IDC TECHNOLOGY SPOTLIGHT

Improving Productivity in the Connected Enterprise Through Collaboration

July 2011

Social Business Framework: Using People as a Platform to Enable Transformation by Michael Fauscette, Erin Traudt, and Mary Wardley, IDC #223862

Sponsored by Avaya

In the market for collaborative applications, a large convergence is beginning to take hold, and the consumerization of IT is central to this movement. The technologies that people use as consumers are impacting the way employees, customers, and partners want to interact and collaborate at work. People want to take the same technology experiences that are available at home and plug them into their daily work lives. This movement is setting worker expectations as both employees and corporate consumers. Workers need to have the choice and flexibility to consume the applications they want, where they want, and on their preferred device. Particularly, IDC believes that the industry is on a trend to combine key technologies, such as email, instant messaging (IM), team workspaces, video, voice, Web conferencing, and social features into a single "superset" environment for users.

Fueling this convergence are three key industry dynamics: the notion that everything is "now" and communications are happening in real time, the concept of being your own workplace due to the sophistication and proliferation of mobile devices, and the movement toward becoming a social business. The evolution of the collaborative applications landscape has emerged to serve the demands of today's dynamic business landscape — and it has certainly become a demanding landscape.

In today's business climate, people are more connected by the availability of Internet access and the tools and technologies that are supported. Contextual awareness, created by a combination of the integration of applications and services and real-time access to information, is enabling enhanced productivity and potential business transactions, anywhere on any device. By being connected, we have expanded our reach globally. Workforces are more distributed than ever before, and technology is making it easier for us to collaborate internally and externally. People have become more value conscious and service centric. Customers are demanding more business value that extends beyond just features and functionality. Customers also want a good customer experience, which, in many ways, is determined by the perceived value from a purchase, a service, and the support they received. Today, this is more of a requirement than an exception to the rule.

All of this is propelling a company's need to innovate and harness the knowledge, expertise, and feedback from key stakeholders, including customers, employees, suppliers, and partners, through social software.

This Technology Spotlight discusses collaborative applications and explores the role that Avaya plays in this increasingly important market.

New Collaborative Business Models

The enterprise is moving along in its change to a more flexible and agile social business, externally with both customer and partner initiatives and internally with new ways of empowering collaborative work. Hyperconnectivity is enabling new business model opportunities through pervasive video, social software, and context-aware applications (systems cognizant of an end user's location, device, time, calendar, actions, or activities to offer filtered answers or relevant information). Fueling

hyperconnectivity are the emerging cloud services model and the proliferation of mobile devices, which also support the cultivation of organic business networks. These organic networks connect people, data, content, and IT systems in a flexible, self-optimizing, self-configuring, and self-protecting system that can continuously adapt based on the business imperative.

In the new networked economy, businesses are realizing that people are the hubs that make the business work. Connecting people has never been easier with the proliferation of new mobile devices from smartphones to tablet computers and increasing broadband speeds. Web 2.0 social tools and the hyperconnected workforce are eroding many old work paradigms ranging from work "location" to work "hours."

The virtual workforce trend is gaining momentum, from both a company's desire to get the best talent with the least downside exposure and the workers who are enjoying the increased flexibility and freedom. The nature of sourcing the work is also changing. Project-based work is natural for the virtual workforce (or labor-as-a-service model) and effectively gets high-quality talent engaged in critical project tasks. Even highly repetitive task-based work is finding online support from business models that allow sourcing work at the task level.

If businesses, in reality, are becoming the network and people the critical hubs, the workforce needs to have the following attributes:

- Flexible model (direct employee or contract; task based, project based, or position based; various pay models such as pay for task, pay for project, salary, performance based, etc.)
- Location ("work where you are" models, when appropriate) and time neutral (in a global business environment, time and time zones will be under stress, and businesses will look for employees to work when it makes "sense")
- Communication (a cost-friendly and integrated experience containing video, voice, and/or Web conferencing solutions accessible via the desktop and mobile devices)

In this kind of environment, the workforce needs to utilize various technologies to stay connected to one or several business networks. In addition, the workforce needs to utilize Web 2.0–like people-centric collaboration tools and techniques to increase productivity and engagement.

