Introduction

Unified communications is one of the most promising and powerful business technologies around. As its name implies, UC integrates multiple methods of communication such as e-mail, faxing, instant messaging, voice and video calling and conferencing, mobile communication and even desktop sharing so that they can work together rather than operating as entirely separate processes. The resulting efficiencies and improved communication can bring enormous benefits to companies of all sizes.

Top vendors provide a variety of unified communications capabilities. Those of Avaya, Cisco, Interactive Intelligence, Mitel and ShoreTel are particularly impressive. Naturally, each vendor defines UC based on its own products and technological strengths. Still, it's possible to compare the competing offerings based on selected criteria. This paper focuses on three key areas of comparison. Although this represents a far from comprehensive list, it provides insights into the most important ways vendors can differentiate their products.
Unified Messaging

One way to think of unified messaging is as an early iteration of unified communications. Although it integrates a relatively limited set of functions, it remains an important building block of UC. As such, it is actually becoming more important as unified communications gains momentum. UM typically lets users access voice mail, e-mail and fax messages through the same inbox or interface. From there, it's possible to add all kinds of bells and whistles. Here's a rundown of leading vendors' UM offerings.

Aura Messaging: users access and manage e-mail, voice mail and fax messages via the same interface. Modular Messaging: Access to messages from phones and PCs via various interfaces including browsers, Outlook and Lotus Notes. CallPilot: Access to e-mail, voice mail and fax messages from phones, e-mail or browsers. Hospitality Messaging: Specialized UM for the hospitality industry.

ShoreTel's "Core Software" allows users to access their voice mail visually either from the ShoreTel Communicator (formerly Call Manager) client software or from their Outlook inboxes. Intelligence is distributed over a scalable architecture so IT staff can manage the system from anywhere on the network.

Cisco's Unity Unified Messaging integrates with Microsoft Exchange, IBM Lotus Domino and Cisco Unified Communications Manager. Users can access messages from:
- IP phones
- Mobile phones
- Web browsers
- E-mail clients
- Desktop clients

Interactive Intelligence lets users access the three message types through their e-mail clients and Web browsers. The vendor's Customer Interaction Center (CIC) call center platform also provides access to such messages through call agents' windows.

Mitel's NuPoint Unified Messaging is part of the so-called Mitel Application Suite. MAS provides various unified communications applications, which users can access via desk or mobile phones or PCs. Virtual Mitel NuPoint Unified Messaging works in conjunction with the VMware cloud computing platform.
Mobile Integration

Mobile integration is a more recent and advanced unified communications ingredient. It is also increasingly crucial to today's businesses, because employees are more often on the road or working from alternate locations, including coffee shops and their homes.

One big part of mobile integration is giving users a single identity that lets them handle business calls with equal ease via their desk and mobile phones. This typically includes the ability to have calls forwarded to whatever phone the employee happens to be using, as well as to employ a single number for making and receiving all calls. It may also include handing off calls from cellular to Wi-Fi connections and vice versa on smart phones when arriving at or leaving company premises.

The other big part is the ability to access various advanced communication features both while in the office and while away from it. This includes not only calling, but also voice mail, corporate directories, instant messaging and even video conferencing. It naturally means accessing these features from mobile phones, but access via laptops and tablets is increasingly important as well.

One good way to evaluate each vendor's mobile integration capabilities is to look at the client software it provides as an interface to such features. This reveals the number and power of the features the solution integrates, as well as the variety of devices from which users can access these features.
Avaya's one-X Mobile is the mobile version of their software one-X Communicator.

It runs on Android, BlackBerry, iPhone and Nokia Symbian devices.

It provides access to corporate directories and visual voice mail, and features seamless handoff between cellular and Wi-Fi calls.

Calls to or from mobile devices take place as if they are to/from the desk phone numbers.

ShoreTel Mobility uses the RoamAnywhere client software that works on Android, BlackBerry, iPhone and Nokia Symbian devices.

