White Paper

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Mobility Enables True Unified Communications

NEC Corporation
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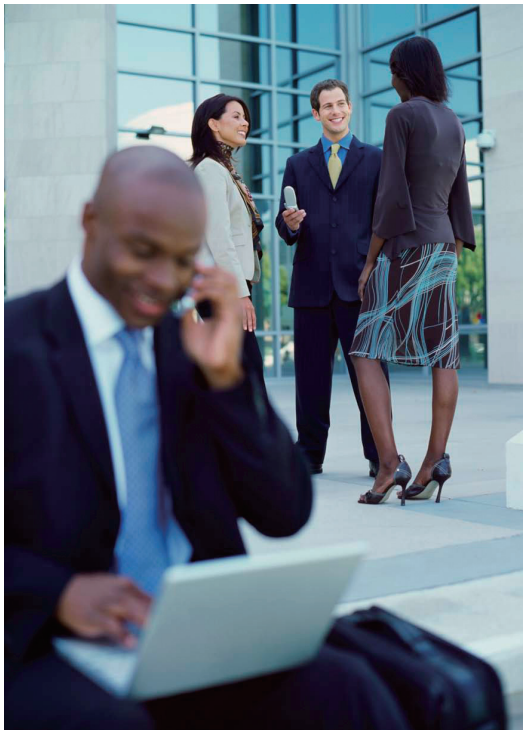
Executive Summary



While mobility was once a growing telecommunications trend, it is now the norm. According to the International Telecommunication Union's 2008 ICT Development Index (IDI), over 60 percent of the world's population has easy access to mobile telephony. Nearly 70 percent of all workers in the United States are issued mobile phones by their employers.[1]

Often, workers are allowed to choose the wireless device that they will use for business purposes. Since there is little platform and operating system standardization between mobile devices and corporate networks, IT departments are forced to issue what is often a third phone number for many workers.

Furthermore, corporate end users and IT professionals are frustrated with the usability of current enterprise application delivery solutions for mobile handsets. In fact, when it comes to mobile access to enterprise applications, the IDI study shows that 76 percent of IT respondents believe that inadequate virtualization interfaces of mobile enterprise application delivery solutions is a barrier to adoption, and 15 percent of corporate end users said virtualization interfaces provided by the carrier or handset manufacturer are difficult or impossible to use.

With all these factors, deploying unified communications (UC) in conjunction with a mobility solution can increase employee productivity and improve customer service by enabling workers and groups to more easily collaborate from disparate locations. As a benefit, UC applications that enhance mobility can provide a significant return on investment (ROI) through improved workforce productivity.

Challenges of a Mobile Environment

Network Conflicts

Implementing a wireless system can be daunting. The sheer number of available wireless options available to businesses is both astounding and intimidating. Cellular, voice over IP, voice over WLAN, DECT, and digital devices – as well as smartphones and computer-based softphones are on the list of choices. Add to the intimidation the fact that each of these options has a different type of architecture with differing operating systems and standards – even among themselves. These differences can create network conflicts that result in constant issues with network reliability. Implementing a stable wireless communications policy can become nearly impossible for an organization's IT department.

Use of both Personal or Corporate Devices

The number of workers using their personal phones for business purposes – and vice versa – has grown exponentially. It has become so commonplace that the IRS has recently started threatening to tax employer-issued mobile phones as a fringe benefit.[2]

If employees opt to separate their work and personal communications, other issues result. According to a survey conducted by Citrix Systems in 2006[3], two out of five mobile employees carry multiple devices. More than a third of workers carry between two and four devices, while the top six percent of the mobile worker population lugged five, six or even seven devices. Overall, almost a quarter of all mobile workers carry three or more devices with them at a time.

Multiple Numbers for Each Worker

These implementation difficulties and multiple devices not only create problems for the organization trying to implement wireless communication; it may also result in poor customer service. Employees often have more than one phone number at which they can be reached.

When clients wish to place orders or request service, they can become quickly dissatisfied if they must call several numbers or wait on hold for an excessive period simply to reach a sales or customer service representative.

Understanding Unified Communication and its Pitfalls

Simply stated, UC is the integration of real-time communication services such as instant messaging, presence, telephony, multimedia conferencing, and call control with other services such as voicemail, e-mail and SMS. UC should offer a consistent user interface and experience across all devices and media types.[4]

Most businesses see unified communications as a way to improve internal and external communications while increasing employee productivity. It also has potential to dramatically improve business activities that involve direct interaction with customers.

Implementation Time and Cost

Unfortunately, several studies have shown that companies implementing UC tend to spend more time and money with the actual installation and resultant troubleshooting rather than planning for the service.

