

The Unified Communications Playbook

Getting the Most Out of UC Features



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Introduction

Unified Communications, or UC, has no official or even widely accepted definition. Pundits, analysts and journalists all have their own descriptions. So do vendors – theirs just happen to fit their own products perfectly. But this lack of consensus doesn't mean the term is meaningless. In fact, unified communications is a complex but very real phenomenon. And this phenomenon has the potential to radically improve businesses' ability to communicate.

It all starts with the fact that companies these days have lots of communication methods at their disposal. These range from ancient to advanced. At the historic end of the scale lie voice calling, fax and e-mail. At the more contemporary end are instant messaging, screen sharing, video conferencing and beyond. The list is lengthening rapidly due to the continuing invention of new ways to use Internet-related technology to communicate. The problem is that many of the methods were originally developed as independent or standalone applications and services. But if many or most of them can be somehow made to work together, the benefits can be enormous.

Telephony now works just like most other internet-based communication methods

The fact that almost all of these communication tools run or can run over IP connections makes that increasingly feasible. And vendors and providers are making increasing efforts to make it happen. As a result, business communications tools are increasingly integrated rather than independent. Or to use a more marketing-friendly term, they are increasingly unified. This trend opens the way to all kinds of advances in how businesses do business.

One of the most important advances is in how employees communicate by voice. VoIP and related technologies already represent a major step forward in voice communication. Telephony is no longer a self-contained system with an antiquated access method described by the even more antiquated term "dialing" (telephones no longer even have dials). Today, users may never see other people's numbers except when entering them in a contact list or address book. Modern calling is all about clicking or tapping on names, and about graphical interfaces. In other words, telephony now works just like most other Internet-based communication methods.

IP technology makes it easy for voice communication to work with all those other methods. It also makes voice just one of a variety of methods to choose from, leveling the communication landscape to a significant extent. Users can opt for the method that's most suitable for a given situation, whether it involves voice, text or images, and whether it's a real-time or best-effort medium. They also can – or should be able to – switch from one method to another with relative ease. That's much better than having to quit one method in order to start another.

UC has a similar effect on all kinds of communication methods. What once might have been a complete application, service or tool in and of itself tends to become just one feature in unified communications systems.

This paper lists a variety of such features beyond voice to look for in shopping for a UC system. Some represent sets of functions that commonly come already integrated. Others are established communication methods that UC turns into features. Others are merely functions that make other features more effective. But in all cases, they are something to ask prospective UC providers about.

1) Unified Messaging

Think of unified messaging, or UM, as sort of the ancestor of UC. In its basic form, it makes voice mail, e-mail and fax messages available through the same inbox or interface. It can provide multiple ways to receive these varied messages through multiple devices. Users may, for example, click on inbox items to listen to their voice mail. They may read a transcript of their voice mail delivered as e-mail via speech-to-text transcription. Conversely, they may listen to their e-mail delivered via text-to-speech audio. One characteristic of UM is that it is not about real-time communication. UC, by contrast, mixes real-time and non-real-time communications.

2) Instant Messaging

You might think instant messaging would be part of the unified messaging category. It is a kind of messaging, after all. And it's one of the most popular, useful and convenient forms of communication around. But as the previous section indicates, IM is not generally part of unified messaging offerings.

That doesn't diminish its importance in UC, however. In fact, it is a key component in many if not all UC solutions.

There are a variety of differentiating factors to watch for in an integrated IM system. One is the ability to escalate to audio or video calls or conferences from within an instant message, or at least from within the IM interface. Another is whether it works with other IM systems such as IBM Sametime, Microsoft Lync, AIM and Google Talk, which the use of XMPP (Extensible Messaging and Presence Protocol) makes possible. A third is whether the IM application is part of a more comprehensive integrated UC interface, or operates separately. Yet another is how many platforms it can run on, including different types of PCs and mobile devices.

3) Presence

Presence, sometimes described as presence or availability detection, lets users know when and how others are available to communicate. And though it's not a communication method itself, it is a capability or feature that makes other communication methods more valuable. The more features in a UC system have the ability to display or take advantage of presence information, the more value it adds. As such, it is a key source of the productivity improvement that UC provides.

Presence is especially useful when applied to voice. With conventional calling, you only find out whether someone is available to talk after you have dialed. That's when you get either an answer or a business signal. You can end up playing phone tag all day. With presence awareness, you know whether they're available before you call. So you only call them if you know they're free. The result is a huge reduction in wasted time and effort. Thus although presence originally gained widespread appreciation as a feature of instant messaging services, it is if anything more valuable in voice communication.

