

## EXTENDING COLLABORATION TO MOBILE EMPLOYEES



A Frost & Sullivan White Paper



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## EXECUTIVE SUMMARY

Today's workforce is increasingly mobile, with employees across the company spending more time working from home and the road, during and outside of "typical" business hours. These mobile workers need the same access to communications and collaboration applications as their office-bound colleagues; they, too, can now use unified communications, enterprise-grade social networking software, and mobile technologies to cut costs and drive productivity. But not all mobile users are alike, and not all applications fit all use cases.

When it comes to supporting mobile workers, most companies don't have a choice: They must stay competitive in today's 24-by-7, global, fast-changing business environment; enter growth markets; attract and retain younger workers; support and maintain contract workers and outsourcing partners; and be more "green." All of which requires agility, flexibility and hard work, and all of which must be done in an economic environment that demands cost cutting and extending the life of existing assets. Unified communications, convergence, advanced collaboration tools, social software, and mobile applications and devices make it possible for employees to find the right person with the right skills at the right time—regardless of whether they know one another, or where they are located in space and time—and connect with the click of a button via telephone, chat or online meeting. The goal is to speed decision making and drive productivity.

Mobile workers need collaboration technology as much as—and maybe even more than—their desk-bound colleagues. They also need one-touch access to contacts, expertise and information; user interfaces designed for mobile devices; the ability to work off-line; and a high quality of service. Companies that extend their applications to mobile workers can leverage maximum value from those technologies, while ensuring all employees have access to the tools and information that they need, regardless of where they're working from, or what type of network they're on.

Of course, not all mobile workers are the same. Classic road warriors need different tools than workers who split their time between offices, or between home and office, and both need still different tools than executives and campus roamers. Companies must consider these differences as they deploy communications and collaboration applications and services to their mobile employees. They must also pay close attention to security, manageability, and quality of service.

Despite today's economic uncertainty, smart managers know that every recession ends in recovery—and the really good ones will prepare now for the turn-around tomorrow. As they do so, they must pay attention to mobile workers, and the applications and devices they're using. This whitepaper will discuss the value of taking enterprise collaboration to the streets; outline the key job roles and user scenarios for mobile applications; and offer recommendations on what technologies to deploy when.

## **THE MOBILE WORKPLACE: WHERE THE VALUE LIES**

The biggest business trend in the past decade is the move to a virtual workplace. Virtual workers are those employees who work in a location that's different from that of their co-workers, managers and direct reports—i.e., the people they work with every day.

By definition, almost all remote workers are virtual (unless their entire team or business unit is based in the same remote office). All home-based workers are virtual. And all road warriors are virtual. But given the location-based definition of a virtual worker, even those employees based at headquarters can be virtual workers if the people they work with day-to-day are based somewhere else. That leads the vast majority of managers to define their organizations as “virtual” in today's global business environment.

Now, we're seeing another shift: the virtual workplace is becoming the mobile workplace: The mobile workplace has come to exist because in any given day or week, people work from a variety of locations and environments. These are not just your typical road warriors and corporate executives; many are knowledge workers who want and need to work from their cars, as they commute to and from work; their homes, as they interact with colleagues and clients in different time zones; and even their kids' soccer games, as they balance work life and home life. These employees must be able to communicate and collaborate from anywhere in the world, at any time, and on any device.

There are a number of benefits from having a mobile workplace, and all are critical in today's competitive global environment. The good news, especially in a down economy, is that all the benefits also come with an underlying gain: cost savings.

### **Do More with Less**

As businesses continue to struggle through a challenging economy, employees are being asked to continuously do more with less: There are fewer resources and fewer people, but they must stay as or more productive than ever. At the same time, employees are fighting to blend work and home life in a way that lets them best serve their employers while also maintaining their personal and family relationships. Few knowledge workers keep “regular hours” these days; being able to work outside normal 9-to-5 parameters is not a luxury, it's a requirement.

