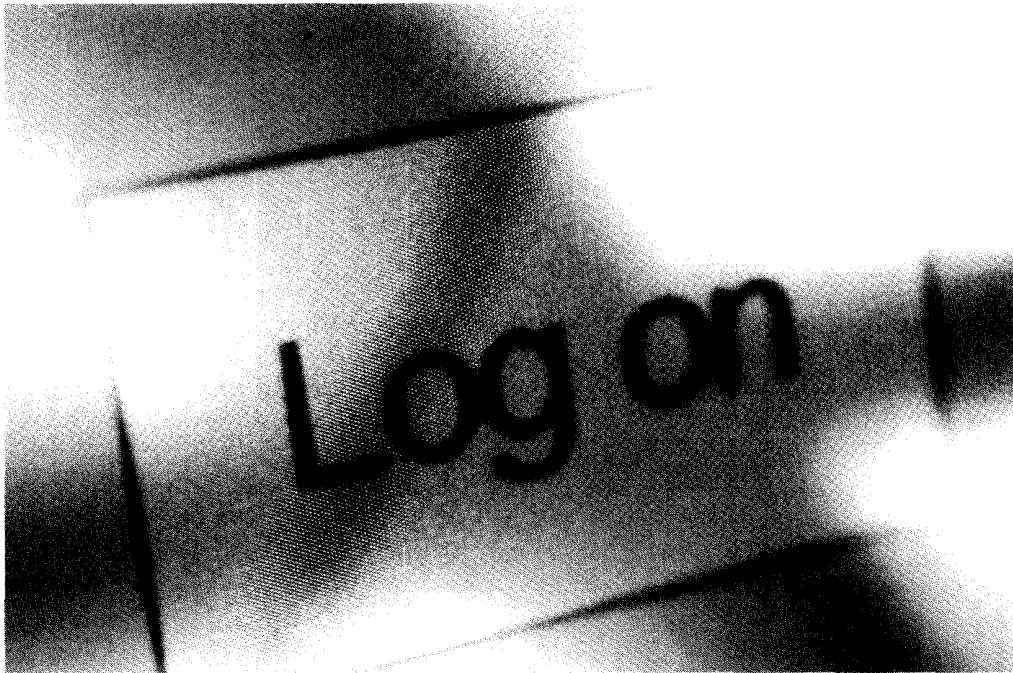


Four Smart Ways To Run Online Communities

Ruth L. Williams ■ Joseph Cothrel



Kaiser Permanente, About.com, Sun Microsystems and Ford have created four kinds of innovative online community. Their experience shows not only how to manage communities, but also how to manage today's work force.

Ruth L. Williams is senior manager, Intellectual Asset Management Practice, PricewaterhouseCoopers, Chicago. Joseph Cothrel is vice president of research at Participate.com, Chicago. Contact the authors at: ruth.l.williams@us.pwcglobal.com and jcothrel@participate.com.

Of the many ideas that have entered the business world by way of the Internet, few have proved more potent than "online community." America Online owes its success to the creation of community. Amazon.com has become a retail powerhouse thanks largely to the relationships it established with and among its customers. Despite the obvious power of community and the fact that virtual communities are not new, executives in most industries have barely begun to grapple with this new form of interaction, much less understand how it can be used to enhance their business. But before long, the ability to create and manage virtual communities will become

a distinguishing feature of nearly every successful business.

Community interactions occur wherever people are connected over computer networks — whether these people are buying, selling, collaborating or merely seeking diversion. Online communities — which we define as groups of people who engage in many-to-many interactions online — form wherever people with common interests are able to interact. These interactions can have a big impact on business strategy and operations. And they pose unforeseen threats as well as opportunities. For example, customer communities eliminate the information

Employee communities can propagate needed change far more effectively than top-down mandates.

gaps that companies traditionally relied upon to maintain profit margins. The Web makes it easy for customers to find alternative suppliers or to create purchasing consortiums to drive prices lower. Independent distributors create communities to gain clout over the companies whose goods they offer to the public. For example, they can compare notes to see whether scarce items are being fairly allocated by manufacturers. Employees form communities to discuss grievances about their managers. But along with such threats come remarkable opportunities. Employee communities can propagate needed change far more effectively than top-down mandates. Community efforts can vastly improve the coordination of channel partners and provide an unparalleled source of customer feedback. By developing new value-adding communities, or better managing those that already exist, companies can greatly enhance their prospects for success in the age of e-business.

This article explores how four organizations — Kaiser Permanente; About.com, Inc.; Sun Microsystems, Inc. and Ford Motor Co. — have created online communities to support their business strategies. Together, these “four ways” suggest the many forms of online community used in businesses today and how to make them work.¹

To gain an understanding of how these changes were coming about and what could be done to manage and promote them, we conducted a study of 15 online communities representing a comprehensive range of platforms and member composition.² We examined four online communities. Each offers lessons that apply to almost any community effort. Moreover, we identified 12 fundamental lessons that provide a broader understanding of how online communities can be established and maintained.

