

Unified Communications

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Abstract

While UNIVERGE®360 provides an innovative, all-encompassing global approach to business communications, the true power of this unique approach lies in the realization that people are at the critical center. Communication is about the human or, more specifically, the employee. The content of a message, the context, the delivery mechanism and even the timing of communications is role-sensitive; that is, the communication needs are defined by the role of the person sending the message and the role of the person receiving it. The manner by which they get it—PDA, Blackberry, laptop, MS Outlook, or other device—is virtually irrelevant except as a point of access, and the underlying medium, the transport layer and access technologies, is even more transparent.

Understanding the human element and role-based needs in business communications allows companies to answer the question “what do we want to do” before tackling the challenge of “how do we want to do it”. This is a sharp contrast to conventional thinking in most companies where the IT managers’ primary concern has been the communications medium: the network, the devices, and the servers. Companies may be drawn into technology decisions before they have determined employees needs such that they allow technology to determine how people will communicate in their roles, rather than allowing the role to determine the technology needs.

UNIVERGE360 defines this critical “what do we want to do” layer as Unified Communications (UC). It is the applications layer that creates the user experience, enables user mobility, and drives desktop integration. UC connects people to people and to the information they need so they can make faster, better-informed decisions from any location, at any time, using practically any brand or type of device or equipment. Here is where communication channels and business processes converge to create a flexible platform for communication anywhere, anytime, and any way employees need.

Here, too, is the future of communications. A number of factors are at work, literally pushing companies toward UC adoption. Chief among these factors is Generation Next, a new generation of workers with an unprecedented appetite for technology and way of using communication that few Generation Xers and most Baby Boomers are unable to fathom. As companies strive to address the multi-tasking, multi-media needs of these workers, they are, in fact, beginning their transition toward UC.

In this paper, we explore adoption trends, UC best practices, and the UNIVERGE360 approach for UC adoption in the tumultuous consumerization environment.

An excellent example of a specific emerging voice application is Unified Communications. Unified Communications relies on VoIP as a platform and pulls together unified messaging, video conferencing, and presence technology to create secure anywhere, any time, any way communication throughout the enterprise – and beyond. Through Unified Communications, workers can collaborate in real time, access critical information, make decisions, and communicate seamlessly with customers and coworkers, whether they are on the road, at the office, or at their home.

This is not your parent’s technology. It’s probably not yours, either.

The new generation of workers, dubbed Generation Next, doesn’t know a world without the Internet. They are the most technologically sophisticated workers to enter the market—even more so, in many cases, than the institutional technologists to whom they report and will eventually replace. They have grown up with the proverbial silver cell phone in their hands; text messaging, voice mail, multi-media and other communication technologies are seemingly wired into their DNA.



The Pew Research Center study A Portrait of “Generation Next” shows that this generation (born 1981 to 1988) has a relationship with technology that is truly unique. While their use of personal computers is similar to that of Generation X (born 1965 to 1980) and only slightly higher than that of the Baby Boomer (born 1946 to 1964) generation, it is their deployment of real-time technologies such as instant messaging and text messaging that sets them apart. In the 24-hour period before they were interviewed for the survey, 51% of Gen Nexters had sent or received a text message on a cell phone. Only 26% of Gen Xers, 10% of Boomers, and 4% of Seniors had done the same. Similarly, 29% of Nexters sent or received an instant message, compared with 22% of Xers, 12% of Boomers and 7% of Seniors.

These numbers point to an important distinction in the way Nexters use technology. Unlike the Boomer generation, the majority of which was introduced to e-mail and voice mail in the work environment, Nexters voraciously consume and integrate technology into their lives from education to social networking, entertainment, and personal enrichment.

An estimated 69.7 million Generation Nexters, accustomed to technology for personal use, are literally bringing technology into the office and demanding the ability to use it in their jobs.

Generation Next is driving technology into the corporate environment. This is a generation of born systems integrators who understand how to work with voice, data and video in a sophisticated manner. As they enter the workforce, they bring with them this knowledge and a resolute belief in the power of technology. Indeed, it is so ingrained in their behavior, they cannot comprehend a world without it. As Gartner analyst Jackie Fenn noted in her “Emerging Trends” presentation, some enterprises are already reporting that many prospects they recruit are turning down job offers due to corporate rules restricting instant-message communication.

A Workforce on the Move

In an effort to take the office on the road without sacrificing communication or access to critical information, the mobile workforce is turning to technology that may or may not be supported by the enterprise. A 2005 study by IDC estimates “878 million mobile workers toiling away on laptops, handhelds and cell phones” by 2009² and that many companies are not ready to manage, secure and support the handheld devices and applications they need.

