

Realizing Faster Return Through Unified Communications Agility

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Executive Summary

The growth of the virtual workplace continues unabated, driving the need for enterprises to invest in tools and services such as web conferencing, instant messaging, audio conferencing, and video conferencing, to enable distributed workers to effectively communicate and collaborate. Unified communications offers organizations the ability to integrate these applications into a common set of user interfaces, but significant challenges including platform flexibility, the ability to integrate with existing systems, and support for mobile workers presents IT executives with the challenge of determining the best architectural approach. Adopting a UC approach that best integrates into existing infrastructure offers the easiest route to realizing quantifiable benefits of unified communications.

The Issue

The growth of the virtual enterprise continues to accelerate; from 57% of IT executives defining their organization as “virtual” in 2006, to 87% in 2008. More than 91% of employees now work outside of traditional headquarters environments, (Please see Figure 1: The Virtual Workplace, Page 2). What does it mean to operate in a virtual workplace? Employees work in multiple locations, away from their supervisors or their workgroups at least some of the time. Team members are physically dispersed, no longer having the luxury of walking down the hall to ask a question, or quickly convene in a conference room to discuss an issue or project. Basically, virtual workers do not have a single place where they conduct all of their business.

The rise of the virtual workplace is creating new opportunities for the business, and new challenges for IT staffs to provide the tools necessary for distributed workgroups to communicate and collaborate, regardless of location. Organizations needs improved ways of sharing information, managing projects, and improving meeting experiences to enable remote workers to collaborate as effectively as those sitting together in a conference room.

The Virtual Workplace is Here—and Growing!

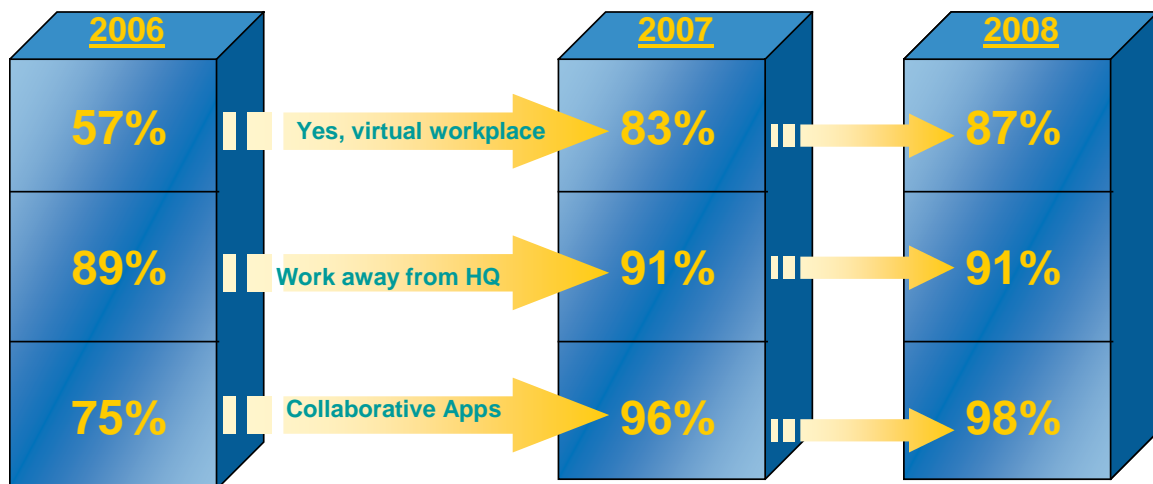


Figure 1: The Virtual Workplace

Hindering the ability of virtual workers to collaborate is a disjointed communications environment present in most organizations. Today's knowledge workers must confront a cumbersome and confusing communications environment based on disjointed channels, with instant messaging, video, Web conferencing, and mobile phones becoming commonplace. As these new services have entered the enterprise domain, they have often served to complicate, rather than improve, the ability for individuals and work groups to communicate and collaborate.

Virtual workers must go through a complex series of steps to determine the optimal communications channel for a given scenario, trying to deduce the right channel for a given situation. This often results in a guessing game, where individuals call multiple numbers leaving messages in desktop and mobile voice mailboxes, hoping to find the person that they are trying to reach. Individuals are unable to effectively locate or include the optimal experts to assist in a given situation. The result is delays in decision making that delay project completion, reduce customer service, and cause loss of sales.