Kaiser Permanente: Community Extends Customer Relationships

At the time of this study, Kaiser Permanente was the largest not-for-profit health maintenance organization (HMO) in the United States, serving 8 million mem-

bers in 11 states and the District of Columbia. Unlike other managed care institutions, which merely affiliate with doctors, Kaiser employed 15,000 physicians as well as 100,000 technical, administrative and other health-care professionals.

In the early 1990s, Kaiser began to explore the use of emerging technology to improve member services and promote preventive health care. In 1997, the HMO launched Kaiser Permanente Online, a free, members-only Web site combining services such as online appointments and access to nursing staff, as well as information such as a health encyclopedia and moderator-led discussion groups.

Create a Critical Mass of Functionality

Kaiser Permanente Online was originally intended to extend some of Kaiser's existing services to the online environment, making them more readily available and convenient for members. But behind this lay a far more ambitious goal: to help members take charge of their own health-care decisions.

“Assembling ‘a critical mass of functionality’ was key to Kaiser Permanente Online's early success,” says Tim Kieschnik, Kaiser's director of strategic development. Features like online appointment booking would attract users, provide a useful service and help pave the way for more complex and valuable kinds of interactions.

Kaiser created an online environment in which information and services are meaningfully integrated. Discussions are often linked to content elsewhere on the site or even elsewhere on the Web. Members who encounter a new topic in a discussion group and want more details can send a message to an “advice nurse” or make a doctor appointment with the click of a mouse. This seamless weaving of discussion groups and other online offerings parallels the organization's overall effort to provide coordinated and integrated customer care.

Collect and Use Feedback From Members

Kaiser Permanente Online is a perpetual work in progress. Member feedback drives changes to its look, feel and functionality. Monitoring customer attitudes is a core competence at Kaiser. The organization gathers feedback directly by asking members to rate the site on a range of attributes and offer suggestions for improvement, and indirectly by collecting data on how members use the site, including which

pages are most popular, which services they use most frequently and which discussion groups attract the most members. Kaiser has even created a discussion group devoted entirely to the Web site, providing members an easy way to suggest new features and voice complaints.

Kaiser hopes its virtual community will improve customer satisfaction. The company believes it can improve members' perceptions of the HMO by drawing them into its virtual community. User surveys during the pilot phase revealed that one-third of respondents think Kaiser has achieved this goal. Kaiser believes that its ability to demonstrate the link between member satisfaction and virtual community services will create a solid business case for its continued investment in health care.

But Kaiser also wants to use community to improve patient outcomes. One measure of improved outcomes is "self-efficacy" — an individual's confidence that he or she can effectively function at the level desired. Self-efficacy plays a critical role in an individual's ability to recover from an illness or to deal effectively with chronic conditions. Kaiser is conducting a longitudinal study to assess the impact of discussion groups on self-efficacy, delving into such issues as health functioning, illness intrusiveness (i.e., how much the illness impedes normal life activities), emotional distress and knowledge about the disease and condition. Kaiser is also attempting to determine whether self-efficacy improves more for active than passive participants in its virtual community.

Harness the Power of a Personal Connection

Kaiser's online discussion groups present the HMO's "human side" to its members. A careful approach to online moderation has been the key to their success. Each discussion group is assigned a moderator from among the ranks of Kaiser's health-care providers — doctors, pharmacists, nurses and educators. In certain groups, Kaiser is even experimenting with "peer moderators" — members who facilitate discussion on a voluntary basis. One such instance is the HIV discussion group, which has been challenging yet successful. With its history of activism, the HIV community has often been at odds with the medical establishment, and Kaiser was no exception. The discussion groups enabled Kaiser to reach out to its HIV-positive patients in new ways. Kaiser used a peer moderator to engender trust, encourage participation and plant the seeds of community.

Many of those involved in developing and launching Kaiser Permanente Online have backgrounds in health education; they developed strong moderation skills by facilitating face-to-face learning and support groups. These skills have transferred well to the online environment. Other moderators — especially physicians — are more accustomed to dispensing advice than facilitating conversation. Offering online medical advice to an anonymous audience creates a legal quagmire that Kaiser is eager to avoid. The organization has therefore been very careful to define the role of the online moderator clearly: (1) to inform users about health issues without offering specific medical advice and (2) to create an online environment in which members are willing and able to help one another — in short, to build community. Both objectives are consistent with Kaiser's tradition of promoting a shared model for medical decision-making.

