Identifying Challenges for Facilitation in Communities of Practice

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Abstract

The role of a facilitator is key to the effective establishment and maintenance of communities of practice (COPs). This paper presents challenges faced by facilitators in COPs based on a taxonomy of facilitation tasks inspired by facilitation research in the area of Group Support Systems (GSS). An online survey of the experiences of COP facilitators was conducted to discover which tasks were the most difficult and the most important for COP facilitation. The results show that tasks related to participation are considered by the majority of facilitators to be difficult as well as important. This and other findings can help facilitators in preparing for their role in COPs.

1. Introduction

Communities of practice (COPs) have become an important part of many organizations and are recognized as valuable organizational assets [19]. COPs have been identified as playing a critical role in the promotion of learning and innovation in contemporary organizations [26]. However, establishing and sustaining communities of practice in organizations is not an easy task. COPs face a variety of challenges and difficulties throughout their life-cycle [27]. One of the techniques that can help to sustain a COP is the introduction of a facilitator, since a facilitator can play a crucial role in addressing the challenges of establishing and nurturing a COP ([10]; [16]).

The facilitator role in communities of practice, however, is still under-researched, while facilitation in other fields, especially group support system (GSS), has been extensively studied and documented. Based on the GSS literature, Tarmizi and de Vreede [27] proposed a facilitation task taxonomy for COPs that also highlights differences between facilitation in a COP environment and in GSS-supported meetings. The taxonomy is based on the existing literature and thus provides an essential starting point for further validation. Validation and evolution of the taxonomy can be done through empirical studies among facilitators and COP members. The current study builds on the prior conceptual work and has the purpose of enriching the COP facilitation taxonomy by collecting data from actual facilitators. In particular, we examine the challenges facilitators perceive in fulfilling their COP facilitation duties. While knowing what tasks a facilitator has in a COP surely would help a facilitator to prepare, knowing which tasks are the most challenging would improve that preparation. Furthermore, knowing which tasks are more important than others would also help the facilitator to allocate limited attention in a more efficient way.

It should be noted that we are neither proposing nor testing a specific theory related to facilitation in the current study. Rather, we believe the goal of identifying challenges perceived by facilitators in a COP environment is an important first step in a theory building process for COP facilitation. Thus, the research reported here is part of an ongoing effort that contributes to ultimate theory building based on both existing literature and the experiences of facilitators in a variety of situations.

For purposes of the current study, we seek to identify facilitation challenges by addressing the following research questions:

- What are the most difficult tasks in COP facilitation?
- What are the most important tasks in COP facilitation?

In addition to identifying the most important and difficult tasks, we also look at whether there are significant differences in the perceptions of less-

experienced facilitators and more-experienced facilitators.

The answers to these research questions have practical as well as theoretical implications. Practical implications of an understanding of the most difficult and important facilitation tasks include the following: (i) organizations could help facilitators in more systematic ways; (ii) COP facilitators could allocate their limited attention in a more efficient way; and (iii) COP practitioners and researchers could develop more purposeful training programs for facilitators as well as more appropriate tools for supporting the most difficult and important tasks. Theoretical implications include: (i) deeper insight into facilitation functions in COPs; (ii) greater understanding of the differences between COP facilitation and GSS facilitation; and (iii) a foundation for assessing and developing task-technology fit for COP facilitation.

The remainder of this paper is structured as follows. Section 2 provides background information on COPs, including a review of facilitation tasks in COP environments and highlights of differences between COP facilitation and GSS facilitation. Section 3 provides details of the data collection. Section 4 presents the findings, and Section 5 concludes the paper with a discussion of the implications of our findings and steps for future research.

2. Background

2.1. Communities of Practice

Wenger et al. [29] define a COP as a group of people informally bound together by shared expertise and/or passion for a joint enterprise. A defining feature of COPs is that they emerge more or less spontaneously from informal networking among groups of individuals who share similar interests or passions [18]. In recent years, however, COPs have been increasingly initiated top-down by a sponsor in senior management, instead of emerging spontaneously from the bottom up [10].