And mobility is no longer the exclusive domain of the sales organization. Businesses across a broad spectrum of industries, of every type and size, leverage workforce mobility to provide services wherever their customers or clients happen to be. And, no longer constrained by geographic boundaries, mobility gives enterprises access to a wider talent pool—particularly the Generation Nexters accustomed to communication whenever, wherever, and however they choose.

With the proliferation of communications devices and the voracious technology appetites of the emerging generation and mobile office workers, it will take more than wireless telephony and Instant Messaging to support the increasingly complex needs of today’s enterprise. Rather, to support the myriad of handhelds and provide workers secure access to information, to customers and vendors and, most importantly, to each other requires a suite of services collectively known as UC.

Unified Communications is about uniting people, information, and context.



UC relies on Voice over IP and pulls together unified messaging, voice and video conferencing, and presence technology to create secure anywhere, any time, any way communication throughout the enterprise—and beyond. Through UC, workers can collaborate in real time, access much-needed information, make decisions, and communicate seamlessly with customers and coworkers, whether they are on the road, at the office, or at their home.

Moreover, UC makes anytime, anywhere communication and collaboration possible with practically any brand or type of device and equipment. Particularly for the Generation Nexters who blur the distinction between company and personal technology, this represents a shift toward greater productivity and corporate support of the advanced technology tools they already use.

Consumerization and the competitive environment

While pressure to adopt new communication technologies stems in large part from the workforce—particularly the mobile workforce and the new emerging generation of workers—corporations face pressure from another source: the competitive environment. In fact, the needs and desires of Generation Next provide a barometer for the demands organizations can expect to face from customers in the near future—demands that are driving companies to implement UC solutions, but perhaps not in the way that you think.

Through UC, employees are afforded the means and applications to respond to exceptions or, for that matter, any customer need that arises, and make customer-facing decisions based on real-time, relevant information—whether from a desk at the company’s operation center, on the Web, in the store, or by phone from a customer contact center. The human, then, is once again placed at the center of customer relations, with the power to distinguish and differentiate the company from the rest of the pack.

Corporate Best Practices

In decades past, the rate of new technology adoption was relatively slow. Even top companies were prone to “wait-and-see” before investing time, money and resources into technologies that could give them the competitive edge.

Today, companies are feeling the pressure to adopt UC, primarily due to the influx of consumer technology into the workplace⁵ and best-in-class companies are more likely to lead the adoption curve, leveraging technologies such as UC to support tech-savvy employees, address competitive pressure, and provide customers the conveniences and levels of service they demand.

The March 2007 Aberdeen Group report, “Improving Customer Satisfaction through Unified Communications” shows that organizations considered “providing their customers with more personalized service” a strategic concern and that best-in-class companies addressed that pressure through accelerated adoption of UC solutions. A later Aberdeen report shows the two greatest pressures companies face are responsiveness to customer needs and managing a decentralized workforce⁴. Again, best-in-class companies chose to address these pressures through the adoption of UC technologies.

UC Where it’s Needed

UC adoption rates and approaches vary by company, but best-in-class organizations tend to leverage the technology in those areas where it can be put to most productive and profitable use. For instance, 63% of best-in-class companies polled by Aberdeen arm their sales and marketing organizations with UC solutions. They are also more likely than all others to leverage technologies to mobilize their workforces⁶.

Technologies Employed

According to Aberdeen, best-in-class companies use a broader range of UC applications than do their laggard and Industry Average counterparts. More than 80% are using an Instant Messaging (IM) / presence system, and 81% have wireless e-mail.

Best-in-Class Companies Use a Broad Range of UC Applications	
Wireless e-mail	81%
Call redirection capabilities	74%
Interactive voice response systems	63%
Application/Document sharing systems	70%
Web conferencing	77%
Instant Messaging/Presence	81%

Source: Driving Workforce Productivity with Unified Communications, Aberdeen, September 2007

The Aberdeen study also shows that, as a result of their investment and pragmatic approach to adoption, best-in-class companies are realizing the promise of UC. Best-in-class organizations report:

- A 55% increase in employee responsiveness to others (2.7x more than all other companies surveyed)
- 52% increase in an employee’s ability to gain knowledge/date from others (almost 3x the Industry Average)
- 60% increase in the flexibility of the workforce (over 3x all others)
- The competitiveness of their companies increased over 3 times that of all other organizations
- That UC solutions have increased the speed with which their products reach market
- And that they are working, on average, 3 hours less per week yet gross margins have increased 19%

UC Adoption Approaches

Rather than basing the decision to adopt UC on the network, or on a specific handheld device, UNIVERGE360 provides a unique approach through which to design a UC solution based on role-based needs—whether those roles are occupied by technology-adverse Baby Boomers or uber-techie Generation Next workers. It serves as a guide, configuring the applications, networks and mobile technologies for specific organizational roles.