Kaiser Permanente Online's experienced moderators have developed a set of guidelines that steer moderators toward these objectives:

- *Clarify, but don't edit or police.* The discussion groups are essentially free-speech areas. Moderators rarely delete postings unless they contain either personal attacks or advertising.
- *Understand participants' needs, even if it means reading between the lines.* The moderator's job is to find out what a community member really needs and what form the response should take — whether it is a direct answer to a question, a provider contact, a link to additional information or simply feedback and support from the discussion community.
- *Keep the conversation going.* The role of the moderator is to stimulate conversation, not stifle it through excessive control. Kaiser moderators employ a range of approaches, such as starting new discussion threads, bringing in topical information from outside the site or referring members to other relevant discussion groups.
- *Put members at center stage.* Kaiser moderators are expected to continually look for ways to turn the conversation over to the group. While this is a standard practice in online moderation of all kinds, it is particularly important in Kaiser's context, where peer support is a known success factor in managing chronic illnesses and diseases.

- *Show the human side.* Members can learn about moderators by clicking on their screen name, which calls up a personal profile and often a picture. Moderators also draw from their personal experience in answering questions, which helps promote a sense of intimacy and comfort.

- *Let them vent.* Kaiser considers unfettered conversation to be a valuable way to monitor member satisfaction. The fact that participants are anonymous — a necessity when people are revealing sensitive medical information — also contributes to an open discussion environment.

Moderators typically spend several hours a week monitoring their discussion groups. They are required to respond within 48 hours to every inquiry. Staff members conduct random audits that measure moderator response times and response appropriateness.

About.com: Community Supports a Virtual Work Force

Headquartered in New York City, About.com is a news, information and entertainment service that operates a network of more than 600 topic-specific Web sites called GuideSites. Each site is managed by an expert "Guide," who combs the Internet for the best information available on his or her subject, gath-

The Doctor Is On(line)

Jack Chan is a California pediatrician whose work in developing electronic medical records brought him to the attention of the leadership at Kaiser Permanente Online. Today he serves as moderator of the Parenting and New Parents discussion groups.

Chan says the discussion groups offer a whole new experience to members and Kaiser professionals alike. He finds interacting with members online to be a welcome change from his office practice, where time constraints can sometimes limit the attention given to individual patients. He also enjoys the opportunity to draw from personal experience in his interactions with discussion group members.

"We made a conscious decision that the moderator would not be the medical answer man," he says. "Instead, much of what I post comes from my own experience. This makes people much more comfortable with me as a member of the community." Chan believes the asynchronous aspect of online discussion, which allows him to check the groups at his convenience, allows him to be more reflective in his comments. He spends up to 24 hours a month in discussion moderation.

ering the pre-screened links in a single place. Located in 20 countries around the world, the Guides also publish original content and manage discussion forums on their GuideSites.

About.com has learned to manage and motivate a virtual work force of independent contractors.

About.com was founded by former executives of Prodigy Communications Corporation who believed search engines were ineffective at locating high-quality, relevant information on the Internet. The proliferation of self-published Web sites featuring links for specific topic areas substantiated their belief. About.com provided the platform and tools for the best of these Web sites to do what they already were doing and to reach a wider audience of information-seekers in the process.

The company recruited Guides by offering Web site creators a small fee to bring their sites under the About.com banner. By aggregating a large number of sites, About.com gained enough clout to attract advertisers, and a percentage of these revenues was passed on to the Guides. Since most of the Guides were already publishing their own Web sites without compensation, the major inducement to join About.com was the opportunity to reach a larger audience, not necessarily to receive a large financial return.

The Guides are geographically dispersed and are not employees of About.com. In managing this work force, About.com is grappling with issues that are becoming increasingly common in an era of virtual organizations and freelance talent. The company has learned to manage and motivate a virtual work force of independent contractors. A key element in this effort, The Community of Guides, is a forum that allows these independent agents to interact both with one another and with About.com staff members. These interactions help bind the Guides to one another and ultimately to the organization.

Prime the Pump With Communication

The Guide community is almost entirely virtual. From training sessions to performance appraisals, interactions take place via e-mail, chats, bulletin boards or

other computer-mediated communication. About.com conveys corporate goals and expectations to its Guides through an ongoing stream of Web communications. About.com continually updates Guides about corporate activities. They receive all press releases before they are issued to the general public. Conference calls twice a year bring Guides up-to-date on About.com news and provide answers to their questions about the company's direction. Such measures help Guides feel more like About.com members than outside contractors.

About.com's virtual community provides many means of support to Guides who work alone and frequently feel isolated and frustrated by the challenge of managing their Web sites. At the center of this community is a virtual water cooler in the form of a password-protected, Guides-only Web site called "The Lounge." The Lounge serves both a business and a social function. Announcements are posted there, as well as important Guide resources such as contracts, promotional packages, stationery and archived newsletters. Guides convene in the Lounge and pose questions to staff members and one another. One full-time and several part-time About.com staff members manage the community, and all About.com editors and mentors participate in Guide community discussions.