Enter Unified Communications

Unified communications (UC) refers to the integration of communications and collaboration applications integrated so individuals can manage all their services together, rather than separately, in both desktop and mobile environments. Unified communications offers individuals the ability, not only to

manage how they contact others, but also how others can contact them. Unified communications leverages presence to improve communications by allowing users to see the status of each other, and thus make communication decisions based on real-time availability of other parties.

Unified communications provides an integrated set of user interfaces and backend connectivity for all communications services. It further merges real-time communications services with non-real-time collaboration and business process applications to bring context and presence to the entire communications and collaboration environment. Figure 2: UC Architecture, Page 3, defines the major components of a UC architecture. Deployment of unified communications sets the stage for organizations to improve business processes by integrating communications services with enterprise applications as part of a service-oriented architecture (SOA). Integration of communications services with applications using standard protocols such as XML-based WSDL (Web services description language) as well as SOAP (simple object access protocol), transitions the formerly stand-alone applications into components of a Service-Oriented Architecture (SOA).

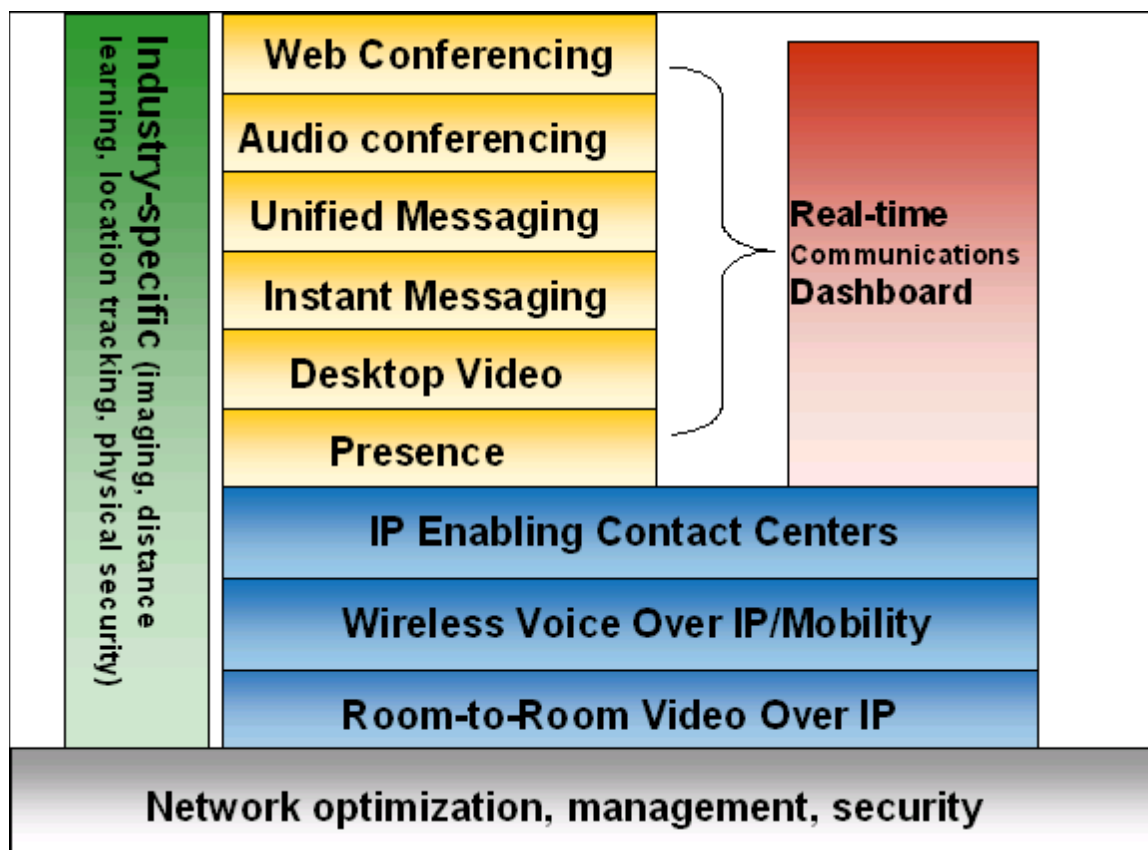


Figure 2: UC Architecture

Those investing in unified communications technologies say their No. 1 business driver is revenue growth (Please see **Error! Reference source not found.**, Page 4). Improving employee productivity is the second-leading driver (21.84%).

