

Communication and Collaboration: Cisco on Cisco

Rich communication and collaboration capabilities empower employees to focus their collective talents on the challenges of the business. Optimally, implementing rich communication and collaboration capabilities requires technology and business architectures that are open and flexible, while preserving security and stability. This paper examines how Cisco IT is executing a communication and collaboration strategy to improve productivity, capture growth opportunities, and accelerate innovation.

Business Trends Demand a Cohesive Architecture Strategy

Every organization is affected by dozens of simultaneous business and technology trends, and many view improving communication and collaboration as a critical way to manage the effect of these trends on their businesses, as well as to take full advantage of the opportunities that rapidly shifting markets offer. Their goals include:

- Supporting globalization: Whether expanding locations, sourcing products or services, or protecting existing market share from expanding global competitors, organizations must connect with employees, partners, and suppliers around the world.
- Scaling to speed: Businesses seek ways to manage constant change, improve their competitive responsiveness, and better take advantage of new opportunities. One way is through enabling delivery of real-time information to people who need it, and another way is to minimize or eliminate geographic and time-zone barriers that delay decision making and strategy execution.
- Empowering employees: Businesses are challenged to meet the employees', customers', and partners' rising expectations created by widespread use of Web 2.0 technologies while simultaneously coping with the associated complexity, support, security, and compliance concerns these technologies bring to IT.
- Minimizing the Impact on architecture: Businesses expect their technology infrastructures to support their business needs optimally. Today's trends significantly affect the way IT groups align their technology architectures with the business's architecture. Globalized operations now require 24-hour connectivity. Many organizations are evaluating consumer technologies, such as Web 2.0, wikis, blogging, and social networking, to empower employees and improve communication.
- Adjusting to new forms of content that require infrastructure adaptation: Email messaging still carries the majority of most companies' communications, but many are finding that overloaded inboxes actually reduce employees' communication effectiveness. In addition to email messages, employees now must also manage high volumes of content from presentations, wikis, blogs, discussion forums, instant messages, business records, and videos—all of which demand more from a technology infrastructure. As businesses seek ways to meet their goals, they must also find new ways to enable, manage, and simplify content.

- **Supporting mobility:**As employees become more mobile, so does the content they use. Businesses must deliver services, access, data, and communication capabilities anytime, anywhere, and to any device. They must also retain quality of service and security as business is conducted within and across organizational boundaries.

Cisco Strategy for Communication and Collaboration

- Expanding communication and collaboration is instrumental in enabling Cisco to achieve its productivity, growth, and innovation goals. From an IT perspective, a communication and collaboration strategy can deliver a consistent experience for highly mobile, empowered users on any of the devices they use. It promises to unify collaboration silos and simplify usage. And it can simplify client device management. The Cisco strategy for expanding collaboration is to create the Cisco® Workforce Experience, which:
Connects people to the right resources: To find a specific person or piece of content without having to spend minutes (or hours) searching
- Enables more effective and efficient communication: Providing access to the right information so that employees do not have to send out yet another PowerPoint presentation or superfluous email messages, or receive dozens of messages and content items that are not directly relevant to their tasks
- Supports internal and external collaboration: Extending the reach of employees across Cisco, as well as to external suppliers, customers, and partners; improved collaboration is also expected to fuel continuous improvement and innovation, as well as improve business processes and the user experience.

