

Addressing the Challenges Facing the Distributed, 21st Century Business Through Telework

Practical Methods for Transforming Organizational DNA through New Ways of Working

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June 2008

Study sponsored by:

Microsoft®

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Contents

<i>Executive Summary</i>	1
<i>Introduction: The Telework Inflection Point – “Tipping into Reality”</i>	3
Defining Telework.....	3
Sizing Telework	4
<i>Business Issues Facing the 21st Century Enterprise</i>	4
Travel, Carbon-Reduction, and Energy Costs.....	5
Work/Life Effectiveness	6
<i>The Impact of Telework on Organizational DNA</i>	6
Entering the Organizational DNA	8
The Bottom Line to the Enterprise.....	9
<i>Enabling Telework</i>	10
Technology	10
Microsoft’s Unified Communications Suite for Telework	12
Policy and Programs	13
<i>The Future of the Teleworking Organization</i>	14
Scenario 1: Placing Brainpower Where it is Needed for the Global Manufacturer	14
Scenario 2: Healthcare Services using Telework to Retain Employees.....	15
Scenario 3: Packaged Goods, Reduced Office Space, Worker Empowerment.....	16
<i>Closing Thoughts</i>	16
<i>About the Authors</i>	17
About Wainhouse Research.....	17
About the Harris Interactive Survey.....	17
About Microsoft	17

Executive Summary

Telework has been around for years as a way to provide flexible work plans for knowledge workers, deal with traffic congestion and business travel, plan for business continuity, and address shortages in office space. For a long time, however, Telework remained somewhat exotic from a policy perspective. Now, Wainhouse Research and others are beginning to identify a fundamental change in attitudes towards Telework and deployment of its supporting technologies. In fact, Telework now has begun to gain currency for most enterprises large and small. The timing of a number of factors – the rising needs of businesses, workers, and community, and the availability of enabling technology – is contributing to an almost perfect storm of conditions that we believe are driving rapid adoption.

The most recent one-two punch for accelerating the adoption of Telework commenced with the heightened awareness of global warming and the need to understand one's carbon footprint, followed by the rampant rise of fuel and energy costs. Fortunately, a number of new – or newly converged – technologies that come under the umbrella term unified communications (UC) are now available, just in time to provide a legitimate alternative for organizational workflow.

To gain fresh insight, in February through April 2008 Wainhouse Research interviewed executives and managers in 22 organizations who use unified communications and collaboration technologies, and another group of human resources and facilities professionals who use these UC technologies. The interviews were conducted with a group of primarily large enterprises (Fortune 2000, universities, and governmental agencies) located throughout North America, Europe, Latin America, and Asia/Pac – and were supplemented by additional secondary research. We now believe that, for the first time, Telework is transitioning into being mainstreamed as an accepted practice – along with mobile applications – in enterprises large and small.

Several key benefits are now widely understood to be good reasons to adopt Telework programs and supporting technologies:

- Greater overall productivity for both organization and Teleworker
- Increased employee retention and job satisfaction
- Reduced “brick and mortar” / real estate investments and wasted office space
- Reduced operating / maintenance costs
- Greater flexibility / adaptability for facilities
- Reduced energy usage / carbon footprint
- Reduced travel costs
- Improved responsiveness and ability to deal with crisis situations (business continuity/disaster recovery) and less downtime in general

A Harris Interactive survey of 153 Fortune 1000 executives conducted for Microsoft found that roughly one half (53%) of Fortune 1000 organizations surveyed have a policy in place to reduce employee travel – and an additional three in ten plan to implement a policy within the next 12 months. A similar number have a policy in place to reduce their carbon emissions, and plan to implement such a policy within the

next 12 months. Many of those currently use or plan use of web and video conferencing as part of their carbon reduction programs.¹

To implement Telework requires a core set of technologies including secure, high-speed Internet access, e-mail and team workspaces, Instant Messaging (IM) and VoIP or business line phone (preferably integrated with the organization's PBX), access to web conferencing, and rich media tools such as videoconferencing. Properly implemented, Telework can enter the organizational DNA and alter that DNA in many positive ways, leading to an improved bottom line, greater productivity, work/life balance for employees, and greater employee retention.