Top Business Drivers

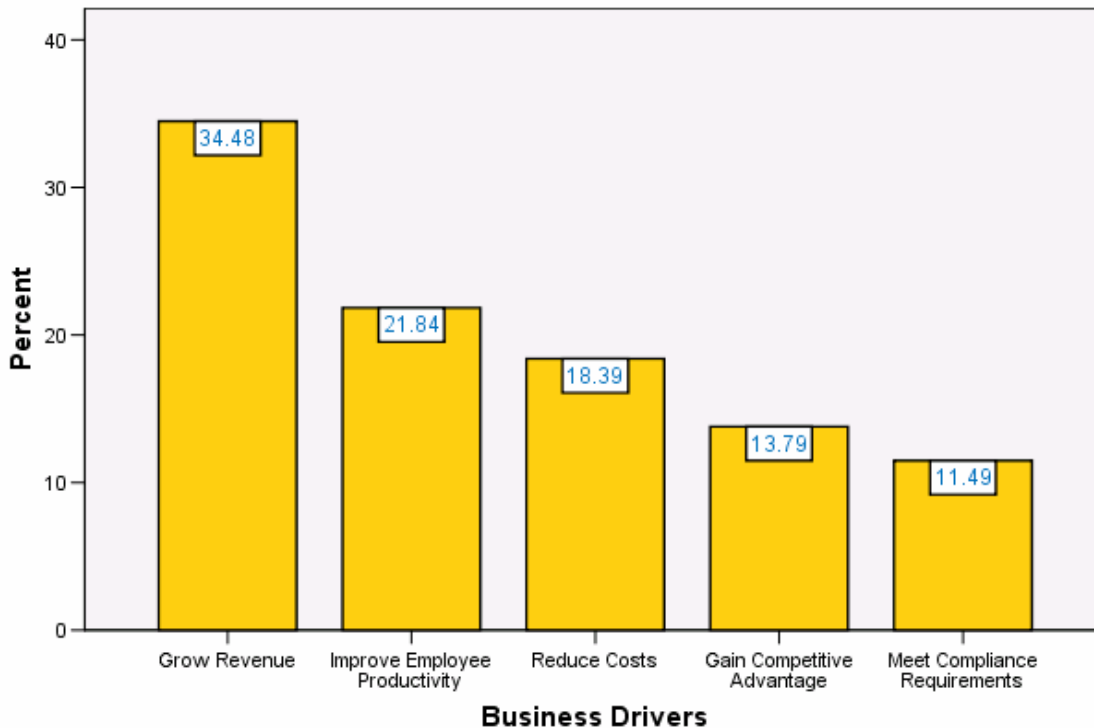


Figure 3: Top UC Business Drivers

UC Challenges

Those that are moving forward with adoption have discovered significant implementation obstacles. Enterprise IT executives report interoperability has been their biggest challenge, with a whopping 58% of participants in the Nemertes' benchmark *Unified Communications and Collaboration* saying that interoperability is the single biggest factor lacking in the UC market (Please see Figure 4: UC Market Challenges, Page 5).

Twenty-two percent of IT executives say that the lack of a demonstrable return on investment is another key hindrance to moving forward with deployment. Quantifying how an enterprise can leverage collaboration tools to meet this goal has been a particularly difficult problem. The majority have not adopted a philosophy of "build it and they will come," where IT delivers applications without specific end-user demand. Most early adopters actually work with their business users to define specific processes that can benefit from unified communications, in effect, creating end-user demand to drive adoption. IT executives often cite that the driver for UC is not simply "improving employee productivity," but to define how productivity enhancements can directly aid the organization in gaining competitive advantage via increased revenue opportunities or reduced operating costs.