The Cisco Approach

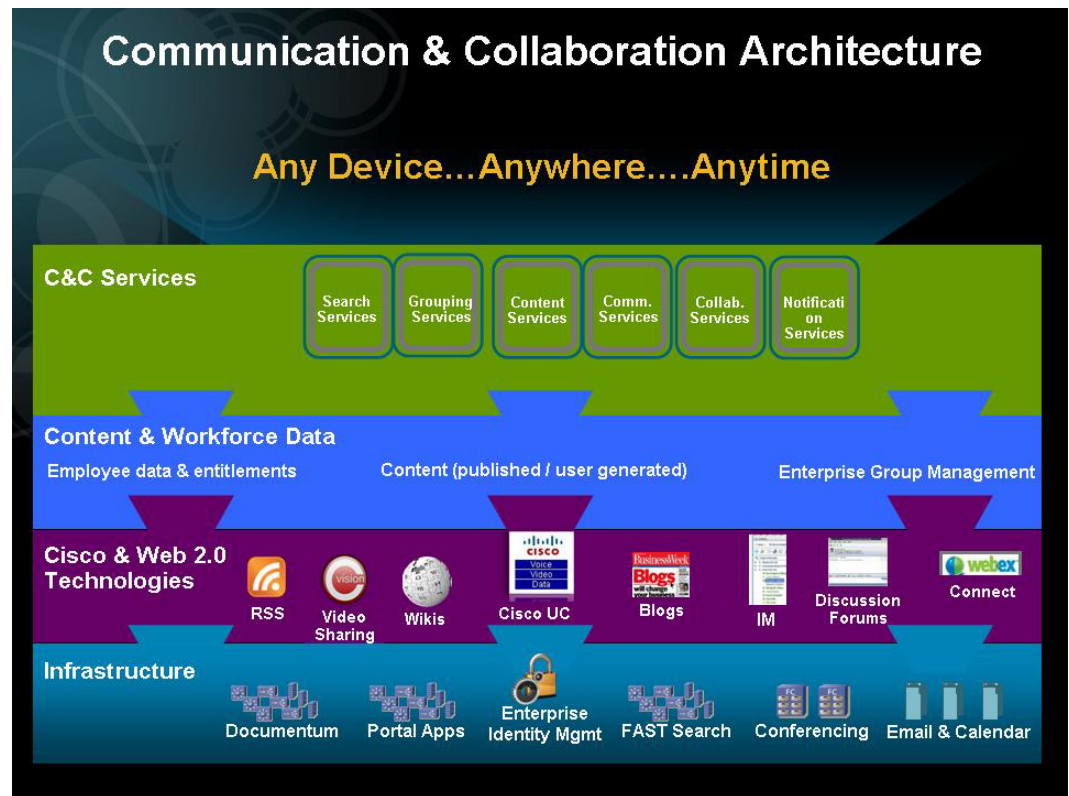
Unlike a traditional IT approach of developing a long-term project plan, Cisco recognizes that implementing a communication and collaboration strategy requires a fluid, try-it-as-you-go-along approach. Cisco is beginning its efforts to deliver an integrated workspace experience by innovating with current tools and improving their value as quickly as possible.

Taking the First Step

Numerous communication tools are already being used within Cisco. To improve efficiency and effectiveness, Cisco IT aims not to deliver more avenues of communication or more desktop tools, a scenario that inevitably leads to overlapping functions or “collaboration silos.” Instead, Cisco takes an architectural approach to improving communication and expanding collaboration so that innovation can occur across the company with the proper security and compliance measures established. We aim to answer the following questions (Figure 1):

- How can you help me communicate and complete my work?
- How can you help me find people that I need?
- How can you help me collaborate in small groups?
- How can you help me share with the world?

Figure 1. Cisco IT Communication and Collaboration



Identifying Critical Capabilities

Cisco began evaluating its communication and collaboration needs from a big-picture perspective and then looking for solutions that fit. For example, the Cisco IT Architecture and Technology team began by identifying:

- Results the company wants to accomplish
- Tools that are already in place
- Logical groups of tools and the capabilities each group delivers
- Gaps to discern which additional capabilities are needed
- Overlapping or redundant functions

For example, when Cisco was evaluating potential collaboration tools for sharing documents, one group within Cisco IT identified a solution that included an IM capability. At the same time, the team responsible for the Cisco internal IP telephony infrastructure was planning to launch a next-generation softphone client that also included IM features. The Cisco IT Architecture and Technology team identified the overlap, which if not identified would have resulted in deployment of multiple IM clients and ultimately, IM silos with separate groups of users who could not use the same IM client to send instant messages to anyone outside of that specific silo.

Architecture Fosters Innovation

Traditionally, the IT organization is responsible for determining long-term direction and supporting critical enterprise systems. At Cisco, enterprise architects play an important role in fostering innovation within Cisco so that emerging solutions have the opportunity to demonstrate their potential value. For example, wikis began at Cisco being hosted on a server under an employee's desk. In a short period of time, usage escalated and the enterprise architecture team became involved to help ensure that the server was properly secured. As usage skyrocketed, it became clear that this type of collaborative solution could deliver business value. Eventually Cisco purchased an enterprise-grade wiki solution that today hosts more than a million edited pages.

Essential Elements of the Cisco Workforce Experience

Cisco relies on the network as a platform for its communication and collaboration architecture. Layered on top of this foundation are Cisco communication and collaboration application service elements, Web 2.0 tools and technologies, content and workforce data, and business applications and services.