Collaborative Applications: Definitions

Collaborative applications enable groups of people to work together by sharing information and processes. IDC's specific definitions of collaborative applications markets include the following:

- Integrated collaborative environments (ICEs) provide a framework for electronic collaboration, typically within an organization, based on shared directory and messaging platforms. The core integrated functionality areas are email, group calendaring and scheduling, shared folders/databases, threaded discussions, and custom application development. Administration and customization are generally performed by centralized IT staff. This market also includes those applications designed specifically for collaborative applications to provide enhanced capabilities such as workflow and imaging.
- Messaging applications consist of a number of subsegments. Standalone email applications provide a platform based on a message store, a message transfer agent (MTA), a directory, and access protocols for use by enterprises or service providers to host email users over a local or wide area network, the Internet, or a dial-up connection. Instant messaging applications provide instantaneous text messaging between users who are online. Instant messaging management products are deployed in conjunction with an EIM application server or service to provide enhanced management, mobility, security, connectivity, or regulatory compliance. Unified

messaging applications provide a single mailbox for email, fax, and voice messages accessible by PC, Web browser, and telephone.

- Team collaborative applications (TCAs) provide an integrated set of Web-based tools for structured, content-specific collaboration among team members from one or more organizations with known domains. The core integrated functionality areas are shared workspaces for managing and sharing information in documents, assigning and coordinating tasks, and maintaining other project and team content. User and workspace administration, configuration, and customization are generally performed by individual users. Communication within the TCA environment is mostly asynchronous, B2B, and closed to a specific set of eyes.

- Conferencing applications provide a real-time connection for the exchange, creation, and viewing of information by two or more users during scheduled or spontaneous online meetings or events. While Web/data conferencing is the focus, audio- and videoconferencing functionality is often integrated in "unified communications" products and services.

- Social platforms emerged based on the recognition that people — customers, employees, business partners, and suppliers — are businesses' most valuable assets and require informal, unstructured, easy-to-use communication tools that scale beyond a team for enhanced productivity. Social platforms are centered around, but not limited to, social networking applications that allow people to connect, share, and interact on the Web around a common goal or interest. Social platforms also leverage other Web 2.0 tools such as bookmarking, blogs, microblogs, idea/voting applications, ranking engines, RSS, tags, wikis, and so forth for people-centric collaboration and communication. Social platform software is characterized as promoting transparent and authentic two-way dialogue that is open, synchronous, and unstructured. Most providers in this market offer hosted solutions that leverage a viral selling model and an ecosystem of third-party application developers.

Benefits of Collaborative Applications

In today's business environment, there is a recognition that people and businesses collaborate in different ways. A social business enables a choice in communication methods among today's workforce, where how people work and interact, not the technology, is at the center of the conversation. Among the benefits of a social business approach are:

- Deeper relationships with internal and external stakeholders
- More transparency inside and outside the organization
- Higher productivity among employees
- Increased organizational agility, engagement, and decision making

Companies can also realize benefits from implementing various collaborative applications. For example, customers, employees, partners, and suppliers all have increasing demands on their time. The ability to connect online and over the Web with conferencing applications that blend voice, video, and screen sharing capabilities lends itself to enabling increased productivity as well as efficiency.

As more companies bring together integrated collaboration experiences for customers that include email, IM, Web conferencing, presence, and video, as well as social content and conversations into a single environment, benefits such as enhanced productivity and improved decision making can be realized.

Conferencing applications in particular have both tangible and intangible benefits, including the following:

- **Lower travel costs.** With conferencing applications, attending a meeting physically is no longer required. This saves not only monetary costs associated with traveling but also time, which allows meeting participants to be more productive.
- **Data and information access.** Instead of waiting for files to be sent via email, end users can use screen sharing features to view, create, and collaborate on content.
- **Consistent understanding.** Since conferencing applications can be used in a 1:1 session or multiparty sessions, they allow individuals and groups of people to absorb and interpret the same information at the same time, helping comprehension.
- **Contextual awareness.** Collaboration tools are poised to fundamentally change the nature of how we interact with and relate to each other and how we use communications devices and the services they provide. Context-aware experiences include integrated histories, contacts, and networks of shared documents. This experience provides participants with the information they require during a collaboration session based on who is in the session. The experience will anticipate needs and guide users through their day in a manner more akin to a personal assistant than a traditional computer.

Market Trends

In a hyperconnected global business environment, competition is more unpredictable and more diverse. The impetus for innovation is stronger in this new competitive environment as well. Not only the market factors and dynamics but also the people are different. The social Web has changed customer, employee, supplier, and partner expectations and is shaping a fresh way of interacting. As interaction is redefining online relationships, innovative methods of communication and collaboration have emerged.