The application of presence to UC raises a lot of issues to consider. One is what kind of presence information it provides about users in each of features it works with, whether voice, video and instant messaging. Does it show just whether they are online, or does it provide details such as whether they are on a call or away from their desks? Does it detect the availability of, and display availability information to, users on mobile devices? Does it take calendar information into account in determining users' availability? Does it allow users to specify levels or times of availability? For example, does it provide a "Do Not Disturb" function that lets them block all incoming communication, manually or according to

time of day, day of week, and the like? More generally, how does it detect users' availability: by recent keystrokes on their computers, by their having the communication application open, by settings they have specified, by the fact that their mobile device is turned on, or by some other such means? Implementing presence detection is technically complicated. No UC system has universally useful and usable presence capability. But it remains a feature you need to have and understand in any system you buy.

4) Mobile Integration

No communication system these days is very useful if you can only use it while in the office. Users have to be able to access its features and capabilities from wherever they are. UC solutions vary greatly in how, how much, and how well they make this possible. And the situation is getting more complex all the time, as people use more and more types of devices, including their personal electronic equipment, for business. The variety of approaches UC providers are taking is similarly increasing.

One basic approach sees all business calls routed through the office system. Incoming calls can ring desk, home or mobile phones according to rules. The ringing of different devices may take place simultaneously, in sequence, according to time of day, by other user-specified criteria. This capability is often called find me/follow me. One big advantage it offers is there is no longer any need to have separate mobile numbers on users' business cards or signatures.

Accessing UC features through mobile devices allows users to make use of office PBX features they could otherwise only operate through manual key presses.

Related is the ability to route calls within an office to mobile phones via Wi-Fi. This turns mobile handsets into extensions of the office system, and lets users make, receive and transfer office calls even when they are away from their desks. The ability to hand off calls from Wi-Fi to cellular networks is also useful. So is the ability to transfer calls between cellular and desk phones in mid-conversation.

Another aspect of mobile integration is the ability to access UC features from mobile devices. UC solutions vary widely in how, and how widely, they provide this capability. The most common way to do

it is through dedicated apps that run on smart phones. These allow users to do things like see others' availability and access various forms of messages through their smart phone touch screens. Without such apps, they are only able to make use of office PBX features through key presses.

5) Video Conferencing & Calling

The ability to communicate by video is becoming increasingly important – and common – in businesses. Not all UC solutions offer it, however. And when they do, using it is not as simple as it might seem. In fact, knowing whether a UC solution offers video capability is just the beginning. You need to ask a lot of other questions to find out whether and how it will work for you. In fact, you will undoubtedly need to refer to documents that specifically address the topic.

Nonetheless, it's worth at least noting here a few points to inquire into. One is whether the solution offers both video calling and video conferencing, which may involve significantly different experiences and levels of usefulness. If it does, is the transition between the two seamless, or does it involve quitting one and starting the other? Another question is what kinds of other UC features the video component works with. Especially useful is integration of video communication with online collaboration tools such as screen and document sharing.

Yet another issue is whether the video feature works only with users of the same brand or type of system or equipment. Far better is for it to be interoperable with other systems and solutions. More generally, how thoroughly integrated is video with other features? The ideal is if it is just another communication method you click to access while you're using other features and functions.

6) Integrated Soft Phone

Soft phones by themselves bring a lot of benefits. Running on PCs, they let users make calls using headsets with microphones, with no need to pick up the phone sitting on their desk. Basic benefits include the ability to call by clicking on a name or icon, to transfer calls by dragging and dropping, and other such user-friendly operations (although desktop IP phones, when integrated into a UC system, can offer similar benefits). In general, soft phones represent a central component in bringing voice communication into the Internet era.

Even basic soft phones have some degree of integration. They have to have access to address books or contact lists, for example, in order to allow click-to-call. They probably at least detect the availability of others using the same type of soft phone. Integration with other UC features brings even more benefits. A big one is the ability to do instant messaging, as well as voice and video calling and conferencing, from the same interface. Things get even better when the soft phone essentially disappears, becoming just part of an integrated UC user interface (see following section).

7) Integrated User Interface

The dividing line between an integrated soft phone and integrated UC user interface is not entirely clear-cut. Either way, the ideal would be the ability to access and use all UC features described in this document, and more, through the same interface. This would include voice and video calling and conferencing; instant messaging; ability to transfer calls to and from, and to access various features from, mobile devices; sharing of computer desktops, applications and documents; and many others. The ability to easily move between these various features is central.

8) Making Your Choice

The main thing to keep in mind in evaluating such capabilities is not to worry about what the manufacturer or provider calls its various features and functions. Trying to understand vendors' terminology is as likely to confuse as to clarify. Far better is to just look at what their products can actually do, and decide whether they're a fit for what you want to do.