In this paper we discuss the business issues that make Telework increasingly attractive to enterprises today, the ways in which Telework is entering the DNA of organizations and solving major issues, the tools necessary to enable the teleworker and other distributed workers, and practical issues to consider from a programmatic perspective. We also explore the future of the teleworking organization through three sample, real-world based scenarios.

¹ Harris Interactive Research Omnibus Executive Online Study, for Microsoft, CMG Market Research & Insights, April 2008

Introduction: The Telework Inflection Point – “Tipping into Reality”

Long touted as an alternative work style that could address a myriad of social and business constraints, the concept of Telework struggled in its early years to gain acceptance. Some organizations implemented Telework initiatives beginning in the late 1980's and early 90's as part of flexible work plans for their knowledge workers, and as ways of dealing with traffic, business continuity, or shortages in office space. But for every early adopter, there were dozens that stayed away from approaching Telework through formal programs. For some it was because their culture did not accommodate the idea of loosening management control over knowledge workers; for others it was viewed as an optional social experiment to placate workers; and for others, it was because the technologies necessary to work from a remote location effectively and create truly communal work teams simply did not yet exist.

Today these attitudes are beginning to feel like ancient history – disappearing in the footsteps of the concepts of the time sheet, 9 to 5 workday, and lifetime employment – as rapid workplace change as well as evolving societal attitudes towards work/life balance is changing how organizations treat their employees. In fact, the timing of a number of factors (technological, environmental, and economic) is contributing to an almost perfect storm of conditions that will drive rapid adoption of Telework.

Defining Telework

Definitions of Telework vary, but one that gained early currency states that Telework consists of *any form of substitution of information technologies (such as telecommunications and/or computers) for normal work-related travel; moving the work to the workers instead of moving the workers to work.*² Wainhouse Research has found that, while once adequate, this definition is now in need of expanding. Once in place, the use of information technologies used to support travel replacement catalyzes interaction between workers in distributed organizations that otherwise could not have occurred, even if travel was an option. This results in benefits that are realized beyond the replacement of work-related travel/commuting time. Thus WR proposes that *Telework is the substitution of information technologies for normal work-related travel and its use to bridge the gap between distributed workers, their work, and each other.* The fact remains, however, that while Telework itself is a rapidly accepted practice, it has linkage to the simple concept of mobility as well. Other types of workers – often mobile – utilize many of the same technologies as teleworkers.

Four major types of Teleworkers exist, adding to the complexity of discussing teleworking. These are 1) The classic definition, those knowledge workers who formally and programmatically – or on an ad hoc basis – work from home part- or full-time; 2) physical world workers not traditionally thought of as knowledge workers, e.g. deskless workers (retail shops, construction); 3) geographically dispersed teams using these information technologies to collaborate together, and 4) purely mobile workers, e.g. sales, delivery, and service employees. Nearly three-quarters (74%) of the people Forrester surveyed in February 2007 said that supporting a highly mobile workforce affects their organization's consideration of information workplaces somewhat or a lot.³

² www.jala.com

³ In its own survey, Forrester Research said that 77% of its survey respondents believed information workplaces are somewhat or extremely important for people who work primarily with the physical world. Erica Driver, Forrester Research, Information Workplace Trends 2007, July 2007