Connectivity of both business and people is simply the backbone of the new economy, opening up all sorts of new opportunities for companies. The social Web, with its new relationship and interaction models, is a result of this connectivity. The growth of mobile as a business "desktop" is a result of connectivity and also an enabler of increased connectivity. Context-aware applications that react appropriately to the real-time context of their use are helping to streamline business process and/or transactions by using location and user information to push relevant content and data. People-centric networks that connect people with each other, with content and data, and to technology are the key drivers of business change, and they need to be at the core of the new socialized enterprise software that will be required to enable managing and operating an organic business network.

With the rise in distributed workforces and ability to access information in real time, conferencing solutions offer a natural extension to applications being offered on mobile devices. IDC believes this is a key trend to watch as these devices are starting to become the new enterprise desktop.

Considering Avaya's Business Collaboration Suite

Avaya Inc. is a global provider of enterprise communications systems with headquarters in Basking Ridge, New Jersey. The company offers unified communications, contact centers, data solutions, and related services to businesses and organizations of all sizes around the world. Avaya's business applications are designed for people-centric collaboration and aim to change the way companies work. For example, employees can use personal devices to collaborate via audio, Web, and video to speed ad hoc collaboration. Four Avaya offerings work together to provide a people-centric collaboration solution: user experience, multimodal conferencing capabilities, presence services, and integration capabilities. Bringing it all together for users is the Avaya Flare Experience, which includes desktop video, social media access, audio/video/Web conferencing, multiple directories, presence, instant messaging, and contextual history. It is designed to eliminate the need to use different

interfaces and directories when communicating across various types of tools. The Avaya Flare Experience leverages the SIP-based Avaya Aura communications platform to deliver improved real-time, multisession, and multimodal communications to desktops and mobile devices. The Avaya Flare Experience will be available on a variety of third-party devices as well as the Avaya Desktop Video Device (a high-definition video and high-quality audio touchscreen interface).

Working behind the scenes is Avaya's integrated multimodal conferencing application that brings high-definition video, audio, and Web conferencing capabilities to personal devices. Video-enabled Web conferencing offers slide show presentations and document-based collaboration, application and desktop sharing, as well as video streaming. Integration with Avaya and third-party unified communications applications allows the use of desktop/mobile applications and interfaces for increased conference control.

Avaya Aura Presence Services is a foundational element utilized by Avaya and third-party applications to collect and distribute presence information and IM capabilities throughout an enterprise to enable more efficient collaboration among employees. Presence is offered as a core communication service that can be integrated into basic information worker applications such as conferencing. The standards-based solution is designed to stand on its own or can complement and extend other IM and presence engines such as Microsoft Office Communications Server or IBM Lotus Sametime.

And finally, making sure applications work with existing communication systems is Avaya Agile Communication Environment (ACE). This CEPB software is designed to simplify and accelerate the integration of multivendor communications systems with business applications through a set of packaged applications and developer toolkits. ACE embeds communications activities within any standards-based Web services application. According to Avaya, this solution allows organizations to streamline collaboration, CRM, and other people-centric processes using existing communications environments. As such, ACE can help organizations protect and extend their investments in existing communications systems.

Challenges

Although the convergence toward a more integrated and unified collaboration environment is under way, the blurring lines may cause some confusion among current and prospective customers in regard to what they need, how to leverage the investments already made, and how to make the transformation into a more social business. Transition and adoption take time, and therefore success stories and proper use cases will be necessary to help organizations complete their vision.

Providing a seamless and intuitive experience for customers as they consolidate their technology investments and collaborate across different devices, applications, and communication methods is critical for success. Areas that can adversely affect end-user experience include, but are not limited to, bandwidth, connectivity, user interface and design, business application access/integration, as well as support for multiple devices. Demonstrating the value and ROI of product investments in a weak economy is essential as organizations rationalize spending.

Conclusion

Collaboration tools, applications, and environments are evolving to serve today's demanding business landscape — one that emphasizes hyperconnectivity and fast decision making. In conjunction with the need for connectivity and anywhere/anytime collaboration, integrated unified communications, collaboration, and social platform technologies are emerging to facilitate people-centric business environments.

As organizations seek to streamline collaboration both internally and externally with partners and suppliers, they are looking to deploy technologies that make collaboration seamless. In many cases, these technologies must integrate with existing technologies and must allow communications across different devices and applications.
