

## **Creating online communities on the Internet: a practical solution for the global engineering community**

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From its inception, the Internet has been about community. While such communities are new to the Web, they spring from the very heart of the Internet. In the early 1970s, the Internet emerged as a tight-knit community of US Defence Department scientists exchanging research data. Soon, as universities and corporate research laboratories hooked in, more and more participants began forming sub-communities, Online Users started sharing data, collaborating on research, and communicating through email, Usenet groups, and listservs. In essence, scientists and academics have formed interactive research communities that exist not on a physical campus but in the virtual world of the Internet. Though such activities continue to be the heart and soul of the Internet, until recently they have remained disconnected from other information services.

Today, instead of flitting about from site to site dabbling in the nuggets of information, a new class of Internet user is making a home away from home. Hard information is still very important to them, but they seek far more than that. They want company and a sense of community - the cyberspace equivalent of meeting colleagues down at the pub after work. To these Internet citizens or Netizens, content is no longer king. They're less likely to randomly surf Web sites laden with fancy content. Content is why people visit a site, but community is why people stay. Call it the colonisation of cyberspace. Today, people of like minds and interests are establishing Internet communities faster than any construction company in the bricks-and-mortar world. According to a recent Harris Poll commissioned by *Business Week*, 57% of those hopping onto the Net today go to the same sites repeatedly instead of wandering like nomads from one to the next. And of the 89% of Netizens who use email, nearly one-third consider themselves part of an online community.

What's behind this new geography of the Web? The biggest factor is the changing demographics of the users. There are now some 40 million people around the world on the Web, up from 1 million in December 1994. As that number grows, the online population begins to look more like the mass population. As these ordinary people from all walks of life, even engineers, venture into cyberspace, they often find it a dizzying place, what with hundreds of thousands of Web sites to choose from. So, just as in the physical world, Net users are gravitating to Web sites where they can find friends and feel comfortable. "To most people the Internet feels like jumping out into the ocean" says Douglas Rushkoff, author of *Cyberia*, a book on cyber culture. "Online communities provide the lifeguards".

Early signs show that online communities may also provide the profits, according to *Harvard Business Review*. Netpreneurs are finding they can turn the intrinsic cultural appeal of communities into a real business proposition. Commercial enterprises have been slow to understand and make use of the unique community building capabilities of the medium. 'Usually, businesses on the Internet today do little more than advertise their wares on the World Wide Web in the hope that somebody, somewhere will visit their Home Page and buy something. By adapting to the culture of the Internet, however, and providing consumers with the ability to interact with one another in addition to the company, businesses can build new and deeper relationships with customers.

So what is a Web community? For now, most of these online gatherings are still in their formative stage. Like Rome, they are not being built in a day, but are evolving by an electronic Internet equivalent of word-of-mouth as people gather and establish their interests and needs. There are some consistent themes; all communities are built around a common interest or passion, whether it's solving an urgent technical problem or locating a fellow professional on the other side of the world. According to the *Business Week*/Harris poll, 42% of those involved in an online community say it is related to their professional interests, and 50% of those surveyed use the Internet mainly for research. But the ideal community site does more than just focus on like interests, it also encourages plenty of communication and interaction, to the extent that in chat rooms, people essentially become the content. But most of all, the creators of these communities don't try to play the role of benevolent dictator. Certainly, they provide a Framework and guidance along the way, and may charge an admission fee, but then they step back and let the members shape the community.

In the information world of secondary publishing, there are only a few services at present attempting to create communities by integrating formal databases with the informal data resources and exchanges of the Internet. Engineering Information's own *Ei Village* is one; others include *BioMedNet* and Cambridge Scientific Abstracts' *RouteNet Directory*. As a case study of how a traditional, well-established secondary publisher has successfully embraced the Internet to create a value-added global community of engineers and technical researchers, Engineering Information has both adapted existing products, such as Ei Compendex, to Internet delivery and created wholly new resource areas of content, services, and community.

Using the metaphor of a Village for engineers enables Ei Village residents to amble along its sinuous High Street and find a Town Hall, where they visit the engineers' lounge and the experts' office, and watch the progress on the construction of the lecture hall and conference centre. Just across the street is the Career & Education Campus, where residents can contact colleges, universities, professional associations and societies from around the world. Further down, there's a News & Weather Bureau, where you can browse the newspaper rack or watch wire stories as they come in, each of which is given an engineering slant. The Research & Industrial Park provides links to engineering departments, industrial zones, and workshops.

Ei Village provides access to formal content - research articles, technical papers, and conference proceedings - through Ei Compendex Web, the electronic equivalent of *The Engineering Index* as well as informal Web-based resources through abstracting and indexing over 15,000 Internet sites of relevance to engineers and technical managers. Additional content comes from access to over 150 databases through Ei Connexion and international coverage of technical standards through ILI Standards Web.

Value-added services include full text document delivery, and current awareness tools like Ei Spotlights and Ei Tech Alert. But underpinning both content services is the sense of a global engineering community, with interactive Ei Lectures covering such topical themes as the employment outlook for engineers, and Ei forums providing unmoderated discussion areas on engineering management. Connecting to like minded individuals is facilitated by both an Ask Your Peers Program, and links to senior expert in all branches of engineering. And for those smaller organisations without the benefit of an in-house library, Ei Village can offer a virtual engineering library on the Internet, with both a professional librarian on hand to guide residents and a technical reference library to answer any queries.

The number of day trippers to Ei Village is growing all the time, as anyone can register for a months free Membership via the EI Homepage (<http://www.ei.org>), while the number of permanent Ei Village residents, from both academic and corporate organisations, has risen, to over 220 world-wide.

Finally, what are the challenge of creating a truly international community? Ei Village's Mirror Site Programs are designed to offer both local internet access to an Ei Village

server located within the region, as well as local content, Mirror Site Programs are already successfully launched in Germany and the UK. After an initial prototype service hosted through CSIR, at the time of writing, Ei is currently in the process of transitioning Ei Village in Africa to an alternative host server.

## References

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**Biography - Richard Hollis** joined Engineering Information Inc as Director, Ei Europe in September 1996 after serving as Managing Director of Ovid Technologies Ltd, with responsibility for Ovid software and database sales in the UK, Ireland, Africa and the Middle East. Prior to that he held sales positions with Bowker-Sauer, Lexis and the British Library. Mr. Hollis holds a Master's degree in Librarianship from the University of Sheffield and has recently completed an MBA with the Open University Business School. He's based at the Company's new Ei Europe headquarters location, 1 Stonecross, St. Albans, Hertfordshire, AL14AA, UK.