Figure 2. Evolution of the Cisco Workforce Experience)



The Network as Platform

Cisco uses its internal enterprise network as a platform for delivering communication and collaboration services and using resources effectively. Security policy is implemented as a network-based service, providing a flexible, context-aware model that supports Web 2.0 applications. Network-based policy optimizes policy information, administration, and enforcement, eliminating the need for these features to be built into each application, resource, or workspace. It also simplifies

user access to resources, applications, and workspaces, eliminating the need for them to “police” every aspect of how they use information.

Enabling Communication

Cisco bases the Cisco Workforce Experience on Cisco Unified Communications Solutions, using Cisco WebEx® Connect to provide the business process-specific presentation layer. Ultimately, users will be able to personalize their own workspace, but such team workspaces will provide a hub for making all of the Cisco Unified Communications, Cisco Unified MeetingPlace® conferencing, and other capabilities accessible to users.

Other Cisco technologies that enable employees to communicate and complete their work more effectively include instant messaging and presence services. Employees can enhance collaboration by sharing presence information and instant messages, as well as communicate with available subject matter experts anywhere in the company.

Finding People and Expertise

Web 2.0 capabilities play an important role in Cisco communication and collaboration. Cisco is using social networking capabilities in Cisco Directory 3.0, which provides contact and profile information for Cisco employees and partners. Users can quickly locate individuals with specific expertise, find contact and location information, determine the person’s availability, and direct visitors to other resources.

Enabling Small Group Collaboration

Another important tool for employees is the wiki. Wiki creation and interaction is active. In less than one year, approximately 130,000 unique wiki pages and 1.2 million page edits have continuously improved available content. Cisco continues to track wiki metrics, such as number of pages, users per day, frequency of use, length of use, and pages changed to monitor growth. One way that wikis are contributing to company growth and innovation is through the Cisco innovation wiki, called the I-Zone. Registered users can post new product development ideas on I-Zone for discussion and vote for ideas they like. Cross-functional teams filter the ideas received to identify those with potential for new projects. In one year, the I-Zone wiki received more than 400 contributions, and more than 30 ideas have reached project stage.

TelePresence also plays an integral role in Cisco collaboration around the world. As of 2008, more than 250 Cisco TelePresence® units are installed in 30 countries. More than 30,000 meetings have been held, allowing participants to avoid travel and, as of October 2008, saving US\$200 million in productivity normally lost in travel time. Use of the Cisco TelePresence application is expected to improve productivity by \$42 million, reduce the sales cycle by 5 days, and improve training to avoid more than \$20 million per year in Cisco Technical Assistance Center (TAC) escalation costs.

Sharing Information with the World

Video usage has accelerated at Cisco as many employees find it to be an excellent medium for spreading knowledge. Video messages from executives, product tutorials, interviews, support information, demos, and a wide range of other topics are available on C-Vision, the Cisco internal video portal. C-Vision was originally identified as a tool for employees to self-publish videos and help each other find solutions to technical challenges. The Cisco video solution is a thriving environment that now hosts more than 60,000 videos that span a wide range of technical and

personal interests. In an increasingly complex technology environment, short training videos have become an essential tool for focusing sales efforts on critical differentiators.

Next Steps

Cisco continues to integrate content, communication, collaboration, and processes into the Cisco Workforce Experience. For example, currently much human involvement is required to identify relevant content, search for specific information, and deliver it to the people who want it. The goal of the integrated workspace experience is to automatically provide each user with relevant information, data sources, and powerful search capabilities based on their identity, roles, and preferences. Content and identity management technologies will play a critical role in enabling a truly personalized workspace experience.

Applications and Services

The integrated “mashup” workspace experience will eventually include applications and services accessed as widgets from each person’s personal workspace. This universal presentation layer will eliminate having to make significant changes to the enterprise applications themselves, while streamlining workflows and unleashing new levels of productivity. Business processes can become more flexible without users having to learn new ways of working.

Summary

Communication and collaboration capabilities will play an integral role in enabling Cisco to achieve its business goals. By aligning its current tools, required capabilities, and unique technologies with a roadmap, Cisco can deliver the integrated workspace experience that will give employees and partners exceptional convenience and access to the individuals and resources that they need.

For additional Cisco IT case studies on a variety of business solutions, visit “Cisco on Cisco: Inside Cisco IT” at: <http://www.cisco.com/go/ciscoit>.



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