COPs can serve as a forum for several purposes within organizations, including sharing ideas, solving problems, disseminating best practices, and

organizing knowledge [29]. Robey et al. [25] also suggest a role for COPs in overcoming knowledge barriers at the time of an IT adoption process in an organization.

Various challenges have been identified in establishing and sustaining COPs within organizations. These challenges include, but are not limited to, the following:

- making a case for COPs [21]
- finding common interesting topics for members [8]
- securing trust of shared information [28]
- lowering barriers among members to get involved in knowledge-sharing activities [2]
- recruiting the right members, e.g., knowledgeable members who have enough time for social interaction [23]
- sustaining members' participation, since " … participation is central to the evolution of the community and to the creation of relationships that help develop the sense of trust and identity that defines the community" [14]

Overcoming these challenges could be the key for COPs to survive and to serve organizations in a better way. Facilitators can help to address some of these challenges and thus help the community and its members to navigate through existing obstacles [10].

2.2. Facilitation in Communities of Practice

The facilitator role has been studied extensively in the GSS field, e.g., see [3], [7], [13], [22], while only a few studies in the COP domain have addressed this issue, e.g., [16], [10]. Therefore, the GSS field provides a good starting point for identifying facilitation tasks in COPs. One particular study that for developing a COP facilitation taxonomy is Clawson and Bostrom [4], which established sixteen critical facilitation tasks of GSS facilitator roles based on interviews of 50 experienced GSS facilitators (Table 1). The critical incident methodology was used to collect the data, since it allowed isolating context-specific behavioral dimensions of a role or job [4].

1. Plan and design the meeting
2. Demonstrate flexibility
3. Create and reinforce an open, positive and participative environment
4. Direct and manage the meeting
5. Promote ownership and encourage group responsibility
6. Demonstrate self-awareness and self-expression
7. Encourage/support multiple perspectives
8. Create comfort with and promote understanding of the technology and technology outputs
9. Listen to, clarify and integrate information
10. Keep group outcome focused
11. Select and prepare appropriate technology
12. Develop and ask the right questions
13. Actively build rapport and relationships
14. Manage conflict and negative emotions constructively
15. Understand technology and its capabilities
16. Present information to group

Table 1. Facilitator functions in GSS [4]

However, since COPs and GSSs are different in many ways, including their purpose and setting, knowledge of processes within COPs is required to develop a COP facilitation taxonomy. An extensive case study of communities within IBM identified several processes in each of a COP's development stages [12]. Mapping the tasks from Bostrom and Clawson [4] to COP processes [12] reveals that some COP facilitation responsibilities are not covered at all, especially when the COP processes are related to interaction with a COP's external environment, such as other communities or management of the organization where the COP is embedded. Therefore, additional tasks for COP facilitators needed to be identified based on unique processes within COPs.

Figure 1 shows the COP facilitation task taxonomy developed in [27], based on the mapping of tasks with processes and the identification of the additional tasks needed. The taxonomy consists of 33 COP facilitation tasks, fourteen of which are from [4]. We group these tasks into categories as follows. First, they can be divided over two broad categories: internal and external. "Internal" refers to tasks that are directed toward the internal functioning of the COP, i.e., toward the processes inside the community. "External" refers to tasks that are related to the functioning of the COP as a whole in its broader organizational environment.

The "internal" category can be further grouped into three overall facilitator roles:
- Information source, including all tasks that are related to providing information to the COP's members
- Inspirator, including all tasks that focus on encouraging members to be active in the community
- Guide, including all tasks that concern assisting and advising the COP and its members