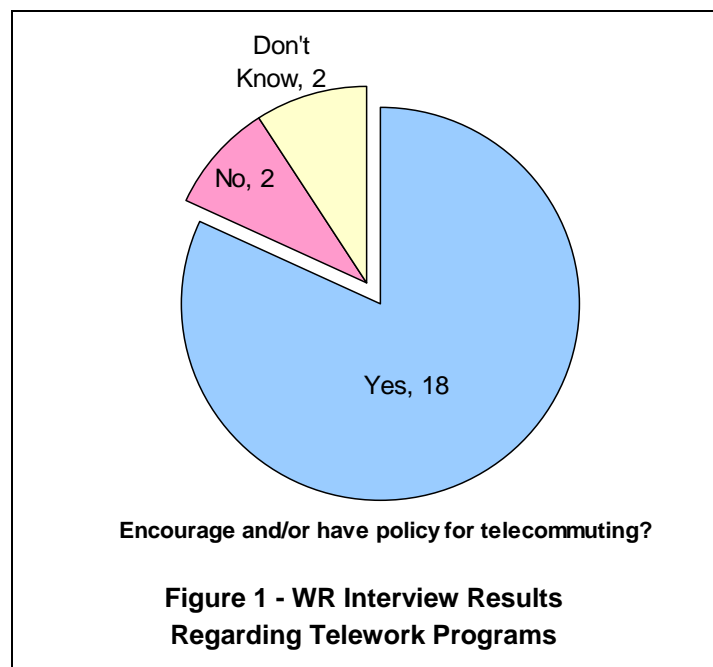
Sizing Telework

The blurring between Telework and mobility makes counting teleworkers challenging, and precise data concerning the numbers of teleworkers that exist across the globe is difficult to find. The most realistic estimate comes from Gartner Dataquest, who claimed that almost 40 million employees worldwide were teleworkers in 2007 (working at least one day a week from home), and who expect that number to grow to 46.3 million by 2011.⁴ If we maintain the narrow definition of the “classic Teleworker” used earlier, this number is probably accurate; if we consider mobile workers who use many of the tools of teleworkers, the number surely is higher.

To gain a qualitative feel for adoption, Wainhouse Research heard in a recent set of interviews conducted in support of this paper a clear bell tolling the alert that Telework is here to stay. Of 22 executives and managers in primarily mid-sized to large enterprises, 18 work for organizations where Telework is encouraged or otherwise a key program.

That is four out of five of those we interviewed. It is worth noting that this number matches almost exactly a similar recent statistic from Fortune Magazine: 82 out of the 100 Best Companies to work for provide telecommuting opportunities today, compared with only 18 in 1998.⁵

In this paper, we discuss the business issues that make Telework increasingly attractive to enterprises today, the ways in which Telework is entering the DNA of organizations and solving major issues, the tools necessary to enable the teleworker, and practical things to consider from a programmatic perspective. We also explore the future of the teleworking organization through three example, real-world based scenarios.



Business Issues Facing the 21st Century Enterprise

Anyone who keeps up with business and economic news is aware that the gains of the past 30 or so years have been the result of a few singular factors: the ability for organizations to drive productivity relentlessly through intelligent adoption of technology; new tools for knowledge workers and new methods of supply chain management; and a single word that has meant so much to so many: globalization.

The reality of globalization has become more apparent because economies are coupled together as never before. The impact of food shortages and rising oil prices are being felt worldwide, and financial markets are especially intertwined. Yet it's not just about stock markets and the connectedness of

⁴ Gartner Dataquest (April 2007)

⁵ FORTUNE's "100 Best Companies to Work For"®, 2007

national economies. The reality is that enterprises are globalized as never before, and teams are likely to be highly distributed across the globe, making them better positioned to understand and serve local markets and better able to position an organization competitively. Outsourcing and offshoring had their origins as a set of means of cutting costs. But these business movements themselves led to something else – wide appreciation of fully dispersed work teams that now are required to team, partner, and collaborate almost around the clock. As a result, teams are as likely to be multinational, multiracial, and multilingual as they are to be multifunctional.

Travel, Carbon-Reduction, and Energy Costs

Many of those we interviewed expressed a combination of real-world awareness of the competitive environments in which they work on a daily basis, and the need for their own and other enterprises to take a hand in responsible corporate citizenship. The environment is a case in point. A recent study commissioned by the World Wildlife Fund (WWF)-UK indicates that 62% of companies surveyed (in the UK) are already reducing their carbon footprint through reduced business travel and another 24% have plans to do so, and 89% of companies expect to fly less over the next 10 years. Most of these organizations expect to utilize conferencing technologies to help them reduce their air travel and improve their productivity, and almost all of them have carbon reduction programs.⁶ Similarly, a Harris Interactive survey of 153 Fortune 1000 executives conducted for Microsoft found that roughly one half (53%) of Fortune 1000 organizations surveyed have a policy in place to reduce employee travel. An additional three in ten plan to implement a policy within the next 12 months. Similarly, roughly one half (56%) of those surveyed have a policy in place to reduce their carbon emissions. An additional two in five (23%) plan to implement such a policy within the next 12 months. Of those, 94% currently or plan use of web and video conferencing as part of their carbon reduction programs.⁷

We have manufacturing and sales all over world, in all geographies. We've got a workforce of fewer than 10,000 employees. This requires us to be always on, with global teams holding global interactions. It often means a team, someone from Europe, Asia, China, and US are all on a call. It's rare that we don't have three time zones. And it's important for folks not necessarily at the office to take a call at 10 or 11 at night. It helps us be more global without having a workforce that many larger companies have.