However, this view is starting to change as unified communications capabilities become an integrated part of many telephony, video or IM offerings,

or workers are exposed to public UC services such as Skype or other services that integrate voice, instant messaging, video conferencing, and presence. While it's difficult to quantify "productivity improvements" as a justifier for UC adoption, several benchmark participants who's organizations conducted UC pilots said that internal surveys indicated a high level of end-user belief that UC had improved their productivity, and made it easier to find the resources they needed to more effectively do their jobs.

What is Lacking in the UC Market?

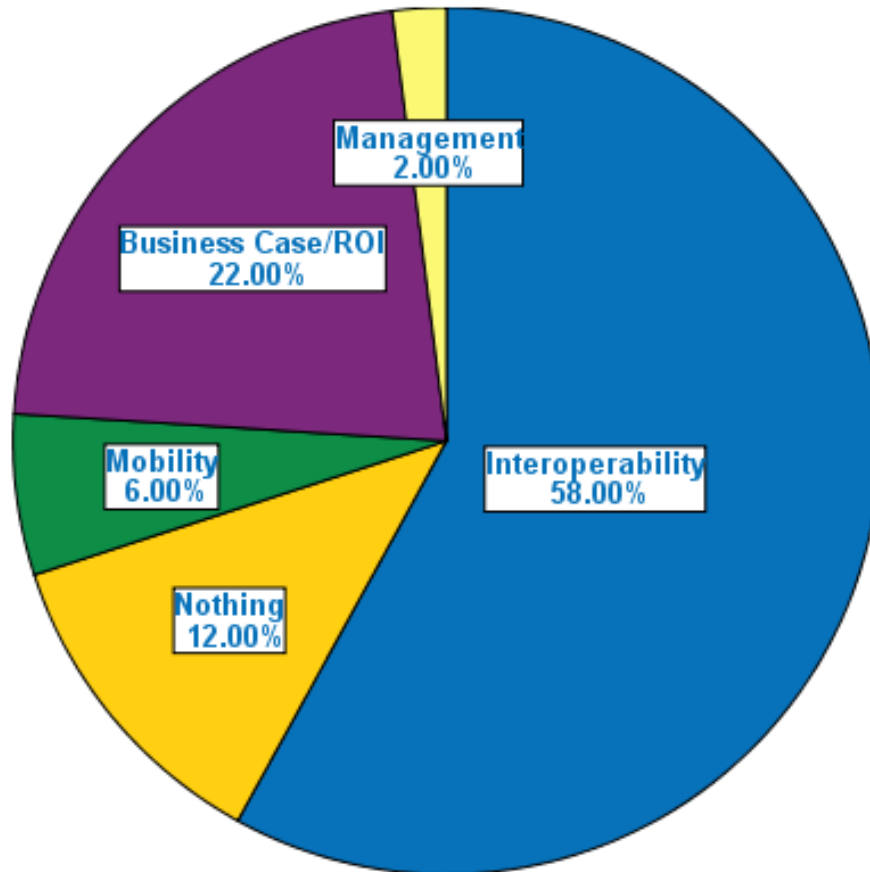


Figure 4: UC Market Challenges

IT executives cite the need to support an increasingly mobile workforce as well, with approximately 96% of participants in the Nemertes' benchmark, *Advanced Communications Services*, noting that their organization is using mobile broadband wireless services to deliver applications to distributed workers. Almost 65% of IT executives say that wireless data applications offer their organizations the potential to save time for distributed workers including field sales force and support personnel (Please see Figure 5: Mobile Application Time Savings, Page 6).