In such an environment, companies must deliver technology that supports a mobile work force in a way that enables them to take advantage of new opportunities, share information, and collaborate with one another anytime they need to, and on any device. As companies pare back staff, they want to keep their most productive and successful people, without concern for where they are based. To do that, they must be able to put those high-performers in touch with other employees, partners and customers in real time, all the time. This will ensure that employees can work smarter, not just harder, while balancing work and home life.

As companies grow and expand into new markets—as they become more global and more mobile—experts and skilled employees are often located throughout the organization and around the world. Employees are often in the position of working with people they’ve never met. As a result, workers often don’t know who has the information or expertise they need—they just know they need it, and they need it now. Tools that can connect virtual workers not with “people” but with the right information and skills holders ensure that employees get the data they need when they need it, without requiring them to know every employee in the company—never mind where that employee is.

### **Opportunity Gains**

From a bottom-line business perspective, the biggest benefit of enabling a mobile workforce is that it allows employees to take advantage of all opportunities, whenever and wherever they occur. Such opportunities can take many forms. For instance, a sales manager commuting from home to work might be able to take a conference call with a sales rep and a key client, just in time to save or ensure a sale; a service technician might be able to IM a colleague from a customer site, getting vital help in fixing a problem; and a traveling executive may be able to collaborate with the rest of her executive team and make strategic decisions faster, from airports and hotel rooms around the globe.

In all cases, the goal is to ensure that employees can generate business and deliver excellent customer service, anytime and anywhere. And this isn’t just important for traditionally mobile employees—sales people, traveling service personnel, and executives. In a down economy, all companies must make sure to grab every opportunity that comes their way—and the faster they can respond, the more likely they are to win the new business.

Finally, customer service is always important, but in a down economy it’s critical; being able to address customer needs and solve problems quickly can help companies differentiate themselves from the competition, keep existing customers happy and engaged, and retain their loyalty.

### **Shifting Cultures**

As the Millennial generation enters the workforce, they are demanding new forms of technology. Among these, mobility tops the list. These employees in their twenties and early thirties are used to using smart phones and other mobile devices to communicate—many of them don’t even have landline phones at home, and most are as comfortable with texting as older generations are with e-mail.

This next generation is also comfortable sharing information and collaborating openly and virtually. The Millennials do more than post details about their personal lives on Facebook and Twitter; they use social networking tools to help out friends, classmates and colleagues with information and advice, on the fly and as needed.

We can expect that open behavior to extend to the workplace. That's good news for business managers who want to increase collaboration among employees and partners, but it also means they need to give those employees access to technology that supports mobile and virtual collaboration. Doing so will drive productivity, shrink cycle and decision times, and boost the bottom line.

Supporting such cultural shifts means changing how managers and corporate decision makers view the "workplace." It's important that employees are encouraged—and not penalized—to work outside the office, and that managers recognize that someone who takes calls and meetings away from his desk can be as productive as someone in the office. Indeed, with the right technology, mobile workers are often more productive than office based colleagues, since they are better able to juggle customer and corporate demands at any time of the day or night.

### **Green Business: A New Mandate**

Cutting carbon emissions and other energy consumption is not only good PR; it's also good business, since saving the environment can also save companies money. Leading organizations are replacing in-person meetings with virtual ones, saving on travel and the related fuel expenditures. Others are encouraging or even mandating that employees work from home part or all of the time, which cuts commuting time, real estate overhead and associated costs.

Companies can also cut power consumption by limiting the type and number of devices employees use on a day to day basis. For example, removing workers' desk phones—and the electricity they consume—can save thousands or even hundreds of thousands of dollars in electricity costs, depending on the number of employees in the organization. But to do that, you have to go mobile.