Although most Guides visit the Lounge, About.com doesn't count on getting everyone to do so. Regular e-mail newsletters are sent to the Guides repeating important messages found in the Lounge. Guides also receive continuous feedback from About.com managers as well as site visitors. Usage reports, which Guides can access in a private, password-protected area, tell them which pages on their own sites are most popular.

About.com seeks to create an intimate, friendly environment in which Guides feel comfortable interacting. The Lounge includes a section called "Photo Album," which contains pictures of About.com staff members and snapshots from face-to-face Guide events. Friday night chat sessions provide an opportunity to socialize with staff members in a party-like atmosphere.

Communication, of course, is a two-way street. About.com welcomes feedback from the Guides even if it comes in the form of rude complaints posted on Lounge bulletin boards. But not all complaints are as evident. Some Guides have formed private e-mail lists

to exchange company scuttlebutt and gripes. One of the largest is Guidezone, a group of women Guides. Where some organizations might try to suppress such groups, thus driving them further underground, About.com's approach is to strengthen relationships between individual staff members and participants in these groups. This way, the group becomes an asset rather than a liability, keeping staff members aware of potential problems.

Help Members Help Each Other

About.com grew rapidly, from a handful of employees in early 1997, to more than 80 when our study took place. At the same time, the number of Guides rose from 6 to nearly 600. How could the company maintain its relatively intimate feel and still be able to respond rapidly to the concerns of Guides? The solution became the Guide community itself. When Guides assist one another, it takes the burden off the About.com staff and is often far more effective.

The "Bright Ideas" forum is for exchanging best practices on community building, structuring content and information design.

About.com has instituted a peer mentoring program to help Guides who have just "gone live." In addition, staff members test new tools and design templates with a small group of Guides who then assist in "selling" the change throughout the Guide community. This "pyramid scheme" reduces the need for formal training.

Some 25% to 30% of conversation on the Lounge bulletin boards consists of Guides helping other Guides. The Lounge contains a "Bright Ideas" forum for exchanging best practices on topics such as community building, structuring content for optimal search engine results and information design. About.com staff members scan GuideSites for fresh ideas and, when they find them, either ask the Guides to codify their approach in writing or offer to do it for them.

Acknowledge the Voluntary Nature of Participation

Participation in a community is generally a matter of choice: it draws on the discretionary energy that we

often associate with volunteerism. Companies that try to compel participation find this rarely produces the desired results. At the same time, the motivations behind participation are far more complex than the desire for a reward, financial or otherwise. In the age of the knowledge worker, understanding how to inspire voluntary effort has relevance far beyond the management of online communities. In knowledge work, the work process itself is almost invisible: managers have to trust workers to apply their full talents to the task at hand.⁴ Unlike the labor of the industrial age, knowledge work does not lend itself to measures such as defects per thousand or units per hour. Particularly in situations with talented workers whose skills are in high demand, employees today look a lot like volunteers — almost like the Guides at About.com.⁴

Tapping the Guides' discretionary energy depends on creating the right environment, which About.com achieves by treating its contractors as a combination of employee and customer: while insisting that Guides meet its standards of performance, the company also tries to be highly responsive to their needs.

About.com conducts surveys of the Guide community every 3 to 4 months, assessing everything from attitudes toward editors, marketing and technical support, to satisfaction with the invoicing process and the tools available for site design. When management discovered that Guides were likely to be online at any hour of the day or night, they reorganized for around-the-clock technical support. Staff members carry cell phones, pagers and beepers and are expected to respond to queries from Guides within 48 hours.

Guides are generally not shy about participating in About.com's virtual community. They understand that doing so has an impact. For example, the company's first survey on its editorial services resulted in a complete restructuring of that function. The Lounge was also reorganized based on member suggestions. Staff members focus on identifying, promoting and recognizing new ideas from the Guides, making it more likely that ideas will continue to emerge.

Sun Microsystems: Community as an Engine for Thought Leadership

Sun Microsystems is a leading manufacturer of network computing systems, workstations and software. The company employs 29,000 people worldwide.

Among Sun's notable successes is the development of Java, a multiplatform, object-oriented programming language.

Created by Sun in 1995, Java is the focus of ongoing development efforts in many different organizations, including some of Sun's competitors. To maintain its thought leadership position, Sun must continue to stay ahead of its competitors, partners and customers. The key lies in the organization's ability to share knowledge, code and cases internally. According to Mark Bauhaus, director of worldwide Java and Internet consulting, "We can't continue to be the best Java architects in the world without sharing with one another."

