Exploring the Selection of Technology for Enabling Communities

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INTRODUCTION

Communities, whilst represented and apparent in their members, are most evident in the technological entity—the technology and tools that support the common and communal activities. Technology acts as the enabler linking a group of individuals who are most likely dispersed, in terms of time and place, and facilitates their interaction.

So you have decided or been asked to create or facilitate the activities of a community, but how do you select an appropriate solution for the requirements of a particular community and its members? Do you follow a traditional systems and software acquisition route: establish the requirement, develop the system, approach a consultant, call the IS department to see how you can adapt existing technologies? Or do you adopt an approach that can also be viewed as part of the community development process through the generation of involvement, engagement leading to ownership of the community and therein its future activities?

The bottom line is that technology—either a system or a tool—is still required; the following exploration is based on the original research of the Knowledge Library project (Cox, Patrick & Abdullah, 2003). The K-Library project, facilitated by Research Development funding from London South Bank University, started from the premise that it would be useful to assemble a group of librarians from across the library sectors to share their understanding of the concept of knowledge management (KM), and to look at how some of the ideas drawn from the KM literature could be applied to library practice. It also reflects the considerations of a project team with its participants for the selection of a suitable system to support this community of interest. This project and subsequent work provided the basis for this exploration of tools and technologies that support communal activity; be that a community of intent, interest, purpose, or practice, which seeks to identify the user requirements for the technology or systems to support the building of an online community. The aim is to review the type of technologies and varying features, and to explore how they can assist a community through its initiation and maintenance phases without intruding or hampering the intention and activities of that community. This has enabled the creation of a list of features supported by explanation of these functions and options, and the creation of a checklist (see Appendix). This checklist can be used to help potential users identify their expected needs by distinguishing essential, useful, and non-essential features. The resulting checklist can be found at the end of the exploration and explanation of functions and functionality that could be adopted in the technology to support a community. From this exercise and other user requirements, it is possible to evaluate different systems for their compliance with user requirements. In the K-Library project, this enabled the selection of a suitable system, replicating the majority of the features the community considered to be appropriate for their activities. This exploration is augmented with observation by the authors and the reflections of the communities arising from the selection and use of a system/technology and the building of the community.
BACKGROUND

On commencing the K-Library project, we found that there was little to directly lead us toward making a choice of supporting technology. A difficulty that lay in the wide and expanding range of technologies available for supporting communities, extending from simple bulletin boards or e-mail archiving systems through to sophisticated suites of integrated software with document repositories and content/records management, calendars, task management, and workflow. Also it was found that at the time of initiating the project, the literature on communities was focused toward the conceptual and practical aspects of running communities. This literature was focussed on selecting technologies rather than more generally on systems and software development, and texts were geared to specific software—groupware or intranets. These texts, whilst relevant, did not offer the fuller picture we initially perceived and then revealed as relevant in the discussions with the K-Library Communities membership.

Additionally, the speed of technological development has continued at pace, making much material dated with the arrival of newer technologies and the convergence and integration of these technologies with other broader ranging technologies and standards, like instant messaging, Weblogs, and RSS feed. These are significantly changing how information can be collated and distributed, with increasing opportunity for customisation and personalisation. This is coupled with systems becoming more pervasive with enterprise information portals, integrated content management systems, wireless networks, and mobile commerce, and these devices becoming smaller and more mobile themselves. An important impact can be seen in the increasing standardisation occurring as useful technologies and practice evolve, particularly the Web-based metaphor for the look and feel of systems for familiarity and ease of use, with many of these technologies or practices being viewed as standards in the field. Although in terms of a true defining of a standard reflecting the technology domain, these may be transitional, emerging, de-facto, or proprietary standards like XML, XHTML, Java, or DHTML. The essential aspect being that this semblance of a common standard is facilitating the development of more consistent systems, and the genuine use and reuse of documents and artefacts for a range of the devices without the need for recreation, providing the ability to use or adapt them with relative ease, and enabling a group of individuals to form and evolve into a genuine and mutually beneficial community.

MAIN FOCUS

Identifying the Necessary Features

The question therefore is what functions or functionality does your community require? A simple bulletin board or mailing list (e.g., listserv, jiscmail) based on specific software, or a Web-based group with discussion threading and the ability to push e-mails (e.g., e-group or Yahoo group) may be enough. Is real time functionality—like chat or instant messenger (e.g., AOL, MSN, ICQ) or Internet telephony (e.g., Skype)—required? What about reminders for outstanding action ‘to-do’ or task list activity areas/places (e.g., Groove, Lotus Notes/Domino, First Class)? Are options required relating to the creation and dissemination of work via content management systems, record management, workflow, sign-offs, and portal-based enterprise systems (e.g., Opentext Livelink, or Hyperwave or Microsoft’s Sharepoint)? Wenger (2001), in analysing tools for the suitability to run communities of practice, argues that “the ideal system [for this purpose] at the right price does not yet exist.” He points out that most available systems were developed primarily with other applications in mind; specifically he identifies tools developed such as: knowledge portals, project type software, Web site communities, discussion groups, online meeting spaces, e-learning spaces, knowledge exchange, and knowledge repositories.

It is very easy in choosing a system to overlook the lack of important features that can be critical as to whether members are encouraged or discouraged from actively and consistently engaging with a community. The stress in functionality varies from system to system; for example, project management tools will stress document management and task listings much more than a Web site community tool. Also the specific terminology used may be appropriate to a particular application—that is, ‘task lists’ would more appropriately be called ‘activity lists’, say, in a Web site community as opposed to a project management