Collaborative Technologies: mmm... mmm... Good!

Industry experts are noticing market trends and influences that can satisfy one's hunger for collaborative technology.

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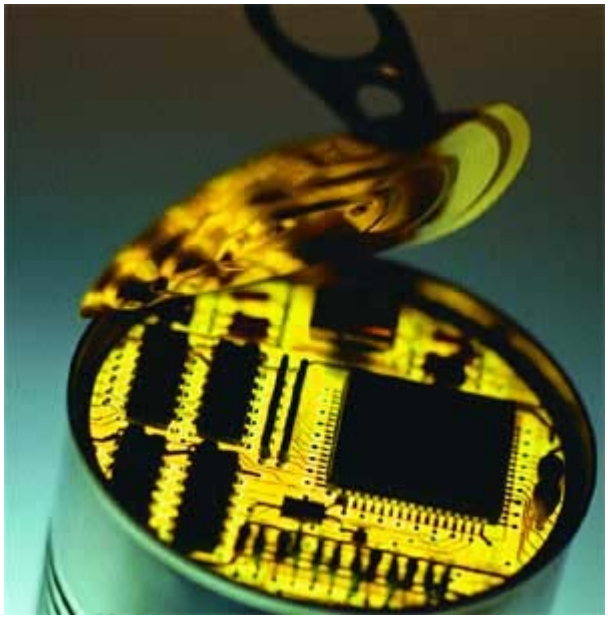
Collaborate



In today's uncertain business climate, it is unreasonably optimistic to predict significant near-term growth in any technology market segment. Such bullish proclamations are anachronistic relics of past technology euphoria. Yet, collaborative technology is in some ways uniquely positioned to benefit from the current levels of caution. Companies are looking to cut back on travel, and at the same time there is an increasing need for collaboration among far-flung business teams brought together not only because of increasing globalization but also in some cases out of economic necessity, with companies combining to share resources.

The new collaboration technologies

Third-generation technology. "I think that we are just about to enter a third generation of collaborative technology," says Bill Bruck, principal of Falls Church, Va., company Collaboration Architects (www.collaborationarchitects.com).

According to Bruck, the first generation of collaborative technology was driven by conference calls and e-mail and the second by online meeting technology and instant messaging. "The second generation of technology was, in my view, an extension of a traditional paradigm," he says. "If you extend conference calls by adding a slide show, there is no real new paradigm shift. Everyone is used to going to a meeting where a PowerPoint slide show is presented, so it's very easy to extend that into a Web-based meeting."

Bruck says that the industry is now poised, however, for a major paradigm change. "I think now in the third generation, we are at a turning point," he says. "Some problems have become apparent with second-generation technologies. Web meetings tend to replicate some of the worst practices of face-to-face meetings. For example, only one person can talk, so a meeting actually ends up being a broadcast. This replicates the hierarchical structure and does not leverage the

knowledge of all the people present. Also, there are often problems associated with trying to get everybody together at the same time. With online meetings, you've solved half the problem because everyone doesn't have to be in the same place, but everyone still has to be available at the same time."

In the third generation of collaboration, says Bruck, "People are recognizing that work is what happens between meetings. We are starting to see emerging technologies that are actually supporting the workflow processes, as opposed to just the periodic meetings."

Bruck says that his company is seeing a growing need for virtual work places where online project teams, e-learning groups, and business communities (or communities of practice) can meet. These work places need to be able to support cross-functional teams. "Many working groups today need to include a variety of personnel, such as representatives from human resources, information technology, business units, and possibly other vendors. Often many people are outside the corporate firewall, and if the company is big enough, even the in-house team may not share a server, but they still have to have a place to work."

We're entering the third generation of collaboration technologies, says Bill Bruck, Collaboration Architects.

Virtual work places are enabled by technology, but are not solely a technology issue, says Bruck. "You can build an e-community center," he says, "but if you don't have an e-basketball game in it, you are going to have an empty e-community center." He notes that for companies to implement virtual work places that actually function requires expertise in the human interactions that the work places are meant to promote. "One of the trends we are going to see is strategic alliances between organizational development, human relations, and information technology to actually make some of these human initiatives work," says Bruck.

Decentralization and local control

To predict the future of collaborative technology, says Ed Wadbrook, senior vice president of product management and strategy at Sonexis (Boston; www.sonexis.com).

"There has been a trend within so many different technologies, such as voice communication and then data communication," says Wadbrook, "in which systems initially grew out of very centralized, hierarchical structures to become much more decentralized. This shift from service providers to customer premises equipment (CPE) has been driven by lower total cost of ownership, security concerns, and the desire for control of a customer's strategic business tools. For example, over time phone systems went from a centralized environment-Centrex-to premise-based, private branch exchange (PBX) solutions. The data market took a very similar approach, if we look back to the evolution of e-mail.