The "external" category can also be grouped into three overall facilitator roles:
- Information source, including all tasks that are related to providing information about the COP to the outside world
- Public relations manager, including all tasks that focus on representing the interests of the COP and its members to the outside world
- Investigator, including all tasks that concern searching for and/or collecting useful information for the COP and its members
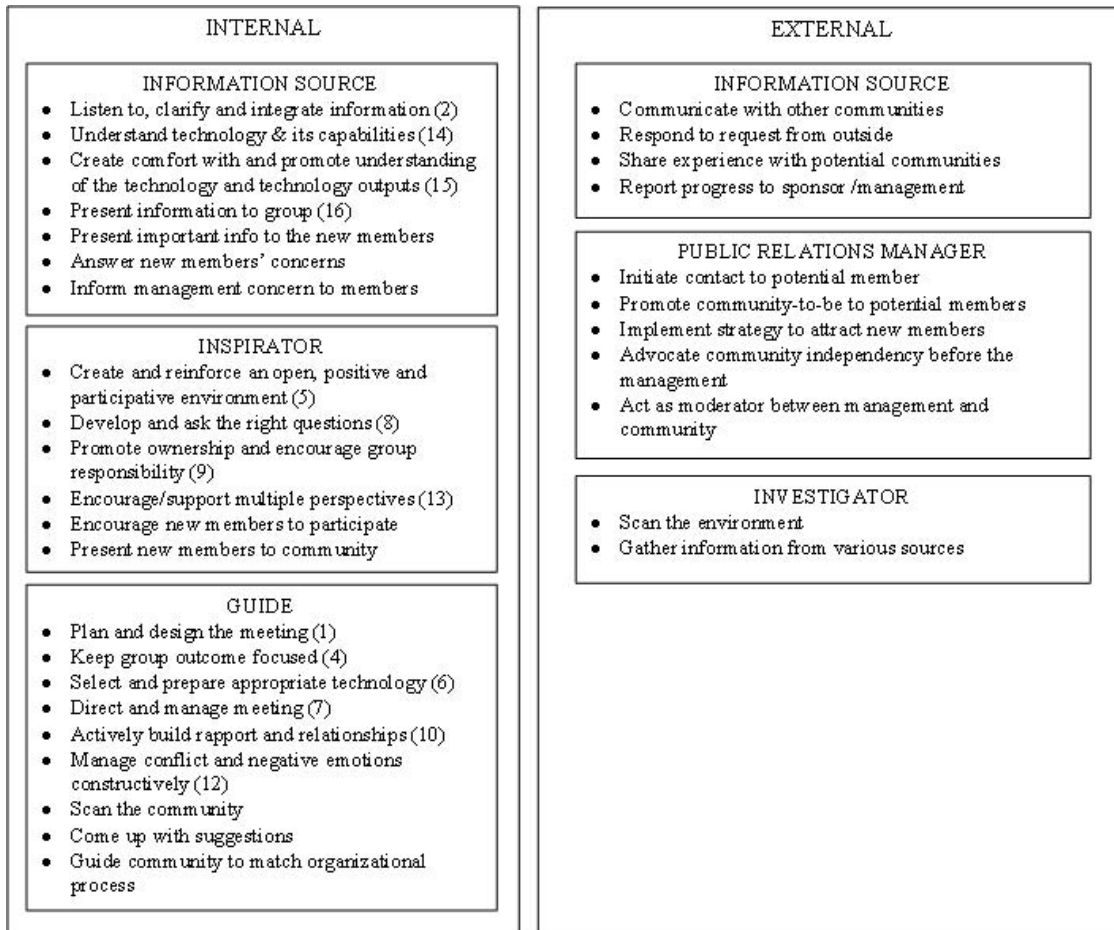
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┌─────────────────────────────────┐   ┌─────────────────────────────────┐
│           INTERNAL              │   │           EXTERNAL              │
│  ┌───────────────────────────┐  │   │  ┌───────────────────────────┐  │
│  │    INFORMATION SOURCE     │  │   │  │    INFORMATION SOURCE     │  │
│  │ • Listen to, clarify and  │  │   │  │ • Communicate with other  │  │
│  │   integrate information(2)│  │   │  │   communities             │  │
│  │ • Understand technology & │  │   │  │ • Respond to request from │  │
│  │   its capabilities(14)    │  │   │  │   outside                 │  │
│  │ • Create comfort with and │  │   │  │ • Share experience with   │  │
│  │   promote understanding   │  │   │  │   potential communities   │  │
│  │   of the technology and   │  │   │  │ • Report progress to      │  │
│  │   technology outputs(15)  │  │   │  │   sponsor/management      │  │
│  │ • Present information to  │  │   │  └───────────────────────────┘  │
│  │   group(16)               │  │   │  ┌───────────────────────────┐  │
│  │ • Present important info  │  │   │  │  PUBLIC RELATIONS MANAGER │  │
│  │   to the new members      │  │   │  │ • Initiate contact to     │  │
│  │ • Answer new members'     │  │   │  │   potential member        │  │
│  │   concerns                │  │   │  │ • Promote community-to-be │  │
│  │ • Inform management       │  │   │  │   to potential members    │  │
│  │   concern to members      │  │   │  │ • Implement strategy to   │  │
│  └───────────────────────────┘  │   │  │   attract new members     │  │
│  ┌───────────────────────────┐  │   │  │ • Advocate community      │  │
│  │        INSPIRATOR         │  │   │  │   independency before the │  │
│  │ • Create and reinforce an │  │   │  │   management              │  │
│  │   open, positive and      │  │   │  │ • Act as moderator        │  │
│  │   participative           │  │   │  │   between management and  │  │
│  │   environment(5)          │  │   │  │   community               │  │