In this case, mobility doesn't mean driving or flying around the world to meet with colleagues and customers. It doesn't even mean enabling long commutes for those employees who live far from the office and want to conduct work on their way to and from work. What it does mean is allowing employees to work from wherever they happen to be, and thereby not forcing them to drive or fly somewhere else to get the job done. That saves additional carbon emissions, and it allows employees to better manage their own time and resources. The end result is a greener company, and a better working environment (literally and figuratively).

### **Identifying Mobile Workers: Necessary for Success**

Once companies understand the value of supporting mobile workers, they need to assess two things: the types of mobile workers in their organization, and the tools they need to get the job done, from anywhere, anytime.

All mobile workers are not the same. The amount of time they spend away from a desk, the kind of work they do, their need for communications and collaboration—all vary from person to person, often based on their job role and corporate status. So before deploying a set of devices and applications to every "mobile" employee, IT must work with line-of-business managers to evaluate the nature of those mobile employees, how many of

them there are, and where they're located when they're not on the go.

Generally, mobile workers fit one of four main categories:

- Road Warriors (sales people, service techs, consultants, etc.)**  
 Road warriors are the oldest, and often most mobile, of mobile employees. These are the people who rarely work from their own office—if they even have an office. They are as likely to be working from an airport as a desk, and many spend more time at customer sites than they do at their own companies. They need to be in constant communication with managers, direct reports, and support personnel. Road warriors are likely to be the first to get access to new mobile devices and applications—and they need it.
- Executives (CXOs, VPs, etc.)**  
 Executives typically travel an enormous amount, often to the far reaches of their company's sales territories. They routinely need to collaborate with their senior leadership team, and make decisions on a dime. But they also need to tap the expertise of their direct reports and lower-level employees. Throw in customer meetings, strategic partnerships, and the need to identify and take advantage of global opportunities, and executives are ripe for a full suite of mobile tools and applications. But they are often less tech-savvy than road warriors, so they may need more training on mobile tools and applications.
- Campus Roamers (managers, retail clerks, hospital staffers, etc.)**  
 As companies grow, they expand physically—with more buildings, offices and employees. As employees work with more people, they move among those offices and buildings, and become campus roamers. As such, they must be able to reach key contacts regardless of where they are on site—in an office, between buildings, or the parking lot. Campus roamers also often work in non-office environments—stores, medical buildings, and so on—and while these employees may not need regular access to productivity tools, they do need corporate data on a daily basis.
- Workers without Boundaries (teleworkers, flex-timers, etc.)**  
 These are the newest type of mobile employee—people who work from home or a remote office location part or full-time, and/or who want to work flexible hours without missing important calls, meetings and client engagements. Many companies don't yet recognize these employees as “mobile” at all, but they are—and they need the same devices and applications as their more traditional mobile colleagues.

	On site		Off site	
	At desk	Elsewhere	At desk	On the road
<b>Desk Worker</b> <i>Software Designer</i>	90%	10%		
<b>On-Site Rover</b> <i>Admin. Assistant</i>	70%	30%		
<b>Site Wanderer</b> <i>IT Troubleshooter</i>	10%	90%		
<b>Tele Worker</b> <i>Remote Agent</i>			100%	
<b>Off-site Rover</b> <i>Consultant</i>			30%	70%
<b>Road Warrior</b> <i>Account Executive</i>			10%	90%
<b>Global Cruiser</b> <i>Corporate Executive</i>	25%	25%	25%	25%

Figure 1: Time Away from the Office

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## COLLABORATION AND COMMUNICATIONS—NEW WAYS OF WORKING

Just as the workplace has become more virtual, communications and collaboration have also changed. (Please see Figure 2.) The need to see where people are without being in the same room with them has made presence information critical; being able to click to communicate—that is, to simply click on a person’s name to launch a call, chat or conference—is increasingly important for seamless connectivity; and the need to reach people from anywhere, regardless of where they themselves are located, is paramount. Unified communications, converged communications and Web 2.0 technologies are changing the way people work.

