

Developing library professionals: The influence of communities of practice

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Abstract:

In pursuance of promoting collective learning among library professionals, this paper is aimed at discussing the knowledge sharing techniques that took place in a community of practice (CoP) which was specially set up for the library industry. The issues will highlight how best practices that are shared in these CoP workshops are 'captured', catalogued and accessed via online social networking tools, fostering a collaborative knowledge sharing climate.

For library managers facing an array of problems which resist traditional ways of learning or a knowledge worker who wants to know 'how do I fix things', the CoP can be utilised as an enabling environment to seek, embrace new experiences and be an integral part of the community that is focussed on enhancing and expanding their collective awareness and capabilities.

We had drawn our implementation experience from the creation of an online CoP, 'KMaya' (www.kmaya.com.my) for our customers who are predominantly from the library community. Our study was conducted via online observations and face-to-face discussions in exploring the trends in stimulating the creation and sharing of tacit knowledge within the user community.

The main thrust of the paper will be to highlight on how a CoP can be leveraged into sharing knowledge, transfer best practices and create long-term success of libraries and library professionals who work in them.

Keywords: Community of Practice, Informal Learning, Tacit Knowledge sharing and Knowledge Management.

1. INTRODUCTION

Organizations are discovering that the real value in knowledge management (KM) is in sharing ideas and insights that are not documented and hard to articulate, which is referred to as tacit knowledge. The challenge is in compiling this knowledge in a usable way. One way to do this is through communities of practice, which are groups of people who share information, insight, experience, and tools about an area of common interest. The key components to these communities are the following: they are held together by passionate interest and value, link people in many ways and thrive on trust.

Cultivating these communities of practice had emerged, based on the need for people to look beyond their own organizational walls for ideas and support. This emerging interest within the library context serves to remind the library profession that sharing of knowledge collectively ensures that the library industry remains current and relevant in a rapidly changing environment.

Communities of practice have also been identified as playing a critical role in the promotion of learning and innovation in organizations (Swan, Scarbrough & Robertson (2002) and they are found to be a very powerful tool to generate sustainable advantages. Learning takes place when tacit knowledge can be filtered, codified and processed into a form usable by the firm and communities of practice can filter this knowledge toward the core competencies of organizations (Malone, 2002).

The paper discusses on how communities of practice can be leveraged into sharing knowledge, transfer best practices and create a collaborative learning environment for library professionals. The aims of the study are to explore to what extent the libraries' participation in KMaya, an online community of practice tool had influenced informal learning and to investigate types of knowledge that was shared in the community. By emphasizing learning in the context of a 'practice' (rather than in a formal classroom setting or behind a computer), it was observed that the KMaya environment (the face-to-face workshops and the online community of practice tool), as a whole had contributed significantly to both knowledge sharing and learning within the community.

2. LITERATURE REVIEW

The structure of the community of practice is based on three components: the domain as the area of knowledge that brings the community together, the community as the group of people for whom the domain is relevant, and the practice as a body of knowledge, methods, tools and stories that members share and develop together. The communities of practice unify three components, namely: knowledge, people, and experience (Wenger, 1998).

Wenger further explains that a community of practice defines itself along three dimensions:

- **Domain - what it is about** – is the basis of common topics, key issues, problems and issues that members share at their daily work
- **Community - how it functions** - mutual engagement that binds members together into a social entity

- **Practice - what capability it has produced** – the *shared repertoire* of communal resources (routines, sensibilities, artefacts, vocabulary, styles, etc.) that members have developed over time.

2.1 The interest in Communities of Practice

According to Johnson (2001), one main reason for the increase in interest in communities of practice is dissatisfaction with traditional learning methods which have been described as codified learning, one that is removed from the place where the learning is applied (Robey, Khoo & Powers, 2000).