│  │ • Develop and ask the     │  │   │  └───────────────────────────┘  │
│  │   right questions(8)      │  │   │  ┌───────────────────────────┐  │
│  │ • Promote ownership and   │  │   │  │       INVESTIGATOR        │  │
│  │   encourage group         │  │   │  │ • Scan the environment    │  │
│  │   responsibility(9)       │  │   │  │ • Gather information from │  │
│  │ • Encourage/support       │  │   │  │   various sources         │  │
│  │   multiple perspectives(13)│ │   │  └───────────────────────────┘  │
│  │ • Encourage new members   │  │   │                                 │
│  │   to participate          │  │   │                                 │
│  │ • Present new members to  │  │   │                                 │
│  │   community               │  │   │                                 │
│  └───────────────────────────┘  │   │                                 │
│  ┌───────────────────────────┐  │   │                                 │
│  │           GUIDE           │  │   │                                 │
│  │ • Plan and design the     │  │   │                                 │
│  │   meeting(1)              │  │   │                                 │
│  │ • Keep group outcome      │  │   │                                 │
│  │   focused(4)              │  │   │                                 │
│  │ • Select and prepare      │  │   │                                 │
│  │   appropriate technology(6)│ │   │                                 │
│  │ • Direct and manage       │  │   │                                 │
│  │   meeting(7)              │  │   │                                 │
│  │ • Actively build rapport  │  │   │                                 │
│  │   and relationships(10)   │  │   │                                 │
│  │ • Manage conflict and     │  │   │                                 │
│  │   negative emotions       │  │   │                                 │
│  │   constructively(12)      │  │   │                                 │
│  │ • Scan the community      │  │   │                                 │
│  │ • Come up with suggestions│  │   │                                 │
│  │ • Guide community to      │  │   │                                 │
│  │   match organizational    │  │   │                                 │
│  │   process                 │  │   │                                 │
│  └───────────────────────────┘  │   │                                 │
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Figure 1. Taxonomy of COP facilitation tasks