Mobile Application Time Savings Impact

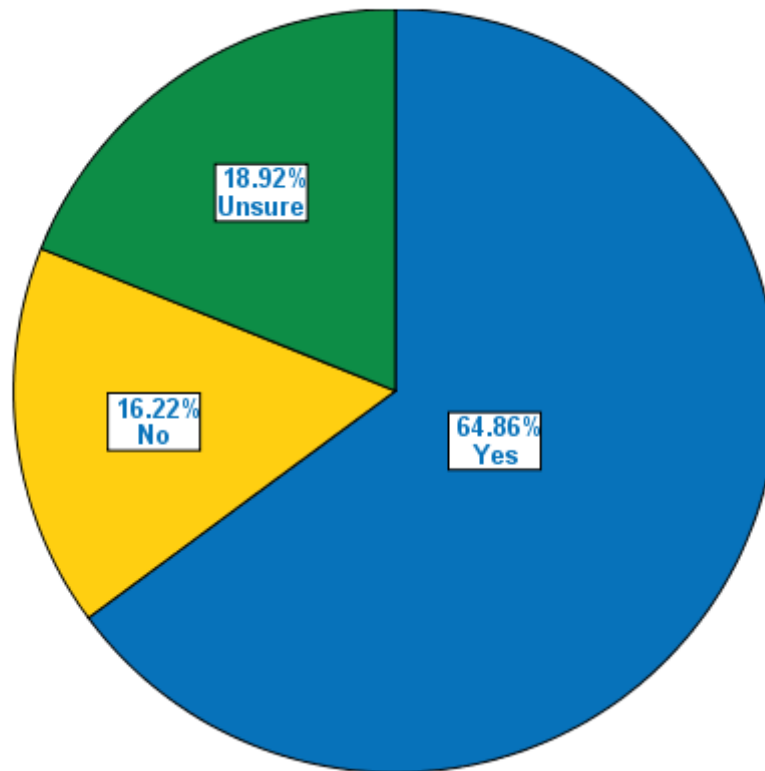


Figure 5: Mobile Application Time Savings

UC Architectures and Approaches

Enterprise IT executives developing UC plans for their organization must navigate through an increasingly complex product and service landscape. UC vendors offer a mix of software and hardware (or appliance) based solutions covering one or more aspects of the UC product mix. In an appliance-based model, organizations purchase a pre-configured piece of hardware with specific capacities and capabilities. In a software-based model, organizations purchase a software package that they install on their own servers. Server support may include Windows, Linux or virtualized environments.

Feature sets are typically one of the following:

- Complete end-to-end UC solution – providing all components of a UC architecture, including voice, video, instant messaging/presence, mobility, and unified messaging with a full suite of desktop and mobile clients in a single platform
- Best-of-breed – providing only certain components of a UC architecture. For example, desktop clients, telephones, or video conferencing systems

In both approaches, vendors will typically partner with other vendors or service providers, either to supplant missing pieces of their own product offering, or to enable easy integration of their products and/or services with existing enterprise systems and applications. Key differences do exist, such as the ability to support integration with legacy video conferencing, telephone, or instant messaging systems.

Vendor architectures also differ in their ability to support a mix of server and desktop platforms. Nemertes has consistently found growing interest in server operating systems, such as Linux, as well as desktop environments based on either Mac OS or Linux, meaning that those offering unified communications applications need to support an increasingly diverse end-user and data center operating environment.

Finally, vendors differ in their ability to support the requirements of mobile users, with the ability to enable users of cellular mobile devices emerging as a key differentiator among UC providers.

Current operating environment, requirements, and cost govern the choice of platform architecture. Enterprises with existing installed bases of UC components, such as instant messaging or IP telephony, will likely choose a solution that allows them to meet the interoperability challenge by leveraging those previous investments while adding additional features at a minimum cost, while those lacking installed applications may look to deploy a platform that has a wide variety of integrated applications.

Taken together, deployment flexibility and ability to integrate into existing environments emerges as the key requirement for UC platform selection.

Conclusion

Increasing virtualization of the workforce is driving the need for organizations to invest in tools to enable distributed workers to effectively communicate and collaborate. Those that are able to meet this challenge can realize quantifiable business benefits, including increased revenue, improved employee productivity, and reduced costs.

Developing a UC implementation approach requires careful consideration of vendor approaches, including platform architecture, features, and ability to integrate within existing architectures. Enterprise IT architects should carefully evaluate UC solutions against the requirement to integrate with legacy, current, and planned systems, including real-time communication, non-real-time collaboration, business applications, and mobility.

About Nemertes Research: Founded in 2002, Nemertes Research specializes in analyzing the business value of emerging technologies for IT executives, vendors, and venture capitalists. Recent

and upcoming research includes Web services, security, IP telephony, collaboration technologies, and bandwidth optimization. For more information about the analyst, please contact client services at client-services@nemertes.com