Organizations often do not see a direct relationship between business results and their investments in traditional learning methods. In contrast to knowledge transfer, corporate learning should be characterised by sharing knowledge, capturing experiences, reusing them, creating new knowledge and recognising and solving workplace problems in a process-oriented, collaborative manner (Collis & Margaryan, 2004). Such learning is said to be supported by communities of practice which is by providing the organization with an enabling context that allows for individual and group learning in knowledge sharing processes such as storytelling, conversation, coaching and apprenticeship (Lave, 1988; Wenger, 1998; Wenger, & Snyder, 2000; Lave, & Wenger, 1991). Berends, Vanhaverbeke & Kirschbaum (2007) further claimed these communities of practice enable the improvement and transformation of the practices they are centred on because they constitute the perfect context for informal knowledge sharing among experts.

Wenger and Snyder (2000) listed six ways communities of practice can improve organisations – through rapid problem solving, professional skill development, best practice promotion, retaining talent and by guiding strategy. The appeal of communities of practice is such that they have been assessed for their utility in a diverse range of contexts, for instance, in nursing (Andrew et al., 2008), at Rolls-Royce (Meeuwesen and Berends, 2007), for school leaders in Singapore (Hung et al., 2005), in the Norwegian electronics industry (Gausdal, 2008) and in the Dutch police force (De Laat and Boer, 2004).

2.2 The learning element in the community of practice

The community of practice is not an isolated body, but it is composed of many members, who themselves are also members of many other communities of practice (Lave & Wenger, 1991; Wenger, 1998). Drawing from this definition are the aspects of a community of practice being a source of meaning making, both individually and socially, and the pivotal role of the social structure in defining possibilities for learning (Lave & Wenger, 1991). Thus a community of practice provides a framework from which learning in social environments and the development of expertise, in its many definitions, can be understood.

Brown and Duguid (1991) extended on this notion by stating that practitioners ‘develop’ in communities of practices, where learning to become a practitioner occurs by having access to colleagues. Through discussion and exchange of information, the knowledge base of all who are within the community is increased.

It was claimed that communities of practice achieve this goal in two ways: first, they introduce new knowledge into the environment and, second, through the process of framing and exchanging information, they clarify and enhance information for individuals to share the knowledge. Communities of practice emerge as a natural result of individual working and learning collaboratively through self-directed means, and represent one way in which information is shared throughout the organization.

2.3 Legitimate Peripheral Participation in Communities of practice

Embedded in the concept of communities of practice is the idea of the legitimate peripheral participation of community members. In arguing for their definition of legitimate peripheral participation, Lave and Wenger (1991) proffer that legitimate peripheral participation is an inseparable term and each of its parts cannot stand in opposition to the other. The legitimate aspect of the term is drawn from the sense of belonging inherent to a community.

He explained the concept of legitimate peripheral participation, referring to the practice-based learning of novices. Novices do not learn through the transmission and absorption of knowledge, but through the increasing participation in the professional practice. The learning is, therefore, as much about becoming a member of a community as it is about the acquisition of knowledge.

2.4 Social learning in communities of practice

Lave and Wenger (1991) further argued that it is a fundamental part of the learning that occurs within the social world that people/actors change direction, develop identities and re-shape their membership of the community. Learning was therefore recognized as contextually dependent, social and embedded in particular practice, and Huzzard (2004) extends this recognition, by suggesting that learning should be viewed as an “integral aspect of social practice” and that learning is, in and of itself, a social process.

3. RESEARCH SETTING

Having acknowledged the significant benefits offered by cultivating communities of practice, there was a need to investigate to **what extent these communities of practice foster a learning environment for library professionals and what kind of knowledge can be shared in this community.**

The authors of the article are directors of Penang Public Library Corporation (PPLC) and Knowledge Connections Inc. (KC).

In order to achieve its strategic initiatives, PPLC had recognized the need to continuously renew themselves rapidly in order to adapt to a more competitive and changing environment, being more flexible than in the past and also implement more sophisticated ways of providing effective models of learning for their library staff. Sharing experiences with the internal and external library communities, acquiring new knowledge and upgrading new skill-sets have been key milestones of the success in the implementation of continuously expanding their capacity for learning.

KC on the other hand, is a consultancy house comprising of Information and Knowledge Management service providers and experienced librarians who have devoted their time and effort in fostering the communities of practice programs for libraries in Malaysia. Since 2007, the team has been focussed in facilitating 3 face-to-face communities of practice programs a year, on domains related to library management techniques and best practices with the usage of systems and tools. In June 2012, KMaya (www.kmaya.com.my) was established as a professional online community of practice with the intent of sharing knowledge, develop new networks and determine best practices with their community who are mainly library professionals.