Sun's Java Center Organization, which Bauhaus heads, works with end users, systems integrators and groups within Sun on the design and implementation of Java application systems. The organization is growing quickly and now has managers, senior consultants and architects in 15 countries around the world. It is the host of the Java Center community, which consists of about 150 core community members and more than 1000 others who either work with the Java Centers or take advantage of their solutions and knowledge. The core community members are the "cream of the cream" of Java experts in Sun. They are involved in complex Java development efforts and get many requests for help from other consultants.

The Java Center Organization hosts the community, but not all participants are employed there. Participants work on many different projects and have many different roles, some internal to Sun, some external with Sun's clients and partners. The community is united by their shared practice as creators, developers and architects of the Java programming language. They are, in fact, a "community of practice." Informal and voluntary by definition, communities of practice are thought by many to be the true seat of collaboration, learning and innovation in organizations.⁵

Fit the Tools to the Community

One might expect Sun to use an advanced groupware product in its community-building efforts. In fact, the Java Center community relies on a relatively simple combination of e-mail and intranet Web sites. Although groupware and other discussion applications were considered, the dominance of e-mail as a communication mechanism at Sun and the low utilization of newsgroups led organizers to conclude that e-mail discussion lists would be the most effective solution.

Discussion lists constitute a network of overlapping communities spanning the corporation.

Perhaps wisely, they didn't try to encourage participants to form discussion groups. Instead, they met users where they lived — in their mailboxes.

Of course, storage and scale also matter, and these are addressed by the other place Sun employees live — on their intranet. Introduced in early 1994, SunWeb is one of the largest intranets in the world, containing more than 5 million documents. There are Web sites for all major divisions and groups in the company, including the Java Center. Users can drill down to lists of Java developers by region and specialty and, from those listings, can find developers' personal Web sites. It is a tradition in many groups at Sun that people who join the company send out an e-mail message introducing themselves. Eventually, they are expected to put up a Web site describing their work.

The interplay between the e-mail discussion lists and Web sites creates an effective medium for exchanging information when speed and easy access are critical and change is the order of the day. Thanks to a simple, Java-based application on SunWeb, anyone at Sun can create a discussion list. Hundreds of lists have been created around groups, projects and topics of interest. Some are relatively permanent; others have a life span that lasts as long as the related project or topic. The lists constitute a network of overlapping communities spanning the corporation, a virtual organizational structure that is constantly changing and evolving.

Mailing lists are used when timely communication is critical: announcements (often notifying users that something is now available on SunWeb), news and requests for information are the most common occasions for posting to the discussion list. The Web is generally used to house information of more enduring value. However, like the e-mail lists, the Web also serves a collaborative purpose: the Java Center uses its site as an electronic whiteboard to display graphics during conference calls and e-mail discussions.

The discussion lists and the Web complement one another. When members of the Java Center Organization respond to information requests, they

typically do it on a list, not via one-on-one e-mail. This makes for easy archiving of key conversations that are simply transferred to the Java Center's site on SunWeb. Messages sent to the list are also archived, so people searching the Web can see if a certain question has been asked before.

Play on All Motives for Participation

Despite the sophisticated tools and skills that make knowledge sharing easier at Sun, getting people to use the systems — and more importantly, contribute their knowledge — is still a challenge. According to Bauhaus, contribution at Sun remains a "culture in the making," not a finished product. Senior managers in the Java Center actively encourage people to participate. If they notice someone is not on the discussion list, they ask them to give it a try. This kind of nudge sends two messages simultaneously: (1) you should be participating, and (2) I'm a participant and notice when others are not.

Participation can also be hindered by intercultural factors present in any global corporation. In some cultures, a face-to-face meeting is considered necessary before ideas or information can be freely shared online. Non-native speakers may be sensitive about their language skills and hesitant to risk committing a language error. In general, Sun managers believe that most people experience some inhibition the first time they participate in an online exchange. Getting people "over the hump" is considered a task for Java Center leaders, who provide members with informal coaching on how to participate effectively in an online setting.

E-Mail Sun-Style

Sun recognizes that e-mail is not an optimal solution to the challenge of linking far-flung communities together. Daily e-mail traffic exceeds 4 million messages — an average of about 150 messages per employee per day. In addition to the problems of scale, e-mail is not an efficient use of the network infrastructure. Traffic increases needlessly when a message is sent out 30,000 times instead of being posted once to a Web site. Storage also becomes a problem if users are not assiduous about filing or deleting their mail. But e-mail is a way of life at Sun. As one Sun employee noted, e-mail is often the fastest way to get an answer to your question: "I send out a question to one list, and if I don't hear back in five minutes, I send it to another list." So Sun is sticking to e-mail. But don't get comfortable if you work there and you've got a full inbox: A corporate-wide policy ensures that e-mail a user has not filed for storage is not backed up. You therefore risk losing your mail if you don't manage it properly.

