001, pp. 831-841.
7. Manville, B., Foote, N., *Harvest Your Workers' Knowledge*, *Datamation*, 42 (13), July 1996, pp. 78-83.

8. McDermott, R. (2002), *Measuring the impact of communities*, Knowledge Management Review, 5(2), 26-29.
9. Nickols, F., *Communities of practice: An overview*, 2003,
<http://home.att.net/~discon/KM/CoPs.htm>, accessed on December 12th, 2008.
10. Nonaka, I. (1991), *The Knowledge Creating Company*, Harvard Business Review, Vol. 69, Nov-Dec, 1991, pp. 96-104.
11. Polanyi, M. (1966), *The Tacit Dimension*, First published Doubleday & Co, 1966.
12. Schoen, S. (2001), *Gestaltung und unterstützung von communities of practice*, Herbert Utz Verlag, München, 2001.
13. Wenger, E., *Communities of Practice: Learning, Meaning, Identity*, Cambridge Univ. Press, Cambridge, 1998.
14. Wenger, E., *Knowledge management as a doughnut: Shaping your knowledge strategy through communities of practice*, Ivey Business Journal (January/February), 2004.
15. Wenger, E., McDermott, R., & Snyder, W.M. (2002), *Cultivating communities of practice*, Harvard Business School Press, Boston, 2002.