"So as we look at the collaboration market space (both real time and nonreal time)," continues Wadbrook, "that same historical shift is occurring now. Audio conferencing goes back 20 or 30 years, and today, customers can go to some of the largest long distance companies and subscribe to a service. Now that service requires a subscription fee and usage fee, for which every user pays per user per minute for the duration of the conference call. This is not very flexible, because it doesn't integrate with your e-mail and calendaring system, and it doesn't leverage your existing telephone lines or wireless services for communicating meeting requests. It is a monolithic bridge, with a significant price premium attached, that people can use, but it lacks customization and security because you are beholden to someone else to maintain the security.

"In the Web conferencing space, that same type of centralized service model has been in existence for the last couple of years," Wadbrook says. "And now we are seeing that people want to move from a hosted environment to a local, premise-based implementation for conferencing, because it will drive greater economic returns, greater productivity, and more localization based on the end user/customer need. So we see that the advent of audio and Web collaboration coming together both in real time and nonreal time is going to be one of the fastest growing trends in the marketplace," he concludes.

Access and flexibility

Group Jazz (Washington, D.C.; www.groupjazz.com) specializes in face-to-face or online collaboration. Lisa Kimball, founder and executive producer, stresses that successful new collaboration technology will match how customers want to work.

"We should be looking for new trends in how people are working together in organizations and see where communications technologies can support those changes," says Kimball. "For example, the boundaries between teams, departments, functions, and even organizations are becoming more permeable to include all the stakeholders in a project. That means it no longer works to design collaborative environments that require participants to have proprietary software, because you may be working with people with different brands of computers, different kinds of access, and different desktop

environments. It doesn't matter how nifty the features are if all the users can't access them," she says.

According to Kimball, new technologies will not only enable workers to use the access methods that they choose, such as wireless devices, but will also "make it easier for us to move seamlessly between all modes of interaction. It should be a lot easier to write on a whiteboard or a napkin and scan that drawing into an ongoing online discussion or take key elements of an online discussion and pop them into a decision-support structure that can be projected on the wall during a face-to-face meeting. It's not so much that we need new technology features, but that we need the mechanisms to pull the disparate pieces together."

She also says that new technologies will be less dependent on large-scale implementation in the future. "More and more people are working independently and as part of small businesses. So the model where there's a big corporate information technology shop that is supporting a big technology infrastructure is irrelevant to them. I expect (and hope) that will mean more and more services aimed at this market," she says.

Trends affecting collaboration technology

Collaboration convergence. One major trend in the collaboration space is the beginning of a convergence among what had been separate collaborative purpose areas, says Soren Kaplan, cofounder and managing director of iCohere (Walnut Creek, Calif.; www.icohere.com). "I believe that there are four distinct domains coming together: knowledge management, collaboration, e-learning, and community," says Kaplan. "For example, many people in knowledge management now thoroughly understand that community is a major part of what's going to make organizations successful. Community is important in bringing out tacit knowledge, tapping into the huge amount of undocumented knowledge that's on people's hard drives. There are also widely discussed statistics suggesting that most organizational best practices actually reside in people's heads, and that most of what employees or business partners need to know to get their jobs done effectively is actually learned through informal interactions and mentoring rather than through formal training. So knowledge management is now incorporating community and collaboration as a way to capture this critical tacit knowledge.

"The challenge is going to be [that] different groups have different objectives and purposes for their existence. Companies will need to make sure not just that the technology is installed successfully but is also used in ways that support the goals of specific groups."

Strategic stumbling

Jonathan Spira is chief executive officer and chief analyst at Basex (New York; www.basex.com). The firm covers the market space it has named collaborative business knowledge, or the hub of knowledge management, groupware, expertise, document management, data mining, and community and idea management. Basex has for years pointed to three principles for successful implementation of collaboration.

First, says Spira, is friction-free knowledge management or "user environments where the actual work of knowledge management is transparent to the user." Second is the community which is seamlessly embedded in the user's environment. "A good example of this would be a search results page that might show an author or other users online available to speak," he says. The third Basex principle is the one environment rule, which, according to Spira, "predicts the likelihood of the success of a collaborative environmental initiative based on how well the environment allows the user to perform all the tasks and work without requiring the user to leave the environment."

One trend in collaborative technology that Basex is particularly interested in is the growing awareness of the value of bringing together people of disparate interests so that what Spira calls strategic stumbling can take place. Strategic stumbling, says Spira, occurs when unstructured communication results in important collaboration between people with complementary skills or knowledge.

Last May, as an example of such an investment in unstructured collaboration to uncover tacit knowledge. IBM held a 72-hour online event, called World Jam, attended by approximately 55,000 of its employees, to bring associates together to discuss issues that were important to the entire company. Spira, who attended the conference as an observer, notes that such a conference not only brought together the contributions of more people than would have been logistically possible physically, it also allowed users to experience the communication in a richer way than they could have if the meeting had been face-to-face rather than online. "Imagine if you were in the center of a huge stadium of people all communicating with each other, and you could hear each one distinctly."

Vertical services, horizontal commodity

Another trend affecting collaboration technology is an increase in the number of collaborative services providers that are focusing on particular industries, says David Coleman, founder and managing director of Collaborative Strategies (San Francisco; www.collaborate.com). "We're seeing more and more vendors taking a vertical approach," says Coleman.