– HR Director of Organizational Effectiveness, Major Manufacturer

Yet travel and carbon-reduction concerns are not stand-alone issues. With employees dispersed globally – and constantly on the move – companies must grapple with the logistics surrounding how to office them, provision them with appropriate technologies, and enable them to work together well. Estimates for providing office space for the typical knowledge worker run as high as \$10,000 or more annually, and relocation costs (for moving employees) have been estimated to run as high as \$100,000.⁸ The highly inflationary costs of energy are only one reason for the concern – but are the most visible because they impact profitability. It's as if there's been a one-two punch to the enterprise in the past few years, starting with heightened awareness of global warming and the need to understand one's carbon footprint,

⁶ www.wwf.org.uk/travellinglight

⁷ Harris Interactive Research Omnibus Executive Online Study, for Microsoft, CMG Market Research & Insights, April 2008

⁸ The Telework Coalition, www.telcoa.org/id33.htm

followed by rampant fuel and energy costs. Those costs – climbing every day – are not expected to return to their previous levels. Thus businesses are under increasing pressure to get them under control. Most of the companies we interviewed not only have Telework initiatives and/or programs, but also are looking at other ways of improving productivity and reducing costs, through technologies and policies such as hoteling, office clustering, and the like. A few either have begun some type of ‘green’ initiative, or know that they will need to over time. Depending on geography, facilities, operations managers, and IT are beginning to try to understand their carbon footprint – or are well underway in attempting to take control over carbon emissions. Even smaller businesses are wrestling with the costs of energy, and turning to environmental auditors, consultants, architects, and contractors to help them become more energy efficient.

Work/Life Effectiveness

Meanwhile, the other great workplace issue for the 21st century has become work/life effectiveness. With technology, globalization, and changing social demographics, the demarcations between work and life have rapidly been blurred. Knowledge workers now not only take work home, but also are asked to stay connected (or available) at all hours of the day. This is all while dual-worker families and single parents wrestle with *getting everything done*. The challenge of managing work requirements – which at times can seem incessant – can take a toll on both mental productivity and quality of life. Telework is a double-edged sword, requiring intelligent application and a careful, thought-out approach (as we discuss later in this paper). It can solve problems – and create new ones – which based on our interviews, can easily be handled through policy and the right mix of technologies.

The Impact of Telework on Organizational DNA

Telework today is solving major issues across the board for enterprises large and small. The Fortune Magazine report and interviews conducted by WR are proof indeed that, very quietly, organizational DNA is evolving to accept and embrace the concept of Telework. As stated earlier, Telework has gone from being a “new age” concept with vague, soft benefits such as “I get to work from home and dress casually” to an accepted concept with better understood, clearly realized personal benefits such as “I get more work done and save money by not commuting; I get to pick up my children from school and I give the hour back by interacting and working later with a colleague on another continent.” Fewer organizations now question the value of Telework because workplace culture has evolved to not only accept that people do what it takes to get the job done, but that Telework is compatible with the changing needs of distributed organizations as well. This section discusses the benefits of Telework, changes in the organizational culture around Telework, and what is (and who are) driving adoption of Telework.

The benefits of Telework can be found at the business level, at the worker level, and at the community level. Specific business and worker benefits, which overall contribute to increased productivity, lower costs, and higher employee satisfaction, include:

- Reduced “brick and mortar” real estate investments, with a corresponding reduction in energy, operational, and maintenance costs; and in the organization’s carbon footprint.
- Ability to optimize individual schedules outside of the traditional 8-hour workday to accommodate distributed workforces (off-hour meetings, 24/7 coverage, etc).
- Acceptance of management by objectives, not by time clock.

- Transformation into a 24 x 7 culture, leading to faster time to market and improved agility.
- Improved responsiveness by working issues after traditional business hours and improving communications between staff.
- Less downtime due to inclement weather, traffic congestion / road construction, and sick days.
- Ability to deal with crisis situations (business continuity / disaster recovery).
- Elimination of commuting time and reduction in wear-and-tear travel.
- Ability to accommodate change-in-life situations or geographic displacement to retain employee talent.
- Permitting employees to set their own schedules so they can optimize their work/life balance by managing priorities, becoming more productive.