The taxonomy of COP facilitation tasks shows that the COP facilitator role appears to be broader and more complex than the GSS facilitator role, although there are many similarities. An important reason for the greater depth and complexity is that the COP facilitator has more of an external representative role than a GSS facilitator, as represented in our taxonomy. In addition, a COP is a long-lasting group that consists of a large number of people [9], which further increases the facilitator's portfolio of responsibilities.

Although we could consider all of the tasks in Figure 1 as important, knowing which of them are the most difficult and/or most important ones would surely help would-be COP facilitators in their preparation. It also would help organizations in designing training for their COP facilitators. Knowing the most difficult tasks would help organizations and facilitators to work harder on them, while knowing the most important ones would help facilitators in allocating more attention to those important tasks.

3. Research Methodology

The data for this study was collected through an online survey of practicing COP facilitators. An online survey offered several advantages, including: (i) a quick distribution and response cycle [31]; (ii) low cost; and (iii) no human intervention in entering responses into a database. A Website containing the questionnaire was set up, since Web-based surveys have advantages over email surveys [1]. The questionnaire asked respondents to: (i) provide background information, such as gender, years of experience with COPs, years of experience as a COP facilitator, number of COPs facilitated; (ii) choose the ten most difficult facilitation tasks based on their experiences; and (iii) choose the ten most important facilitation tasks based on their experiences. Respondents were provided a list of the 33 facilitation tasks in our taxonomy, from which they had to choose the ten most difficult and ten most important. In order to minimize bias due to position of the tasks on the

list, the position of each task in the list was randomly generated. At the end of the questionnaire, each respondent was also given the opportunity to list additional facilitation tasks not provided in the taxonomy. Thus, the survey was built on existing literature while allowing for addition of potentially missing items.

Three online discussion groups were identified as places where facilitators and COP practitioners from various organizations exchange information or tips regarding their facilitation activities. An invitational email to participate in the survey was sent to those three discussion groups, i.e., (i) onlinefacilitation group at Yahoo!; (ii) com-prac group at Yahoo!; and (iii) a facilitators' mailing list. We followed accepted practices for enhancing response rates for Web-based surveys by sending an email inviting participation [1]. The online survey was available for two week during May of 2005. A reminder email was sent at the beginning of week two, in order to spike participation [1].

4. Data Analysis

4.1. Demographics

During the two-week period of the survey, the questionnaire was viewed by 114 visitors. From those who visited, 79 (69.3%) started taking the survey. Of those who started the survey, 45 (56.96%) actually finished it. However, one respondent had to be dropped due to unreliable data, resulting in data from a total of 44 respondents. The respondents came from 18 different countries, with the majority from the US, followed by Canada. Other countries included Columbia, Chile, UK, Netherlands, France, Denmark, Portugal, Spain, Turkey, Italy, Israel, Hong Kong, Malaysia, India, Bangladesh, and Australia. There were 19 female (43%) and 25 male (57%) respondents. Table 2 shows the demographics of the respondents' experience levels as members of COPs and as facilitators.

COP experience	Less than 2 years	20%
	At least 2 years, but less than 5years	30%
	At least 5 years, but less than 10years	32%
	At least 10 years, but less than 20 years	18%
	20 years or more	0%
Facilitation experience	Less than 2 years	30%
	At least 2 years, but less than 5years	43%
	At least 5 years, but less than 10years	16%
	10 years or more	11%

Table 2. Experience levels of respondents

4.2. Most difficult tasks

When asked to identify the ten most difficult tasks in COP facilitation, 70.5% of the respondents in this survey identified "*Encouraging new members to participate in the community's activities*" as one of the most difficult tasks. "*Promoting ownership and encouraging group responsibility*" was identified by 61.4% of the respondents as among the most difficult tasks. The majority of the respondents (56.8%) also

found that "*Creating and maintaining an open, positive, and participative environment*" was not an easy task. One of the keys of community building, i.e., "*Building cooperative relationships among members,*" was rated by 45.5% of the respondents as a difficult task. "*Mediating conflict in the community*" was considered by 45.5% of the respondents as difficult. Table 3 shows the ten most difficult tasks in COP facilitation as identified by the respondents.