Java Center managers believe that only about one in seven people are really good about sharing and that this holds true at every level of the organization. Consequently, they also believe that, along with providing good tools and setting good examples, another element needs to be in place: a mandate to share. They are currently considering how to make contribution-related criteria part of every employee's annual performance review. They also plan to offer incentives to encourage people to share.

Mandates and encouragement are often combined to maximize the end result. Last year Stu Stern, Senior Manager of the North American Java Centers, decided to make it a priority for his employees to upload as much material as possible to SunWeb and make it available for reuse. The first step taken by Stern and his staff was to stipulate that everyone have a personal home page. They also required that everyone's home page provide one reusable item. People put up virtually anything that would be useful: proposals, project documents, design documents, links to other Web sites that have useful information, even links to source code. Other efforts are intended to keep the information flowing. Recently, the Java Centers declared an "international repository week" to encourage contributions.

Underlying all of this is another, more subtle influence. According to Bauhaus, leaders who want people to contribute their knowledge need to maintain a retribution-free environment. "People need to know that they won't be punished for what they say, even if they are wrong. If they don't trust you, they won't participate."

Reinforce the Community's Focus

Since the Java community is also a consulting practice, management's main objective is commerce, not community. Yet Bauhaus and his managers are able to articulate the link between the two. Business success requires the Java Center group to maintain thought leadership — to continue to be recognized by customers as having the best Java architects in the world. After all, its customers expect more because they know Sun invented Java. They are willing to pay a premium for Sun's unique authority and expertise.

Community enables thought leadership in two ways: by making a pool of resources available to members and by permitting specialization. For example, if someone needs information about a database access

method, they can get it from the most knowledgeable person on the subject. In effect, the community provides a forum for people to take a thought-leadership role. When consultants have access to the expertise of others, they also realize they don't have to know everything themselves. This gives them the freedom to specialize, thus strengthening the entire organization.

The pace of development in the software industry is phenomenal, and no one group of people can possibly keep up by themselves. For the Java Center, the only way to maintain this thought leadership is to both share on a global basis and remain tightly focused. But maintaining focus is not a matter of intervening in community discussions or establishing rules for what can or cannot be discussed. Instead, it starts with a conscious effort to invite the right people to participate. This is one reason Sun's management limited the number of participants in the Java lists and kept the membership relatively small. According to Bauhaus, "Staying focused on the objective of the community is the most important thing. When the interest becomes muddy, the community falls apart."

Ford Motor Co.: Community Aids Information Management

In 1996, Ford Motor Co. set out two objectives for its internal Web efforts: to make its intranet a way of doing business and to create a single point of access for information. Community did not have a prominent place in this strategy, yet the strategy was clearly oriented toward collaboration, as suggested by the definition of intranet: "A network of networks ... promoting information sharing among employees."

Ford's thinking here is more exceptional than it may seem. At its core is an insight that networks are fundamentally about people-to-people communication, not just network applications. The insight was prompted by surveys conducted by Ford's Enterprise Information Management (EIM) Group in 1994 and 1995, the purpose of which was to identify the information required by Ford employees to do their jobs and how much of it was then available. The results were an eye-opener. Respondents had access to only half of the information they needed. Perhaps more importantly, only 20% of the information that employees needed could be provided by the large corporate applications on which the company had focused its attention. Clearly, Ford's information management objectives could not be achieved without

enabling many-to-many communication. "We tended to be application bigots," said Stevie Cote, head of the EIM, "but we realized that most of what people need is created by individuals using a PC."

Ford is just beginning its journey toward community, but it has done an excellent job of framing the issues and developing an infrastructure to make it happen.

People don't collaborate in thin air, but around the artifacts of their work — documents, designs and diagrams.

Provide the Materials that Collaboration Requires

People don't collaborate in thin air. They collaborate around the artifacts of their work — documents, designs, diagrams, etc." Thus, while in one sense collaboration completes information management, in another sense information management makes collaboration possible. As Cote says, "Our focus on growth requires innovation in order to achieve it. We think innovation occurs in the context of communities of practice, and the intranet can get the information to wherever these communities are happening."

The primary information repository at Ford is the Enterprise Knowledge Base (EKB), containing such items as engineering standards, test methods and process descriptions used by program teams in designing new cars. Any kind of file, document (Microsoft Word, Excel, Adobe's PDF, HTML) or Web page can be added to the EKB, which now includes more than 500,000 items.

How was Ford able to convince people to contribute their files to the EKB? A major selling point was that the EKB made it easier to comply with ISO 9000 documentation requirements. Items in the EKB are managed in compliance with Ford's own document retention standards and features like version control, approval and security greatly simplify document management. Previously, a program team spent days or even weeks to bring its documentation in line with ISO standards. That entire process was reduced in some cases to a mere day-and-a-half.