In this context, PPLC being one of KMaya community leaders had utilized the community of practice model to support knowledge sharing, nurture an informal collective learning culture and engage in knowledge building amongst the library community. PPLC library officers had actively participated in KMaya communities of practice programs and had played a major role in sustaining these knowledge sharing initiatives.

3.1 Methodology

▪ Research Methodology

We had decided to adopt a qualitative case the constant comparative approach for this study. We believe that such an approach was appropriate for us as it provides an exploratory and inductive stand that is the foundation for the study; where we are able to seek to gain a holistic understanding and a deep view of the case in hand.

▪ Participants

The participants in this study were 20 library officers who are members of KMaya, who had participated in the communities of practice programs and had utilised KMaya to share experiences. Such experience includes their views on library best practices, marketing techniques, how their library portal is managed and issues pertaining to their library services.

▪ Methods

Online observation - One of the strengths of observation is that it allowed us to obtain information about human behaviour directly without having to rely on recorded interviews or surveys which are retrospective in nature. In the present study, we were able to observe the communications amongst the librarians during the communities of practice workshops where they utilise KMaya to ‘capture’ experiences that they had discussed and wished to share. Queries were posted in the forums and the responses were provided by the KMaya community and the domain experts who were consulted by KC.

Interviews - Interviews were chosen as an alternative source because the librarians’ experience of starting with the online community of practice was now in the past, and also because their perceptions and opinions could not be observed. We use the semi-structure interview format, where interviews were focussed and guided by issues pertinent to the study.

Data analysis

In order to explore how librarians used KMaya to communicate with one another, we used the content analysis approach to identify and categorize types of messages and knowledge that participants share with one another online. We first identified exemplary postings that seemed to clearly illustrate the different types of messages and knowledge. These examples were then used as initial codes to guide the continued analysis exercise. We continued to refine the definitions of these codes during the data analysis process using the constant-comparison method. This involved moving back and forth among data sets to discover new codes and categories until each category was saturated – that is, until new data began to confirm rather than shed new light on the categories.

4. FINDINGS AND DISCUSSIONS

This section looks at the results and discusses its relevance in terms of the two research aims raised earlier.

4.1 To what extent librarian’s participation in KMaya influences informal learning

Findings in this study suggest that the KMaya with its face-to-face workshops as a whole did function as a platform that inculcates informal learning in a social perspective, where online participation not only served as an avenue for knowledge sharing situated in the actual context of librarians’ everyday work experience, but also that participation helped to reinforce identity of the library practice itself.

4.1.1 Sense of identity and legitimacy to participate in the community

One of the main defining characteristics of a community of practice is that it provides its community with a platform for creating identity and meaning of and understanding a domain of shared interest.

Findings revealed that through participation in KMaya, the members explored fundamentally important questions pertaining to the roles they play as Information Providers and in-turn help formulate their professional identities.

For example, one member said:

We kind of correct ourselves. For example if I have a question on something I am doing, I’ll put up a message (in KMaya). I will usually receive several responses back, agreeing or disagreeing with the practices I am doing. It is a good way of verifying my experience. I will be able to gauge my standards as a practicing librarian. There is ‘no right or wrong way’ it is the ‘practiced-way’.

We can relate the above to Wenger (1998) who had mentioned that the coherence of a community of practice comes from *mutual engagement* “in actions whose meaning they negotiate with each other” (p. 73), *joint enterprise* (a shared goal and accountability), and a *shared repertoire* (the use of terms whose definition and use has particular meaning within the community). Despite the fact that membership in KMaya is sponsored by the respective organizations, the KMaya members know if they have something to give, they are likely to take something away. It was observed that the sense of reciprocity was vital in driving the community to collaborate.

4.1.2 Community - interacting and learning together

As discussed earlier, the characteristics of a communities of practice is that members interact and learn together by engaging in discussions and sharing information (Wenger, 2000). Our observations revealed that on the average, about 60 messages are posted at every communities of practice workshop. This showed that communities were willing to interact and learn from each other despite their reservations on sharing. When asked as to why they are willing to participate in KMaya, many (especially novices) said that it was a need to connect with other senior librarians (e.g. ask questions, seek pertinent information or advice) that drove them to interact with one another. For them, the online environment represented a mechanism to reduce their isolation due to the job function and geographical location.