Tasks	% of Respondents
Encouraging new members to participate in the community's activities	70.5%
Promoting ownership and encouraging group responsibility	61.4%
Creating and maintaining an open, positive, and participative environment	56.8%
Building cooperative relationships among members	45.5%
Mediating conflicts within the community	45.5%
Creating comfort with and promoting understanding of the tools and tool outputs	40.9%
Keeping community focus on its purpose	38.6%
Implementing a strategy for attracting new members	38.6%
Advocating community independency to management	34.1%
Encouraging multiple perspectives	31.8%

Table 3. Most difficult tasks

Of the facilitators with less than 5 years of experience, 71.9% identified *"encouraging new members to participate"* as one of the most difficult tasks, while 66.7% of more experienced facilitators (5 years or more) identified the same task as one of the most difficult ones. The same percentage of more-experienced facilitators identified two other tasks as one of the most difficult, i.e., *"Creating and maintaining an open, positive, and participative environment"* and *"Creating comfort with and promoting understanding of the tools and tool outputs,"* while less-experienced facilitators (62.5% of them) noted *"Promoting ownership and encouraging group responsibility"* as difficult tasks. Table 4 shows the data based on experience level of facilitators.

Experience in Facilitation	Tasks	% of Respondents
Less than 5 years	Encouraging new members to participate in the community's activities	71.9%
	Promoting ownership and encouraging group responsibility	62.5%
	Creating and maintaining an open, positive, and participative environment	53.1%
5 years or more	Encouraging new members to participate in the community's activities	66.7%
	Creating and maintaining an open, positive, and participative environment	62.5%
	Creating comfort with and promoting understanding of the tools and tool outputs	62.5%

Table 4. Most difficult tasks by experience level

4.3. Most important tasks

In identifying the most important tasks in COP facilitation, most respondents (55.6%) regarded *"Creating and maintaining an open, positive, and participative environment"* as one of the most important tasks. Next most important were *"Encouraging new members to participate in the community's activities"* and *"Listening, clarifying and integrating information,"* each of which was identified by 52.3% of the respondents. Half of the respondents (50%) considered *"Keeping community focus on its purpose"* as one of the most important tasks. Table 5 shows the ten most important tasks in COP facilitation as identified by the respondents.

Tasks	% of Respondents
Creating and maintaining an open, positive, and participative environment	56.8%
Encouraging new members to participate in the community's activities	52.3%
Listening, clarifying and integrating information	52.3%
Keeping community focus on its purpose	50.0%
Encouraging multiple perspectives	47.7%
Promoting ownership and encouraging group responsibility	47.7%
Developing and asking the right questions	47.7%
Mediating conflicts within the community	43.2%
Building cooperative relationships among members	40.9%
Selecting appropriate tools for the community	34.1%

Table 5. Most important tasks

Of the less-experienced facilitators, 56.3% considered *"Listening, clarifying and integrating information"* and *"Encouraging new members to participate in the community's activities"* as two of the most important tasks. The next three most important tasks were *"Developing and asking the right questions," "Creating and maintaining an open, positive, and participative environment,"* and *"Encouraging multiple perspectives,"* each of which was identified by 50% of the less-experienced facilitators. Most of the more-experienced facilitators

considered *"Building cooperative relationships among members"* as one of the important tasks (66.7%). Next were *"Keeping community focus on its purpose," "Creating and maintaining an open, positive, and participative environment," "Mediating conflicts within the community,"* and *"Managing community through guidelines and rules,"* each of which was identified by 50% of the particular respondents. Table 6 shows the most important tasks based on facilitators' experience level.

Experience in Facilitation	Tasks	% of Respondents
Less than 5 years	Listening, clarifying and integrating information	56.3%
	Encouraging new members to participate in the community's activities	56.3%
	Developing and asking the right questions; Creating and maintaining an open, positive and participative environment; and Encouraging multiple perspectives	each 50%
5 years or more	Building cooperative relationships among members	66.7%
	Keeping community focus on its purpose; Creating and maintaining an open, positive, and participative environment; Mediating conflicts within the community; and Managing community through guidelines and rules	each 50%

Table 6. Most important tasks by experience level

5. Discussion

The data shows that encouraging participation is still the most difficult task for all facilitators, regardless of their experience, while at the same time the majority of less-experienced facilitators

acknowledge the importance of this task. For any community, no social interaction would be possible without participation and therefore no social organization would emerge [11]. For a COP, the issue of participation is crucial, since the level of participation could be one of the indicators of whether

the approach used in developing a community is the right one or not [12].