At one site in the UK the office has moved physical location and they have taken the opportunity to implement a more flexible teleworking approach. The number of physical desks was reduced at that office from 400 to 164; 35 of which are hot desks.
 – Global Commercial Manager, Consumer Goods Manufacturer

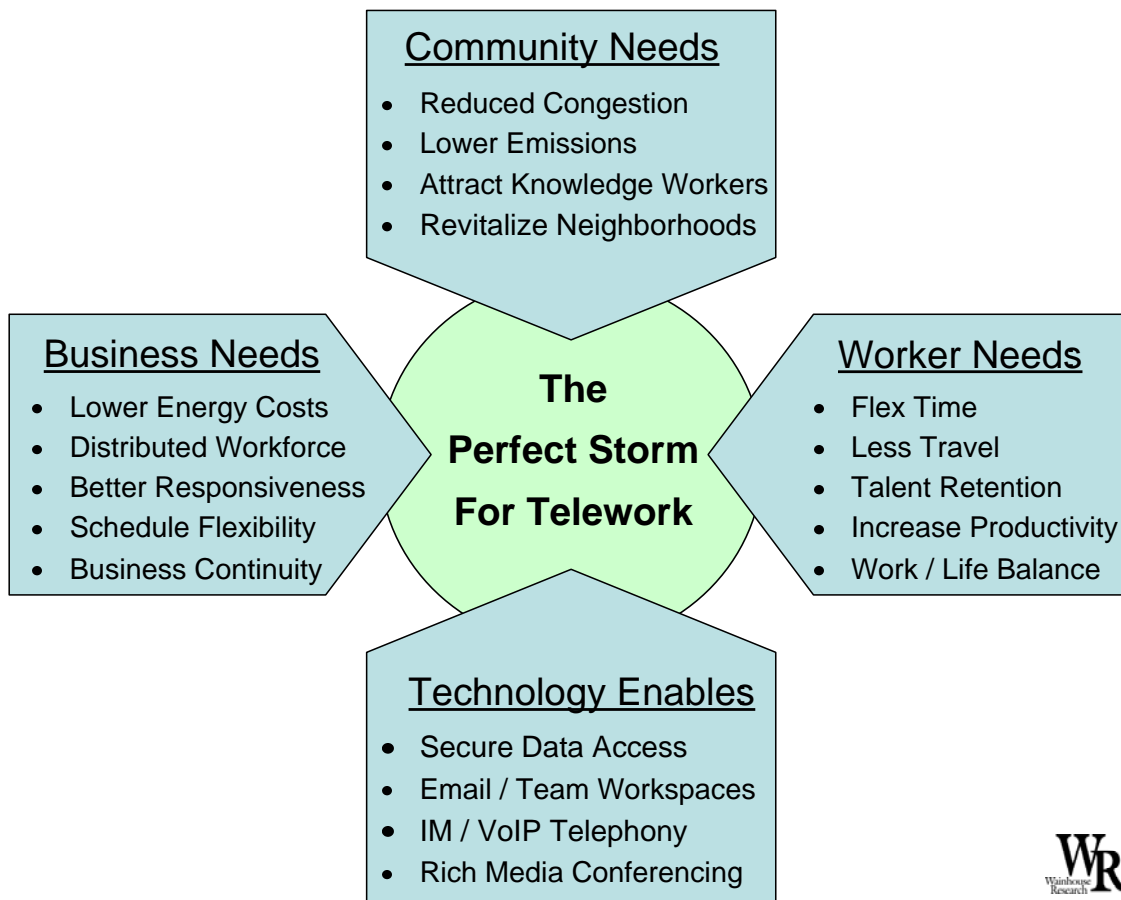


Figure 2 - The Perfect Storm for Telework



Some of the results affect the local community as much or more than the specific enterprise:

- Reduced transportation requirements and infrastructure investment / maintenance
- Less traffic congestion, pollution, and gas emissions
- Stimulation of the economy within suburbs and rural communities through telecommuting capabilities – and the concomitant ability to attract knowledge workers
- Neighborhood revitalization