Furthermore, the Millennial generation that’s just now entering the enterprise is used to working in a way that’s very different from that of their older colleagues. They are more willing to share information and advice; they are happy to make connections without formal or in-person introductions; and they are completely comfortable accessing, evaluating and using a wide array of information from a wide array of sources to make decisions. All that changes how they view their jobs.

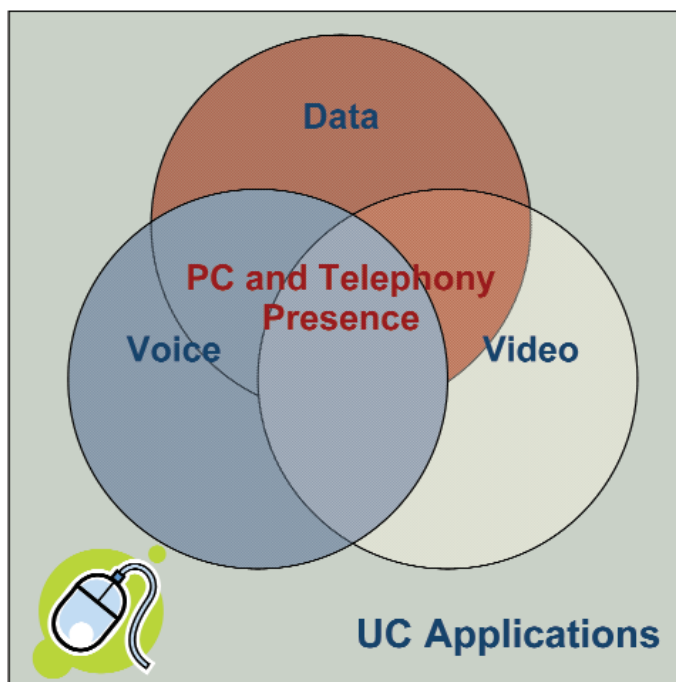


Figure 2: Unified Communications



That's good news for companies that recognize the value of such collaboration. When information is power, employees are likely to hoard it to serve their own interests, even ahead of their company's. But when collaboration is king, the very process of helping others succeed and developing a reputation for knowledge becomes its own success—and that benefits everyone, including the bottom line.

Several technology trends are affecting and supporting this new way of working, and companies must in turn support them in order to stay competitive.

### **Converged Communications**

Convergence is not a new trend, but many companies are only now making headway with it across the enterprise. Frost & Sullivan's latest estimates suggest that the penetration of IP endpoints of total PBX lines is between 30 percent and 40 percent in North America, and that by 2014, IP penetration should be closer to 80 percent.

Voice over IP has been deployed in both business and residential environments for many years, of course, because the technology can save users and companies considerably on telephone calls by transmitting voice calls over the Internet and thus avoiding local and long distance charges. VoIP has been proven in all manner of networks, and today, most IT managers would have to justify why they're not using the technology, rather than why they are.

As VoIP has matured, the industry has turned to standards to improve and build upon the technology. Session Initiation Protocol (SIP) has emerged as the protocol for establishing and sharing information about calls and, increasingly, other forms of communication; this ensures that handsets and PBXs can communicate across networks, regardless of the vendors involved. But SIP goes beyond just supporting telephony operations; it adds capabilities that Plain Old Telephony Service (POTS) cannot, including advanced call routing, recording and management; unified messaging; and integration with chat and conferencing capabilities.

Devices, too, are converging. Increasingly, desk phones can handle all forms of converged communications, making them good alternatives for site-based workers without ready access to a PC (think shop floor workers and retail sales people). For most knowledge workers, however, the PC will continue to serve as their primary business tool—and, increasingly, their business communications.

But increasingly, we expect mobile devices that support converged communications and access to other enterprise applications and information to appeal to a growing number of employees. Here, the mobile device—typically a smart phone—will serve as the preferred way to access all communications (including voice, chat and conferencing), as well as back office data and information. For many users, it will replace the desk phone; for others, it will replace the PC, too.

