

# Virtual Communities Wish List

**James Isaak**

*Southern New Hampshire University, USA*

## INTRODUCTION

Experience with virtual communities such as Yahoo Groups, Community Zero, Blackboard and WebCT and working with ad hoc and formal groups (such as IEEE committees) has provided a basis for a “wish list” of virtual community capabilities. For any given audience, purpose, life-cycle and culture the relevant elements of this list will vary (Kim, 2000). With emerging technology and evolving experience, additional elements should be added. This, then, is a starting point for identifying the specific requirements for a specific virtual community.

Here, general functions are described, as well as functions as seen by users or administrators of a virtual community. The format is intentionally terse to facilitate the use of this information as the basis for a checklist in evaluating requirements, alternatives and priorities. The general concepts of “push” (data is delivered to users, e-mail being an example) and “pull” (where data is only available when the user chooses to seek it out) are highly relevant. Maintaining community “interaction” is dependent on having a core of participants who are regularly interacting, and the “push” model can facilitate this among less experienced users.

## GENERAL FUNCTIONS

- a. **Threaded discussions:** In many ways this is the original form of virtual communities: bulletin board systems, “DEC Notes” and, of course, more recently blogs and wikis. In any case, the ability to “respond” to specific items in a tree structure is one way to facilitate interaction and at the same time provide a pointer to the discussion history.
- b. **E-mail “transparent” interchange:** Some users will not be prepared to enter into a virtual community for the full range of interactions. Allowing users to receive postings via e-mail and respond via e-mail in a transparent way allows these individuals to participate.
- c. **Sequential message numbering and archiving:** Numbering the postings provides an easy way for specific reference, and archiving the postings provides for future reference. When new members enter a community, it is useful to have pointers to key postings that will allow them to come “up to speed” as well as learn the culture.
- d. **Document posting, annotation, version numbering for revisions, work flow:** Another potential form of interaction involves “documents.” Where these are relevant objects, the set of services for tracking them, maintaining them and potentially “approving” them need to be considered. Often, these will co-exist with either threaded discussion or threaded annotations that “argue” for specific changes.
- e. **Integrating with the World Wide Web:** Much of the relevant material will be outside of the immediate context, and linking to this content within the community or in a broader Intranet or Web environment may be required. Exportable links into specific points within a community will facilitate connection from the outside world. General support for XHTML (eXtensible HyperText Markup Language) tags will provide capable users the ability to link to external content and present well-structured entries. (Style sheets support should be considered, and possibly scripting, or even posting of executables in some situations.)
- f. **Polling/voting capability:** with appropriate “rules”—who can vote, can votes be changed and so forth.
- g. **Calendar support for group and individual events:** Events are another aspect of community interaction, and along with calendaring, notification (typically e-mail) of events is useful.
- h. Member listing, with appropriate individual control over the “profile” that is maintained and what is available to what other classes of users.
- i. **Sub-groups:** allowing for easy instantiation of limited or open subgroups, presumably retaining some hierarchical relation to the parent, and inheriting most if not all of the parent community’s functions and limitations.
- j. Communities should be configurable as “e-mail list” only with possible evolution to expanded functionality. This parallels the “e-mail transparency,” and provides for the traditional “list server” function in a consistent form that facilitates expanded services if and when desired.

- k. **Real-Time components (potentially with archived “replay” possible):** Chat (multi-user) and instant messaging (user-to-user) interactions can be useful real-time facilities. Archiving of these may be required or undesirable depending on the expected usage. Real-time messaging can be an excellent complement during teleconferences, or even in-person meetings to allow for less disruptive “back-channel” communications (“I’d like to speak to that issue,” “can you send me that document,” etc.) Shared whiteboard or shared applications, perhaps with shared mouse or annotation depending on the situation. Real-time conferencing would go beyond shared presentation to include video feed (presenter), small groups of participants (multi-window), or longer-term “virtual reality” environments for “face-to-face” interactions.
- l. **Security:** Virus scanning, spam control and other automated facilities to detect and prevent abuse may be needed. In addition, appropriate access controls and projection for the privacy of participating individuals need to be incorporated in the system.
- m. **“Self initiating”:** Some authorized group of persons should be able to initiate a new virtual community (or sub-group) with little or no administrative overhead or time delay. In some examples, any registered member can form a group in a few minutes and it is ready for activity.

