New APIs and cloud services are helping IT departments keep technical complexities from derailing real-time communications.

Of all the moving targets at which IT managers must take aim, collaboration is among the toughest to hit. The consumerization of IT is fueling an upheaval that presents major challenges to IT departments. Users routinely enjoy impromptu video chats, phone conferencing and instant messaging via their personal computers and portable devices. Naturally, they expect the same types of services from corporate IT resources. But what these digitally savvy users may not understand is that something that looks as simple as frictionless collaboration is actually complicated to pull off.

Technology managers must first make fundamental choices about what collaboration capabilities to deploy, how they coexist with current data and telecom networks, and ultimately how to smoothly integrate all the pieces so real-time collaboration doesn’t get derailed by technical glitches.

Fortunately, collaboration capabilities are becoming easier than ever to deploy, thanks to sophisticated application programming interfaces (APIs) and flexible cloud platforms. With the right combination of these resources, IT managers can successfully balance user expectations with digital realities.

Great Expectations
End users are particularly vocal about their technology needs when it comes to collaboration services. “If it’s not simple to use, they just won’t use the applications,” says Tim Banting, principal analyst for collaboration and communications at Current Analysis. “Without widespread adoption, organizations won’t see a full return on their investment in collaboration solutions.”

To learn more about CDW Cloud Collaboration, check out our video at cdw.com/CloudCollaboration.
Ease of use isn’t the only concern. Individual job roles and responsibilities are also important factors. For example, users in sales and organizational development may prefer tools with strong video and screen-sharing capabilities, while members of a technical documentation team may want programs that let them work together to create and edit documents. “There isn’t a single platform that can make everyone happy, which ultimately means that important segments of users worry that they won’t be able to use the optimum communications and collaboration channels for their needs,” says Ken Snyder, practice lead for collaboration at CDW. “On the surface, it sounds like it would be impossible to give everyone the tools he or she prefers and somehow still enable everyone to collaborate in a frictionless way.”

Other problems arise if users circumvent officially sanctioned collaboration tools in favor of consumer-oriented alternatives via the web. “That creates a huge security hole in addition to potentially violating compliance with regulations such as the Health Insurance Portability and Accountability Act or the Sarbanes–Oxley Act,” Banting adds.

The flipside, however, is that successful collaboration deployments can be powerful, especially when they bring together peers, end users and partners. “If every interaction has the ability to take two people from text to audio to video to desktop sharing to pulling in a group of people, everyone would start using collaboration tools more often,” says Bill Haskins, a senior analyst at Wainhouse Research who focuses on unified communications. “In many organizations, there’s a latent need for that collaboration.”

Innovative new services may result. For example, a representative in a bank’s contact center can use a video chat to help a customer apply for a new mortgage. If a question about the terms of the contract arises, the rep can bring in a loan adviser to resolve the issue on the spot. “That’s a huge customer service benefit,” says Banting. “In the past, the question may have gone into some internal workflow system, and a couple of days later, if you are lucky, someone would have responded with an answer.”

Modern collaboration systems also can help companies stay in closer communications with partners and suppliers in extended supply chains. “Joining all those organizations together can help bring new products to market more quickly,” Banting says.

Real-time video and information sharing could also help human resources managers find new talent. “If I can conduct vetting interviews with someone via video, I have a higher probability of identifying qualified candidates who warrant more in-depth discussion,” says Haskins.

Integration Made Easier

But understanding the potential benefits of frictionless collaboration is only the first step. IT departments must address some underlying technical complexities to create a truly collaborative work environment.

Help can come from a growing list of APIs designed for integrating tools and extending collaboration services. “Open APIs are having a significant impact by shifting the collaboration market from traditional, large-footprint applications to a world of smaller apps that organizations can link together to create activity streams,” Snyder says.

“The APIs are making it much easier for vendors to bring to market specific types of productivity tools to solve the needs of individual organizations, while also enabling them to plug into a larger collaboration environment.”

Examples include the Microsoft Unified Communications Managed API (UCMA), which organizations can use to create collaboration and communication services that run on the Microsoft Lync platform. It includes an endpoint API that supports the Session Initiation Protocol (SIP), an industry standard for unified communications.