"Encouraging new members to participate in the community's activities," "Promoting ownership and encouraging group responsibility," and *"Creating and maintaining an open, positive, and participative environment"* are all ingredients for boosting participation in a community. An open, positive and participative environment can lower the barriers to participation among members, which in turn can help participants take more responsibility for their community. As Ardichvilli et al. argue, "the challenge in enabling (virtual) communities of practice is not so much that of creating them, but of removing barriers for individuals to participate …" [2].

However, the root causes of nonparticipation in virtual communities are multivariate [24], since there are many factors influencing member participation [30]. One model that can be used to understand participation in online communities is *a social influence model of virtual community participation* [6], in which the researchers investigated two key group-level determinants of virtual community participation, i.e., group norms and social identity. They then modeled participants' *we-intention*, referring to participating together as a group, as a function of *individual* and *social* determinants. Group norms as social determinants in COPs become known to members in different ways. One way a facilitator could help new members is by introducing them to existing group norms. Without knowing the group norms, new members would probably still face barriers to participate such as fear of accuracy or feel of unimportance of their posting [2].

An interesting empirical study by Yoo et al. [30] found that participation could not be enhanced directly by any management strategy of virtual communities. However, they did find a direct path between participation and sense of community, which in turn could be influenced by management strategy. This finding might explain why more-experienced facilitators saw *"Building cooperative relationship among members"* as the most important task in facilitation. They might have experienced the difficulties of encouraging participation and thus seen a cooperative relationship among members as a way to increase sense of community, which in turn could lead to increases in participation.

Other factors that could inhibit active participation in a community, as found in the literature, include a tendency either to share or not to share information [5], and trust issues, especially in the case of sharing knowledge and information with people from other organizations [17]. To address those factors, facilitators would need to work with the management

of the organization, since organization policies could enhance or inhibit sharing behavior within the organization.

Participation-related issues have also been addressed by researchers from various disciplines. Various technologies and approaches have been proposed to deal with those issues. Some of the proposed approaches to increase participation are (i) email announcements [11]; (ii) reputation systems based on member contributions [15], and (iii) recruitment of community members [20]. However, it seems that there is still plenty of work to be done in addressing participation-related issues in virtual communities in general, and especially in COPs, since most facilitators still consider it as their most difficult task.

6. Conclusion

COPs can foster knowledge creation and sharing within and between organizations. To enable the establishment and sustained functioning of a COP, it is important for the community to be effectively facilitated. In this paper we presented challenges faced by facilitators.

The results of this study have practical as well as theoretical implications. Practical implications include the following: (i) organizations should help facilitators in participation issues via such avenues as policies or rewards; (ii) COP facilitators can allocate their limited attention in more efficient ways knowing that there could be an indirect means to influence participation, e.g., by building a sense of community; and (iii) a more purposeful training program for facilitators and tools for supporting those difficult and important tasks could be designed by COP practitioners and researchers.

Theoretical implications include: (i) deeper insight into facilitation functions in COP, such as how experience might influence facilitators in viewing challenges; (ii) more understanding of the differences between COP facilitation and GSS facilitation, e.g., *"Plan and design the meeting"* was perceived to be the most important task for a GSS facilitator [4]; and (iii) further research is needed to match technology with the requirements of facilitator tasks to be supported, especially from the perspective of the challenges identified in this study.

This study was only the first step of a larger research effort. Therefore, this study has some limitations, including the ongoing validation process of our proposed taxonomy, capturing only facilitators' point of view, and not considering types of

communities and/or organizations. We envision a number of directions for future research to address some of these limitations. First, we plan to validate our taxonomy and our findings through additional data collection, both qualitative and quantitative, from COP facilitators as well as COP members. Second, we plan to look more deeply into the issue of participation in COPs by examining existing theories and models from various disciplines, including psychology and education. We expect that a multidisciplinary approach will offer useful guidance for facilitators to deal with participation issues in communities of practice, and the results of this study help to build toward that goal.

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