Businesses tend to underestimate the amount of time they should devote toward planning. Companies often are under pressure from executives to implement UC so they don't fall behind the curve. As a result, enterprises are spending around $557 per employee to implement functional collaboration applications.[5]

Integration Concerns

According to a study conducted by Nemertes Research, integration concerns are the leading barrier to UC adoption for 58 percent of organizations.[6] Many companies operate a multi-vendor communications environment with disparate legacy systems, PBXs, and platforms across their locations. Indeed, a lack of complete integration of legacy infrastructure and new applications has the potential to create issues in both the implementation and use of UC.

To save time, effort and money, organizations are advised to spend time assessing the market, researching the players and planning for implementation and use.

The Role of Mobility in Successful Unified Communications

The movement toward achieving unified communications in almost all business areas has been swift. However, UC has been called "a shadow of what it can be" without a strong mobile element. Some analysts go so far as to say that it is illogical to think of UC and mobility as separate entities.[7]

Because it enables people to work – and even collaborate – from disparate locations, Mobility paired with UC enhances customer and employee satisfaction. It even helps to streamline business processes. It makes people more accessible and can cut costs by around 30 percent. Call completion rates can improve as much as 50 percent.

To that end, several vendors have released a number of mobile UC products. For example, NEC introduced several UC mobility options for its SV8000 Series of communications servers.

Mobilization of the Workforce

The mobility market has experienced explosive growth. More people are working from home than ever, and many employees need to keep in touch during business travel. UC mobility enables workers to:

- Use any company telephone as their own extension anywhere on campus or in any branch office – even one that is thousands of miles away from the primary office
- Open a softphone or use USB-linked headset to connect via a laptop with a connection to the internet
- Utilize a cellular telephone to access all of the functionality available on their UC desktop application
- Access the corporate database, presence and other services on a dual-mode device: one that operates on both corporate and cellular networks
- Save travel time and employer costs by using live video streams for virtual meetings

Increased Employee Efficiency and Satisfaction

Providing employees the ability to work outside the office can drive greater operational efficiencies and higher employee satisfaction.

A recent survey by AT&T revealed that 41 percent of responding workers felt that they were very likely to conduct business while away from the office. Over half of that group believe that the success of their business is dependent upon their ability to be in touch to customers and coworker from anywhere at any time. Additionally, a majority said that they find themselves working extra hours due to the freedom and increased productivity that mobile work provides.[8]

In another survey conducted by Kelton Research, 75 percent of mobile workers reported that the biggest benefit of working remotely is a flexible work schedule – and 90 percent reported a better work-life balance and more positive attitude toward their jobs as a result.[9]

Bottleneck Elimination

According to findings in a recent study by Forrester Research, the communication bottlenecks that occur in virtually all industries can be alleviated—and productivity improved—when mobile UC services are implemented.[10]

The Role of Mobility in Successful Unified Communications

Examples of Achieving the Highest ROI in Different Lines of Business

Network Conflicts

When retail stores run popular promotions, it is crucial that store managers, marketing departments and supply-chain partners coordinate their activities to replenish stock as needed and ensure that the stock supports advertised. While promotions are ongoing, employees operate in a mobile mode in order to avoid the information and decision latency that could result in outages and lost sales. When Forrester Research asked retail store managers whether being able to locate key decision makers on any device using a single address would save time, 75 percent answered affirmatively. Of that group, 52 percent thought one-number reach would save 5 to 15 minutes per call.[11]

Healthcare

Hospitals need communication systems that more rapidly put nurses in touch with nursing supervisors and physicians in order to offset nursing shortages. In addition, when UC in hospitals includes RFID-based location services, nurses in need of medical instruments can find the location of the needed unit quickly and easily. Forrester Research found that 74 percent of healthcare respondents believed portable wireless devices would save the nursing staff at least thirty minutes per day per person for nursing staff. In some hospitals today, wearable push-to-talk devices are enabling nurses and doctors to communicate more efficiently, thus contributing to higher quality health care in spite of nursing shortages.

The Financial Sector

In the competitive financial services industry, rapid response to mortgage, secured loan and credit card applications is a business requirement. UC addresses communication lapses that cause delays in loan decisions. According to Gartner's findings, "Loan representatives indicate that UC would allow them to speed decisions and increase the number of loan applications," which would enable financial institutions to be more responsive to customers.

Emergency Response and Government Services

Government officials and civil servants often work in a mobile mode, particularly when playing an executive role, while inspecting or regulating infrastructure and while enforcing laws and protecting citizens.

If a disaster occurs, government leaders and representatives must be able to move quickly. They must be able to survey conditions on the ground while in communication with a centralized command center. If they have UC services on board their mobile devices, they can efficiently and safely serve and protect affected citizens.

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About NEC Corporation

NEC Corporation is one of the world's leading providers of Internet, broadband network and enterprise business solutions dedicated to meeting the specialized needs of its diverse and global base of customers. NEC delivers tailored solutions in the key fields of computers, networking and electronic devices, by integrating its technical strengths in IT and Networks. The NEC Group employs more than 150,000 people worldwide. For additional information, please visit the NEC home page at: http://www.nec.com

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