Employees can make and receive calls using either corporate or cellular numbers. The system automatically chooses the best Wi-Fi or cellular connection, with automatic handoff between the two as appropriate.

Features accessible from mobile devices include extension dialing, call transfer, directory dialing and a single voice mail system.

Cisco's Jabber client is available for Android, BlackBerry, iPhone, and Nokia handsets, as well as for PCs.

It provides presence, IM, voice calling and conferencing, video conferencing and voice messaging.

The Jabber mobile client replaces the Unified Mobile Communicator.

Interactive Intelligence's CIC (described above) and Messaging Interaction Center (MIC) offer find me/follow me capability, so users can have incoming calls routed to any phone desired, including mobile devices, according to various rules and criteria.

Mitel Mobility is based on the vendor's so-called Freedom Architecture.

It employs the UC Advanced (UCA) Mobile Client that is available for Android, BlackBerry and iPhone handsets.

It provides access to presence information, corporate directories and voice mail.

It also allows integration with the BlackBerry Mobile Voice System (MVS). In addition, Mitel offers a mobile wireless voice and data service in the U.S.
Unified User Interface

Just as a vendor's mobile client software tells a lot about its approach to mobile integration, looking at its overall user interface is a good way to evaluate the vendor's broader UC capabilities. Features and capabilities to look for include presence, instant messaging, integrated soft phones, voice conferencing, video calling and conferencing, voice activation and integration with other business communication systems and applications. Also important is the ability to access unified communications capabilities from a variety of devices and in a variety of ways.

Avaya has a number of one-X (for "one experience") Unified Communications clients:

- Its one-X Communicator is available for PCs, both Windows and Mac. On its own, it provides capabilities like voice calling and conferencing and corporate directory access. When used with Windows platforms, it also offers presence, IM, and video calling and conferencing. One-X Mobile is, as previously noted, available for Android, BlackBerry, iPhone and Nokia Symbian devices.
- One-X Portal makes unified communications capabilities accessible through Web browsers, while one-X Speech provides voice activation of features. There are also one-X IP desk phones, and a one-X soft phone that turns PCs into IP phones using Avaya handsets or headsets.
- The Avaya Flare client for tablets includes video conferencing capability.
Unified User Interface (cont.)

The ShoreTel Communicator also comes in desktop and mobile versions, providing access via: Windows and Mac PCs; Web browsers; Citrix applications; and BlackBerry, iPhone and Nokia smart phones. It allows users to move seamlessly between voice, video and instant messaging. It provides presence information, conferencing for up to six people and integrated soft phone. It integrates with Microsoft Outlook and various CRM applications. The previously described RoamAnywhere client software provides additional capabilities to a broader range of smart phones.

Cisco's Jabber client runs on Windows and Mac PCs, as well as on Android, BlackBerry, iPhone, and Nokia mobile phones as noted previously. It provides presence, instant messaging, voice and video calling and conferencing, voice messaging and desktop sharing. The Jabber client is replacing and building upon the Unified Personal Communicator client for Windows PCs. The software offers click-to-call, corporate directory access, visual voice mail, presence, IM (including group chat) and Web conferencing. An integrated soft phone provides HD audio and video calling. Users can access the Unified Personal Communicator from within Microsoft Office applications.
Unified User Interface (cont.)

Interactive Intelligence's previously described Customer Interaction Center (CIC) platform, which integrates with CRM applications such as Salesforce, lets agents and managers indicate and view their and each other’s' availability, have text chats with customers and each other, record calls, send and receive alerts, respond to and send e-mails, and transfer calls with a mouse click.

Mitel's Unified Communicator Advanced (UCA) client is available in desktop and mobile (described above) versions. It provides presence and availability information, instant messaging, integrated soft phone and point-to-point video calling. It also offers integration with Microsoft Outlook and Office and IBM Lotus Notes. A version called UC Express (UCX) doesn't require a server application to work.