Concentrate on Communities that Matter

A particular priority for information management at Ford is the Ford Product Development System

(FPDS). Speed, quality and cost efficiency in new product development are a primary source of competitive advantage in the automotive industry. Improvements in product design can also have a major impact on downstream costs in manufacturing and later in warranty repairs. At Ford, people involved in new product development have a special need for more effective information-management tools. Over the last five years, the company has set some extraordinary goals for the FPDS organization. As one interviewee noted, "We took away 40% of their time, 30% of their budget, 20% of their staff, and then we asked them to work better." In this environment, better information management is a survival tool.

Within FPDS, there are three Vehicle Centers: large cars, small cars and trucks. Each Vehicle Center consists of multiple "program teams," which are groups of people responsible for taking a new car or truck all the way from the idea stage to production. They are also responsible for updates, or "freshenings," to existing models. The program teams are multidisciplinary, combining people from engineering, marketing, manufacturing and supplier organizations — all those with a stake in the product development process.

When Vehicle Center structure was implemented in 1995, co-located functional groups like engineering and marketing were greatly reduced, and the personnel were redeployed to the new Vehicle Centers. While inefficient in many ways, co-location of functional specialists promoted an exchange of ideas and information that has become much more difficult under the new organizational structure. According to David Roggenkamp, manager of the FPDS Communications group, "You might call one of your functional colleagues to discuss an idea or to find out if a product problem has already been solved. But by the time you've left a few voice messages or e-mails and still haven't heard back, you whip out a blank piece of paper and figure it out yourself." Now Ford provides systems, tools and processes that help functional specialists reconnect, not in physical space, but as online communities.

Form Communities Around People, Not Applications

The product development community at Ford does not have a single application or space where the community "lives" online. At Ford, the options include integrated e-mail, calendaring, corporate directory services; team and department home pages; the EKB; shared network storage; discussion forums

(associated with each of the major sections of the EKB); corporate newsgroups; and other tools such as voice mail, videoconferencing and whiteboarding. Ford's product development group relies most heavily on the Enterprise Knowledge Base, shared storage, Web sites and voice mail.

Each program team has its own Web site. Links to the EKB from the template make sure that new team Web sites are effectively "preloaded" with the basic information members need. Instead of using the corporate directory, FPDS personnel are more likely to call the FPDS hotline, where staff members can often answer "whom to call about what" questions because of their frequent interactions with many parts of the organization.

Ford continuously modifies its plans in response to information it receives from users. In the early stages, EIM assumed community members would want to make information available for each other in Web page format. They later discovered that people preferred to share native files — spreadsheets, word-processing documents and the like. Shared network storage was a compromise between the goals of information management and the messy realities of creativity and collaboration.

Three Keys to Creating and Sustaining Online Communities

As our four examples illustrate, online communities require a wide range of supporting activities, from making sure the enabling technologies are available and working, to gathering and acting upon member feedback. Three kinds of activities appear critical to a community's continued viability: (1) member development, (2) asset management and (3) community relations.

Member Development

Communities need critical mass to remain active and hold the attention of members. Because attrition always occurs, member development must be an ongoing effort. A clearly defined community focus helps coordinators conduct market research to identify potential members as well as the content, tools and services that will draw them in. For example, are members and potential members technologically savvy? If so, sophisticated functionality will increase community activity; if not, it will merely cause frustration and turn people away.

Another effective approach is to work with individuals who influence community members or play leading roles in the community. They can become effective evangelists and a focal point for community formation. Community organizers need to know and cultivate such opinion leaders.

Finally, there's no substitute for one-on-one promotion among potential members. There are many approaches: direct e-mail, phone or fax; online and offline presentations to related groups or gatherings; and encouraging recruitment activities by existing members. For communities of employees or business partners, training sessions and in-person meetings are also effective.

Asset Management

What are the assets of an online community? They range from content, both externally and internally generated; to alliances with other groups; to the knowledge and experience of experts; to the community infrastructure (hardware, software, interface and other design elements). The commitment of members to the community is itself an asset. One way to sustain this commitment is to provide a blend of services, content and relationships that is difficult to find elsewhere. This in turn creates the kind of virtuous cycle that drives a successful community.

The community coordinator is responsible for maintaining the community's assets. Start by identifying those assets and creating a plan to manage them. Among the communities that we studied, asset management activities included:

- Creating member profiles and topic-specific subcommunities to make the expertise within the community more visible.
- Maintaining a balance between experts and novices in the community.
- Capturing the information members need and creating structures and taxonomies that make the information easily accessible.
- Creating processes that facilitate discussion and other forms of contribution.
- Creating a critical mass of functionality that encourages use of community spaces.