Key Performance Indicators for Unified Communications Adoption

- Better workforce collaboration
- Streamlined workflow processes
- Fewer customer complaints
- Decreased time to address initial requests
- Improvements in customer care

Source: Driving Workforce Productivity with Unified Communications, Aberdeen, September 2007

- **Network readiness.** When companies add communications to their IP networks, the result is a massive increase of network traffic—an increase that is in addition to existing traffic from existing applications. One study found that 75% of companies estimate a quarter of their network traffic over the past three months was related to UC applications such as unified messaging and instant messaging, and that Internet, video, e-mail and Web conferencing account for 78% of IT managers’ additional network traffic¹². To avoid performance issues, it is critical, therefore, to assess the traffic needs of the organization now and in the future and ensure network readiness before implementation of any UC technologies.
- **Leveraging existing investment in network resources.** The degree to which a company can leverage its existing investment in network resources depends on the applications, the provider, and the equipment it chooses for UC solution. Some solutions are built to be used in their entirety, requiring a ‘rip-and-replace’ process that typically renders any existing network infrastructure obsolete. On the other end of the spectrum are solution providers, such as NEC Unified, with systems and services designed to work seamlessly with other vendors’ equipment. NEC can also serve as an integrator to help companies maximize their return on technology investment.

- **Backwards and forward compatibility.** Technology is constantly changing, and the equipment used to support these advances is changing, too. It makes sense, then, to implement UC solutions that integrate with the current network infrastructure and applications, whether from the same vendor or from other vendors, and with future versions and additions to the communications environment.
- **Voice expertise.** When voice, video and data converge into an IP-based UC solution, the result can be seamless communication—or a decline in the performance of all three. Voice packets behave differently than data packets, even when sent over the same data network. What’s more, our expectations for voice delivery are different from our expectations for data delivery; neither employees nor customers will be satisfied with anything less than a perfect connection. Simply put, voice over an IP network is difficult, and the challenge is exacerbated at each phase of the Unified Communication implementation¹³.
- **Organizational readiness.** Organizational readiness spans a number of functions and challenges, from employee reticence and training to staff structure and workflow processes. A Nemertes study of 120 IT executives reveals that 79% of respondents either already use or are planning to use UC, but 60% report that their collaboration and communications staffs are separate and, therefore, not cooperating with each other, and that only 10% have their IT departments structured to handle collaboration effectively¹⁴.

In just about any large implementation, multiple vendors are involved. One vendor might own the network; another might provide the desktop solution. Still another might provide the ERP platform.

With global partnerships and the unique ability to work directly with third-party enterprise platform providers, NEC Unified excels in the multi-vendor environment. Employing the UNIVERGE360 Communications approach, NEC provides a distributed architecture, integration with legacy communications and business applications, plus forward compatibility for a clearly defined migration path.

Resources

¹ Ignoring ‘Generation Techs’ at Your Own Peril, strategy+business

² ComputerWorld, November 8, 2005

³ Harvard Business Review, May 2003

⁴ Driving Workforce Productivity with Unified Communications, Aberdeen, September 2007

⁵ Unified Communications Adoption Outpaces Expectations, Computerworld, August 21, 2007

⁶ Driving Workforce Productivity with Unified Communications, Aberdeen, September 2007

⁷ Driving Workforce Productivity with Unified Communications, Aberdeen, September 2007

⁸ Zen and the Art of Rouge Employee Management, Yankee Group, July 2007

⁹ Zen and the Art of Rouge Employee Management, Yankee Group, July 2007

¹⁰ Driving Workforce Productivity with Unified Communications, Aberdeen, September 2007

¹¹ Study: Businesses Want Unified Communications But Staff Structure Leaves Them Unprepared, Networkworld, May 9, 2007

¹² VoIP, Unified Communications Study Reveals Challenges, ComputerWeekly, August 29, 2007

¹³ Voice Over IP White Paper, NEC Unified Solutions, November 2007

¹⁴ Study: Businesses Want Unified Communications But Staff Structure Leaves Them Unprepared, Networkworld, May 9, 2007

¹⁵ Driving Workforce Productivity with Unified Communications, Aberdeen, September 2007

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