For example, one member explained:

I am the only officer in charge of the library and being alone, I don't have any contact with other officers in my premise to share my concerns on situations I face, or comment on 'workarounds' I provide. KMaya helps me to be in contact with other library officers from all across the country online on a regular basis. It allows me to ask questions and assist in verifying my practice. If the community is unable to respond, the KMaya administrators will seek for external help and provide me with insights that are relevant to my issue. I am connected all the time.

Having observed the above scenario, we can claim, as mentioned by Lave and Wenger (1991), this officer who is a new KMaya member, has the legitimacy to participate in the learning of the community, but lacks the 'old-timer' expertise of the community to be at the core of the learning process, instead she exist on the periphery of the learning. The beliefs, behaviours and values of the community are acquired by this new member and as she moves to the role of full membership, she will get to develop her identity within the community, move from this position of a legitimate peripheral participant towards a full membership of the community, developing and shaping the learning of the community.

As Hara & Hew (2006) had mentioned in their research findings, an online collaborative environment represented a valuable learning resource for those who do not actively contribute through posting, but who just ‘lurked’ in the background and read what was being discussed in the community. Similarly, a KMaya member in an interview had commented:

I may not have the time to login and read the messages posted in KMaya. However relevant postings to my mail (by the administrators), gets me curious to log-in to KMaya. Almost 20% - 25% of what I read, I have found relevant and I have incorporated (them) into my actual practices. I hardly, however, post messages or contribute often; perhaps only at the face-to-face KMaya workshops where I am guided to ask questions and able to contribute my opinions to something useful.

The above participation was in fact, engaged in ‘vicarious interactions’. Sutton (2001) defined vicarious interaction as what takes place when a participant actively processes both sides of a direct interaction between two other participants. Sutton found that those who interacted vicariously had read, appreciated and learned from the interactions of others, but they felt no desire to interact themselves. The previous studies by Gray (2004) and Hara & Hew (2006) on an online community of practice designed to support informal workplace learning, had observed that participants ‘learned by lurking’ and ‘picked up ideas’ even when they only read the online postings but did not contribute themselves.

When asked whether and how the nature of the online environment itself helped to facilitate interaction among members, two main responses were gleaned from the interviews.

First, the online environment helped members to be more open in sharing knowledge. This was mainly due to a user-friendly environment afforded by the online communication medium that connects members from different organizations. Our interview data supported this view by revealing that some library officers, who worked in different organizations, felt that they were able to share knowledge easier due to lack of ‘red-tape’ or ‘formal requests’ bounded by an environment that allows delving into previous responses on similar scenarios.

Secondly the ubiquity of the Internet created a convenient and fast avenue for interaction:

A member commented that ‘the Internet itself has made it so much easier to let people like us to ‘talk’ to people from the other states. You can just like initiate something off at KMaya and get the practitioners from all over the country to respond to you quickly (rapid turnaround time). It’s convenient for the people who are experienced in the area concerned, to respond when they like. It is also convenient for you to pose your questions, since you can do it any time of the day or night you want.

4.1.3. Shared Practice to inculcate informal learning

Within their conversations in the workshops and the online responses, it was observed that there is a collective manner in which know-how about ways of doing tasks in a specific domain gets collated in a form of frameworks, ideas, stories, experiences, lessons learned and documents that community members share at their work. Thus there was strong evidence that such shared practice was present in KMaya.

This will be elaborated further in the following section when we describe the types of messages and knowledge that librarians share in KMaya. At this juncture, however, it is worthwhile to mention that these ‘shared stories’ was one of the main attractions of KMaya. The community members appreciated that KMaya could attract the country top names in library fraternity to share their expertise and contributions in the KMaya workshops. One member mentioned that “you are able to ‘talk’ to domain experts and comment and respond to your queries, which you may not able to do so elsewhere”.