Community needs, like those of individual members, are constantly shifting. Making sure that assets remain valuable to members involves a continual "ear to the ground." Community organizers must gather feedback

from members about what they find most beneficial. This can be done through one-on-one interviews, surveys, electronic feedback forms, rating tools or simply by monitoring discussion groups. Members can also share in asset management efforts. As a community matures, volunteers often come forward to help create and maintain assets that are pertinent to specific subgroups. Organizers can harness this discretionary energy to build the value of the community.

Community Relations

Of course, the main reason people participate in communities — online or otherwise — is to interact with other people. Where there is little or no face-to-face interaction, nurturing and strengthening connections can be a delicate balancing act. It calls for both a solid structure of norms and guidelines and the flexible “reading between the lines” of online moderation and facilitation.

In many communities, conflict is welcomed as a spur to participation. Most communities have a strong element of self-policing; when conflicts arise or members behave inappropriately, other members step in. Explicit rules and guidelines provide a reference

point for members who want to play this role. But formal moderation is often required, and it takes skills and experience to do it successfully. For communities where discussion is a core activity, moderators are usually experienced or rigorously trained.

Managing community relations involves tending to connections between people, rather than the assets the community creates. As such, informal or social interactions are typically valued and promoted. Some organizations, like About.com, hold real-time online events to celebrate important milestones in the community's life. Many communities take the activity off-line as well: face-to-face interactions help cement the relationships that have been established online.

As shown by Ford, Sun, About.com and Kaiser Permanente, online community can be a powerful ally in confronting some of today's most challenging business issues. But success requires effective execution in member development, asset management and community relations. By understanding and using these key elements, executives can begin to build communities that will support their business model, no matter what that model happens to be.

References

- 1. The theme of this article is derived from “Four Ways of Being Human,” the classic anthropology textbook by Genevieve Hellen Lisitzky. Lisitzky's book illustrated the myriad ways of “being human” through four diverse examples.
- 2. The 15 communities included Amoco, Awakening Technology, Buckman Laboratories, Fast Company, Ford Motor Company, GrandNet, Hewlett-Packard, Kaiser Permanente, About.com, Monsanto, The Motley Fool, Snap-on Tools, Sun Microsystems, Swiss Re and U.S. West. The research was conducted by a collaborative team led by Arthur Andersen's Next Generation Research Group and including representatives from the study's three co-sponsors: Shell Oil Company, Anheuser-Busch and the Mutual Group. A representative from each of the 15 communities completed a pre-interview questionnaire that provided such basic information as community origin, purpose, size, composition, support structure and technologies. Hour-long telephone interviews were then conducted with individuals responsible for the day-to-day operations of the community, whom we refer to in this article as the “community coordinator.” These individuals had a wide range of backgrounds and occupied many different levels of authority within their organizations. The interviews delved into such issues as frequency of contribution, personnel requirements to maintain community, the existence of formal roles, the use of online events and how outcomes are measured. This phase resulted in a preliminary list of best practices that contributed to formulation of the lessons presented in this article. Four of the 15 candidates were then selected for more in-depth study. This final phase included interviews with sponsors, managers, members, administrators and technologists to obtain a broader perspective on the workings of the community. For each online community, we conducted up to 8 hour-long interviews. Where possible, we performed an in-depth review of the community site as well as an assessment of the interaction among members and community moderators.
- 3. Steven Barley writes about the “invisibility” of today's work in his introduction to Julian Orr's classic of workplace ethnography, “Talking About Machines: An Ethnography of a Modern Job” (Ithaca, New York: ILR Press, 1994). Orr's book, which describes the work of copy-machine technicians, vividly describes the community interactions that effective work performance often depends upon.
- 4. Managing discretionary effort — not just from employees, but business partners and even customers — presents itself as one of the key management challenges of the 21st century. For a look at the customer dimension, see: C.K. Prahalad and V. Ramaswamy, “Coopting Customer Competence,” *Harvard Business Review*, 78 (January-February 2000): 79-87.
- 5. Key texts include: E. Wenger, “Communities of Practice: The Organizational Frontier,” *Harvard Business Review*, 78 (January-February 2000): 139-145; E. Wenger, “Communities of Practice: Learning, Meaning, and Identity” (New York: Cambridge University Press, 1998); J.S. Brown and P. Duguid, “Organizing Knowledge,” *California Management Review*, 40 (Spring 1998): 90-111; and J.S. Brown and P. Duguid, “Organizational Learning and Communities-of-Practice: Toward a Unified View of Working, Learning, and Innovation,” *Organization Science*, 2 (February 1991): 40-57.
- 6. As John Seely Brown and Paul Duguid point out, “Communities bound together by texts... pre-date not only the Net and the telephone, but even the printing press. Sharing and circulating documents, it seems, have long provided an interesting social glue.” J.S. Brown and P. Duguid, “The Social Life of Information” (Boston: Harvard Business School Press, 2000), 190.

Reprint 4146

Copyright © 2000 by the Sloan Management Review Association. All rights reserved.