"They are targeting specific industries, and they are hiring people from those industries. Even though they have a horizontal collaborative solution, many of them are beginning to understand that the greatest value for that solution is in some specific industry or process.

"Although Microsoft hasn't figured out its collaboration strategy yet-or rather, it has four or five of them at this point-eventually the company will enter this market and probably offer products on a commodity basis. IBM and Lotus will probably start doing the same thing. The big players with the deep pockets can do that. It's going to be very hard for anyone else to achieve enough profit margin at that point. It's going to be up to the other vendors to prove why customers should use their tools instead."

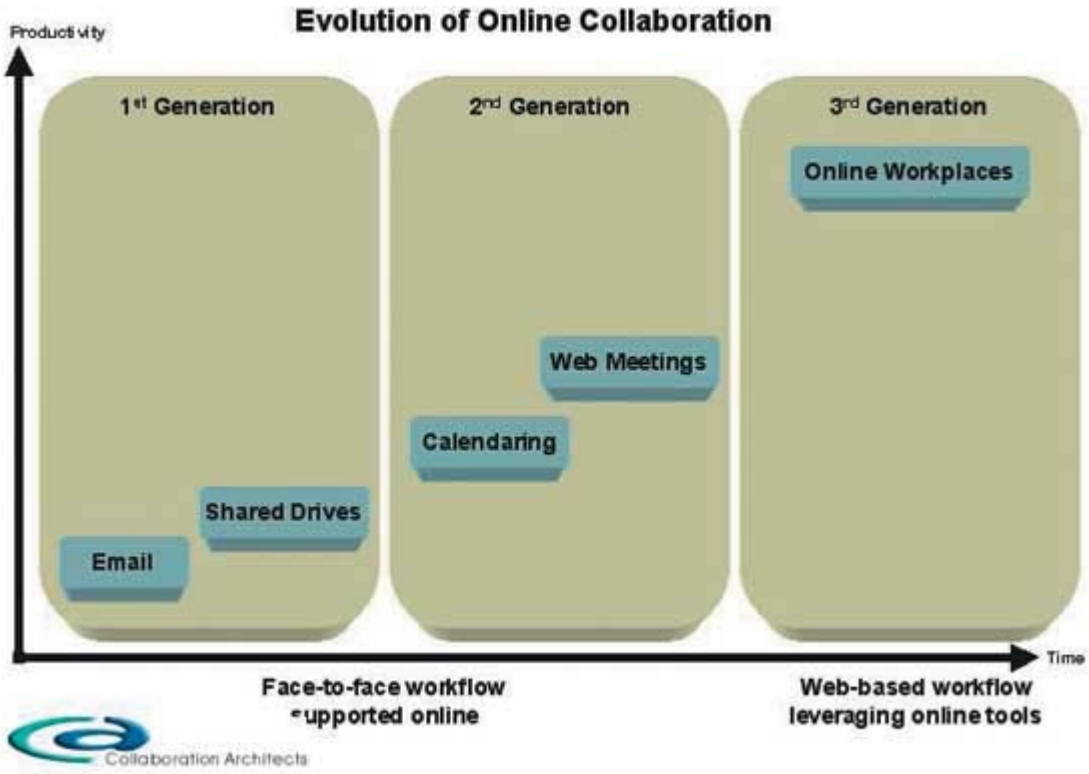
An excellent example of a Web-based collaboration provider with a vertical focus is Oridus (Fremont, Calif.; www.Oridus.com), a corporate solutions provider focusing its Internet collaboration technology on the electronics industry.

"We understand the specific requirements there," says Kuochun Lee, president of Oridus. The company began as a design services firm and developed its collaboration technology to meet its own needs for real-time communication with worldwide engineering teams, semiconductor companies, and foundries. Lee notes that many of the personnel involved in the design and manufacture of integrated circuits are globally located; therefore, the need for online collaboration is becoming an essential element in the design and manufacture of next-generation semiconductor chips.

Jingwen Yuan, director of business development, also notes that the electronics industry has particular requirements for collaboration technology. "For instance," says Yuan, "security is one of the most important concerns the electronics industry has when it comes to collaborating over the Web. Companies want to be assured their intellectual property is safe. As such, the Oridus solution must provide the highest levels of security, which means our software is integrated into the corporate enterprise server, behind corporate firewalls, so customers have complete control of data."

In addition, Oridus' collaboration technology must accommodate cross-platform communication between Windows and Unix systems, as well as be able to quickly and reliably exchange huge design files over the Internet and provide the ability to view this graphically intensive data simultaneously without screen lag time. Having the expertise in the electronics industry as well as in software development has been an essential part of Oridus' success in its market niche.

Despite the challenges and the current business climate in many industries today, there is much to look forward to in the collaboration technology arena. Industry experts agree that the adoption of core collaborative technologies, such as Web conferencing and virtual work places, is inevitable given the possible cost savings and productivity gains. Adoption is a matter of when, rather than if.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1st Generation
2nd Generation
3rd Generation
Online Workplaces
Web Meetings
Calendaring
Shared Drives
Email
Time
Face-to-face workflow supported online
Web-based workflow leveraging online tools
Collaboration Architects