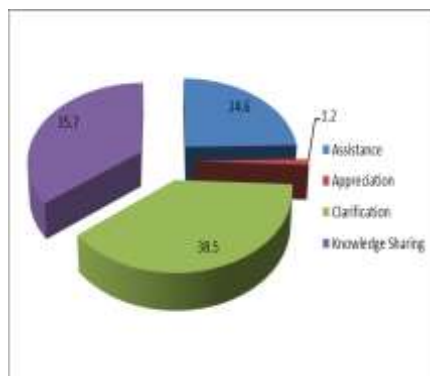
Besides having quality contributions from top authorities in the field, librarians felt the rich diversity of members in KMaya itself helped to foster value for effective collaboration. The comments were:

We look forward to platforms like this where we are able to talk to other library members throughout the country, people who were from the industry but with different culture, experiences and opinions. We are able to get more interesting stories and ways of adapting to library related issues.

In summary we can safely say, that the KMaya with the combination of the regular face-to-face workshops can provide the elements for a learning environment with an avenue for interaction and knowledge sharing situated in the actual context of the librarian’s everyday work experience (i.e. practice) can be made to a reality.

4.2 To explore how librarians use KMaya to communicate with another

Content analysis of 914 issues (based on 11 months of collaborative activities in KMaya), revealed 4 types of messages that were commonly posted by the community:



Request for Assistance – request for information, ideas, or participation

Appreciation – offering thanks for some action

Clarification - expert opinions on pertinent details about a topic

Knowledge sharing- sharing book knowledge, practical knowledge or how ‘things’ are done in their organizations.

Figure 1: Types of messages that were posted in KMaya

The majority of the messages shared were clarification (38.5%), closely followed by knowledge sharing (35.7%) and assistance (24.6 %). The fact that knowledge sharing and clarification were the most frequent type of messages being discussed in the workshops and posted in KMaya, bears strong testament that situated learning is prominent, where members continually develop a shared repository of resources, such as ‘work stories’ highlighting ways of addressing recurring problems.

With regards to sharing knowledge, three categories were found:

1. Produced knowledge – documented facts, general regulations, policies or rules;
2. Practiced knowledge – actual practice adapted from standards or policies;
3. Community knowledge – what was collectively discussed and consolidated in the previous KMaya workshops and stored in the KMaya repositories.

The above categories were adapted based on an empirical study on communities investigated by Hara and Hew (2006). Adapting to the above, analysis of the types of knowledge shared revealed that the most common was community knowledge. Practiced knowledge, made up of second most frequent type of knowledge shared, followed by 'produced knowledge'. The relatively high count on 'community knowledge' being shared among the library professionals in KMaya was not very surprising given the fact most of the KMaya community is made up of young professionals or novices who tend to hook up to KMaya as a 'learning tool'.

5. CONCLUSION

The findings in this study suggest that the KMaya environment (the online community of practice tool and the face-to-face workshops) as a whole did provide a positive coherence for informal learning from mutual engagements and created a legitimate platform to foster a shared repertoire of experiences and work stories for the professional development of the information professionals in the community.

By involving members from different disciplines and geographic areas, the KMaya community has the potential of multiplying the knowledge flows, address knowledge gaps, and foster knowledge partnerships. The communities of practice model that was employed, was shown to increasingly represent a new model of learning in KMaya, a model that centres on continuous learning as opposed to one-off learning events.

However this study is limited by a single case study. Other than first hand observations of the trends of issues that are being captured in the online forums and at the face-to-face workshops, the findings may too premature to be table out. As such the observations reported may not be conclusive. It would therefore be useful to examine the perceptions and opinions of more communities to gain further insights.

With the availability of data, a longitudinal study is envisaged to identify the knowledge assets that can be derived from cultivating KMaya. Future research on online communities of practice may be the tangible and intangible values from the collective contributions of the communities of practice to the knowledge worker and to the organization.