The Google Drive Realtime API provides collaboration as a service for files in Google Drive. The API is a JavaScript library with collaborative objects, events and methods for creating collaborative applications.

The Cisco Hosted Collaboration Solution includes APIs that enable developers to extend the platform’s core collaboration services. For example, the Cisco AJAX XMPP Library is a content library based on the JavaScript Extensible Messaging and Presence Protocol client library that can integrate instant messaging, availability and related services from Cisco Unified Presence to corporate web-based applications.
A second integration booster comes from cloud services. Clouds are helping organizations speed deployment of collaboration services while expanding the options at their disposal, says Mark Royle, marketing manager at Cisco. For example, a bank can use a cloud service to quickly launch collaboration for a collection of branches it acquires in a new geographical area. Later, bank executives can gradually roll out on-premises applications and endpoints in the new branches if that becomes the best way to reduce operating expenses and provide richer user experiences, he says.

Of course, the cloud offers numerous other benefits, such as allowing IT managers to pay for a feature-rich collaboration solution over time as an operating expense rather than incurring huge up-front capital costs for new hardware and software. Cloud solutions also can scale up or down quickly based on demand. “If, instead of going to the cloud, I buy a telephony solution equipped to support 1,000 office workers, I will face sunken costs if suddenly 50 percent of these people start working from home,” Bunting says. “Conversely, if the staff increases, I’ll see additional capital expenses and implementation costs.”

Cisco recently announced a new solution that combines cloud and on-premises technologies. Its Collaboration Meeting Rooms give users video collaboration spaces in the cloud. Attendees can connect with these rooms using a variety of devices, ranging from a Cisco telepresence video endpoint to many other standards-based endpoints and desktop or mobile clients, including Cisco’s WebEx system, says Wade Hamblin, director of product management in Cisco’s Collaboration Infrastructure Business Unit. Collaborators also can use Microsoft Lync to join a meeting.

Jive Communications uses Jive Cloud to deliver hosted Voice over IP and unified communications. According to the company, Jive Core provides enhanced telephony features, such as call transfer, dial-in conference calling and call queues.

**End-user Insights**

With the help of APIs and cloud services, IT managers have new options for creating frictionless collaboration. But many still wonder exactly what services they should deploy. How can organizations determine exactly what solutions they need to create a foundation for frictionless collaboration? Evaluating technology shouldn’t be the first step. “You can chase lists of features and bells and whistles all day long among the various products on the market,” Snyder warns. “But it’s difficult to identify what solutions are relevant to your organization until you clearly understand your specific needs.”

The best starting point is to perform an assessment either with in-house resources or outside experts. The goal is to identify use cases and organizational objectives that will be best served by enhanced collaboration. Experts also say the best way to determine actual requirements is to directly ask users what they need to be more productive. “Ride-alongs” can also be revealing. “End-users may not fully understand what’s available to help them collaborate more effectively,” Haskins says. “But if people from the IT department shadow end-users as they do their jobs, they’ll be able to see what technology can best serve their needs today and tomorrow.”

Then, look for solutions from multiple vendors that can be easily linked together to meet users’ collaboration requirements, Snyder says. “For example, because of CDW’s extensive vendor ecosystem, we can deliver a total collaboration experience by bringing together best-of-breed components,” he explains. “And we’re able to do that more efficiently than ever because of today’s wide range of open APIs.”

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**A FRAMEWORK FOR EFFECTIVE COLLABORATION**

CDW offers a unique option for enterprise–level collaboration services that combines the best of cloud and on-premises solutions. IT managers can choose cloud or hosted deployments and benefit from CDW’s secure, state-of-the-art data center that uses innovative Cisco technologies. With CDW’s Cisco–certified engineers managing the environment, technology departments can focus on other IT initiatives.

The flexibility of CDW’s resources, which support more than 4,000 unified communications deployments, delivers a range of benefits including:

- **Scalability:** Organizations can quickly adjust capacity according to current demand.
- **Deployment on demand:** Managers can provision services quickly.
- **Manageability:** Organizations are freed from the responsibility of upgrading, administering and troubleshooting collaboration systems.
- **Cost efficiency:** Hosted and cloud–based services are predictable operational expenses that make budget planning easy.
- **Innovative technology:** Cisco is one company at the forefront of innovations in collaboration solutions.