## Unified Communications and Collaboration

A unified communications application is an integrated set of voice, data and video communications, all of which leverage PC- and telephony-based presence information. UC applications are meant to simplify communications for the end user by making it easy to “click to communicate.” These UC clients will likely serve as the default communications application for knowledge workers of the future, much as e-mail and the telephone serve that role today.

The worldwide UC market is nascent today, but we expect to see a compound annual growth rate of 72% between now and 2014. Unified communications can offer companies significant cost savings, while enabling employees to boost productivity and improve the company’s bottom line. Furthermore, more and more employees are already using some form of unified communications at home, and they naturally gravitate toward them at the office.

At Frost & Sullivan, we believe the move toward unified communications is inevitable. As companies deploy the technology, they must enable mobile communications at the same time as they deliver desktop UC; only then will they and their employees truly be able to leverage the value of the virtual workplace.

## Social Networking... and Beyond

Most businesses are just starting to get a handle on how and where social networking and other Web 2.0 technologies fit into their business. But their employees are forging ahead, without input from IT, or even their own line-of-business managers.

Companies must pay attention to sites such as Facebook, LinkedIn and Twitter, which employees are already using to communicate with one another; network with colleagues, customers and even rivals; and share and learn information about their industries, customers and organizations. For instance, Twitter—which lets users send small text messages to everyone who cares to listen, as often as they want to—is reshaping how companies market themselves, as well as how employees interact with one another, and people outside the organization. Best of all, perhaps, it allows users to get information when they need it, from any source that happens to have it.

Although most companies have yet to set policies around these relatively new technologies, as they do they must ensure their employees can access the sites anytime, anywhere. Social networking is all about immediate and constant availability. People must be able to post information about their own status, as well as have access to other people’s information and input. Having mobile access to social networking technology will be a non-negotiable issue in the near future, especially for the next generation of employees.

Basic access to information (plant engineer, retail sales):  
web browser  
(IBM® Lotus® iNotes,  
IBM® WebSphere®  
Everyplace® Mobile Portal  
Enable)

Regular access to communications, off-line access to information (home office workers, remote office hoppers):  
(IBM® Lotus Notes®,  
IBM® Lotus® Sametime®,  
IBM Lotus® Connections,  
IBM® Lotus® Quickr™)

Power users, always connected, always collaborating (field technician, marketing manager, sales director):  
(IBM® Lotus Notes®,  
IBM® Lotus Notes® Traveler,  
IBM® Lotus® iNotes,  
IBM® Lotus® Sametime®,  
back-office applications)

Services to support mobility:  
IBM Global Technology  
Services -- assessment design /  
planning services,  
implementation and  
integration services,  
deployment and management  
services

## CONCLUSION

The mobile workplace is here, and it's here to stay. To stay competitive in this global, virtual business environment, companies must make sure their employees have access to the applications and devices they need to stay current, make fast and accurate decisions, support customers, and take advantage of fast-moving opportunities.

Companies can choose from a vast array of technology to deploy to their employees. Making the right decisions about what to give to whom can mean the difference between a productive, well-run organization that takes quick advantage of new opportunities in the global marketplace... and one that doesn't, and therefore can't compete.

As companies consider how and when they want to enable their mobile workers, they should pay close attention to the certain key technologies. These include data (information, presence, profiles and other social network metadata), so that mobile employees can access information, regardless of where they are and when they need it; communications (e-mail, chat, voice), so that employees can call, chat with and e-mail one another—as well as partners and customers outside the organization—24-by-7; and collaboration (synchronous meetings, asynchronous social networking), to allow distributed teams to collaborate virtually, rather than in person.

Especially as they operate within a struggling economy, smart companies will prepare now to take advantage of the rebound when it comes, by supporting their best and brightest employees with the tools that allow them to work from anywhere, anytime and on any device.

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