References

- Andrew, N., Tolson, D. & Ferguson, D. (2008). Building on Wenger: communities of practice in nursing. *Nurse Education Today*, 28(2), 246-252.
- Barab, S. A. & Duffy, T. M. (2000). From practice fields to communities of practice. In D. H. Jonassen & S. M. Land (Eds.), *Theoretical foundations of learning environments* (pp. 25-55). Mahwah, NJ: Lawrence Erlbaum Associates.
- Berends, H., Vanhaverbeke, W. & Kirschbaum, R. (2007). Knowledge management challenges in new business development: case study observations. *Journal of Engineering and Technology Management*, 24(4), 314-328.
- Brown, J.S. & Duguid, P. (1991). Organizational learning and communities of practice: toward a unified view of working, learning and innovation. *Organization Science*, 2(1), 40-57.
- Collis, B., & Margaryan, A. (2004). Applying Activity Theory to Computer Supported Collaborative Learning and Work Based Activities in Corporate Settings. *Educational Technology Research and Development*, 52(4), 38-52.
- De Laat, M. & Boer, W. (2004). CoPs for cops: managing and creating knowledge through networked expertise. In P. Hildreth & C. Kimble (Eds.), *Knowledge Networks: Innovation through Communities of Practice* (pp. 58-69). Hershey: Idea Group, .

- Gausdal, A. H. (2008). Developing regional communities of practice by network reflection: the case of the Norwegian electronics industry. *Entrepreneurship and Regional Development*, 20(3), 209-235.
- Gray, B. (2004). Informal Learning in an Online Community of Practice. *Journal of Distance Education*, 19(1), 20-35.
- Hara, N., Hew, K. F. (2006). A Case Study of a Longstanding Online Community of Practice Involving Critical Care and Advanced Practice Nurses. *39th Hawaii International Conference on Systems Science (HICSS-39 2006)* Retrieved from <http://www.computer.org/csdl/proceedings/hicss/2006/2507/07/250770147a.pdf>
- Hung, C. T., Seng, H. J. G. & Seng, K. T. (2005). A framework for fostering a community of practice: scaffolding learners through an evolving continuum. *British Journal of Educational Technology*, 36 (2), 159-176.
- Huzzard, T. (2004). Communities of domination: Reconceptualising organisational learning and power. *The Journal of Workplace Learning*, 16(6), 350-361.
- Johnson, C. M. (2001). A survey of current research on online communities of practice. *The Internet and Higher Education*, 4(1), 45-60.
- Lave, J. & Wenger, E. (1991). *Situated Learning: Legitimate Peripheral Participation*. Cambridge: Cambridge University Press.
- Lave, J. (1988). *Cognition in Practice: Mind, Mathematics, and Culture in Everyday Life*. New York, NY: Cambridge University Press.
- Malone, D. (2002). Knowledge management: a model for organizational learning. *International Journal of Accounting Information Systems*, 3 (2), 111-124.
- Meeuwesen, B. & Berends, H. (2007). Creating communities of practices to manage technological knowledge: an evaluation study at Rolls-Royce. *European Journal of Innovation Management*, 10(3), 333-347.
- Robey, D., Khoo, H., & Powers, C. (2000). Situated learning in cross-functional virtual teams. *Technical Communication*, 47(1), 51-66.
- Sutton, L. A. (2001). The Principle of Vicarious Interaction in Computer-Mediated Communications. *International Journal of Educational Telecommunications*, 7(3), 223-242. Norfolk, VA: AACE. Retrieved from <http://www.editlib.org/p/9534> on 5th May 2013.
- Swan, J. A., Scarbrough, H. & Robertson, M. (2002). The construction of communities of practice in the management of innovation. *Management Learning*, 33(4), 477-497.
- Wenger, E. (1998). *Communities of Practice: Learning, Meaning and Identity*. Cambridge: Cambridge University Press.
- Wenger, E. & Snyder, W. M. (2000). Communities of practice: the organizational frontier. *Harvard Business Review*, 1, 139-145.
- Wenger, E., Trayner, B., & de Laat, M. (2011). *Promoting and assessing value creation in communities and networks: A conceptual framework*. Rapport 18, Ruud de Moor Centrum, Open Universiteit, The Netherlands. Retrieve from http://wenger-trayner.com/documents/Wenger_Trainer_DeLaat_Value_creation.pdf
- Wenger, E. (1998). *Communities of practices: Learning as a social system*. Retrieve from <http://ewenger.com> <http://www.kmaya.com.my> (accessed on 10th May 2013)