## USER MODEL

- a. **Consistent user accounts used for “login” and “privilege” definitions:** In intranet and extranet situations, it is useful to have a single login for all applications, with virtual communities being one of these.
- b. **Users can have multiple profiles that may reflect different roles or personas:** These may direct e-mail to different target addresses and so forth.
- c. **Individuals can submit/receive interactions from different e-mail addresses:** (authentication may be required to establish additional source addresses).
- d. User can change the forwarding e-mail address for a profile and it will affect all communities that include that profile.
- e. For each community or subgroup, a participant can make selections about the rate of e-mail delivery (immediate, batch by day, batch by week, only access via archive).
- f. Archive of e-mail passed through a community, with threading as a management option: Threading and search/organization allow new participants to come up to speed. Periodic summary entries, easily identified, are another tool to facilitate effective multi-year or many-entry discussions.
- g. It may be useful to have an “archive” or “do not archive” sender option for messages.
- h. **Transparent “e-mail” use:** that is, users may be involved in a community, receiving and sending e-mails via the list, and never have to learn about any of the more sophisticated services (or have the facilities to access them).
- i. **Integrated user view:** a user can identify all lists that include any of their profiles. In some contexts, this will want to span beyond virtual communities into other services provided (digital library, tutorials, news/RSS feeds, etc.).
- j. Easy opt-in, opt-out of lists; using Web or e-mail directives (user choice).
- k. **Search (full text) of content for topics/keywords of interest for the user:** In the longer term, this should reflect artificial intelligent agents that can suggest areas of interest based on prior participation.
- l. **Integrated calendar for a group (shows scheduled events, provides automatic notification to lists):** The system should provide each user with a “union” of all their selected group calendars, and personally added dates. A facility to help schedule date/time for real-time multiple-user interactions may also be needed.
- m. An easy method for individuals to invite others to participate in the community.
- n. Profiles that provide information users chose to share about themselves with others in a group. Longer term, this will include the “avatar” they choose to represent them in virtual reality interactions.
- o. Instant messaging (individual to individual) and chat (shared real-time messaging) to provide for immediate interaction between participants. Easy segmentation into side conversations would be useful, as well.
- p. Allow for disconnected interaction (via downloaded datasets with “transparent” response/entry that can be uploaded when connection is resumed). One relevant example of this would be a dataset with a hyper-linked agenda for a meeting to all of the relevant subdocuments available in the same format online, as a downloaded dataset or on CD. In this same example, the ability to link in new documents and to annotate documents for personal or shared use would be valuable.

2 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: [www.igi-global.com/chapter/virtual-communities-wish-list/18136](http://www.igi-global.com/chapter/virtual-communities-wish-list/18136)

## Related Content

---

### On Being Lost: Evaluating Spatial Recognition in a Virtual Environment

Tomohiro Sasaki and Michael Vallance (2018). *International Journal of Virtual and Augmented Reality* (pp. 38-58). [www.irma-international.org/article/on-being-lost/214988](http://www.irma-international.org/article/on-being-lost/214988)

### PolyOrBAC: An Access Control Model for Inter-Organizational Web Services

Anas Abou El Kalam and Yves Deswarte (2011). *Virtual Communities: Concepts, Methodologies, Tools and Applications* (pp. 537-557). [www.irma-international.org/chapter/polyorbac-access-control-model-inter/48691](http://www.irma-international.org/chapter/polyorbac-access-control-model-inter/48691)

### Team-Work Issues in Virtual Teams

Barbara J. Cargill (2006). *Encyclopedia of Communities of Practice in Information and Knowledge Management* (pp. 529-531). [www.irma-international.org/chapter/team-work-issues-virtual-teams/10542](http://www.irma-international.org/chapter/team-work-issues-virtual-teams/10542)

### Reconceptualising Information Literacy for the Web 2.0 Environment?

Sharon Markless and David Streatfield (2009). *Handbook of Research on Social Software and Developing Community Ontologies* (pp. 316-334). [www.irma-international.org/chapter/reconceptualising-information-literacy-web-environment/21381](http://www.irma-international.org/chapter/reconceptualising-information-literacy-web-environment/21381)

### Using a Design Science Research Approach in Human-Computer Interaction (HCI) Project: Experiences, Lessons and Future Directions

Muhammad Nazrul Islam (2017). *International Journal of Virtual and Augmented Reality* (pp. 42-59). [www.irma-international.org/article/using-a-design-science-research-approach-in-human-computer-interaction-hci-project/188480](http://www.irma-international.org/article/using-a-design-science-research-approach-in-human-computer-interaction-hci-project/188480)