One human resource consultant estimates that businesses on average lose \$789 in payroll per employee per year because of emergency time off. That means employers with as few as 20 employees lose nearly \$16,000 per year, while large employers with more than 2,000 workers suffer losses in excess of \$1.5 million. And those figures don't take into account the cost of lost productivity or the overtime pay needed to pay others to pick up the slack.⁹

The blend of community, business, and worker needs – combined with the availability of the enabling technologies – has resulted in a perfect storm for Telework adoption. This perfect storm is leading more and more organizations to formally adopt Telework programs – thereby introducing Telework into the organizational DNA. Figure 2 shows the benefits of Telework to the major constituent groups we have been discussing, and how they are intersecting with the today's enabling technologies to create the ideal environment for mainstreaming of the concept of Telework.

Travel and teleconferencing were brought together under same group a few years ago under the VP of Central Services – who also provides facilities and real estate. We do not roll up through IT / CIO.
– Mgr, Media, Events and Video Conferencing Solutions, Global Conferencing and Travel Services, High Tech Manufacturer

Entering the Organizational DNA

Other than federal, state and local governments – which typically introduce Telework through mandate – traditionally most (but not all) Telework initiatives have been driven by Facilities managers as a way to reduce the cost of underutilized real estate.¹⁰ We have seen estimates that Telework can cut corporate real estate costs as much as 90%. Facilities managers may want to seize this opportunity to elevate themselves from the operational, tactical level to strategic level. They can do this by driving Telework as a workplace initiative to increase employee productivity and innovation across all functions while reducing facilities costs. While Telework as a strategic initiative requires buy-in from the entire executive staff, a case can be made that Facilities is the right function to drive a Telework program itself.¹¹ Yet Telework is not a siloed initiative, but in fact one that touches many functional areas across an organization. Thus Facilities must work with other champions or stakeholders – including, but not limited to, Human Resources, finance, IT, product development, support, and sales & marketing – to help Telework find its greatest set of applications across the organization.

⁹ The Telework Coalition, www.telcoa.org/id33.htm

¹⁰ The Telework Coalition, www.telcoa.org/id312.htm, 2006

¹¹ [Academy for Facility Management – The Hague University](#), August 2007

Thus Telework is now on the radar screens of managers and knowledge workers in many other functional areas. As an example, the benefits to HR and personnel, though sometimes not as easily measurable, are no less significant to the bottom line. A short list for HR includes the following:

- Greater management / flexibility in employee / human capital retention.
- "Career extension" (ability to maintain access to employees wishing to switch locations and/or work styles).
- Flex time and adaptability to global team requirements.
- Employee recruitment – many managers tell us younger workers almost expect technological bells and whistles *and* flexible work conditions, while older workers may wish to move – or *not move*.
- Management of distributed workers – With many distributed organizations Telework is just one way to ensure that distributed workers have the tools they need to collaborate, and managers have the tools they need to understand employee progress.
- Less travel – This is appealing to employees with families, who may be struggling with work/life balance.
- The overall benefits of greater employee satisfaction and productivity.

With many changes occurring in the labor market – and a potential shortage of skills with baby boomers leaving the workforce – younger workers with different expectations of professional fulfillment will need to be accommodated, and Telework is one of many ways of doing so. One interviewee described to us a valuable employee whose marriage plans hinged on her ability to Telework from home – and who, through Telework, went ahead with both her marriage and career.

It's great to be able to keep strong contributors if their life changes and they need to work from home.

– Associate VP of Information Technology & CTO, Higher Education

The Bottom Line to the Enterprise

The impact of Telework, like DNA, is occurring at a microscopic level, and, while not always easy to track in piecemeal increments, the overall results can be profound. We hear from teleworking organizations that the impact can be seen in organizational momentum. Costs are reduced; resources are made available more quickly; decisions are made more rapidly; products are developed more quickly; employees are enthusiastic, responsive, and energized.

Policy will vary from organization to organization. One of the benefits of the various technologies available to enable Telework is that they can be customized to address divergent needs based on enterprise, management, and worker needs. The following section consists of a best practices, how-to-enable Telework discussion, with a focus on the communications tools and policies necessary to really make it a successful, measurable, programmatic effort.

Enabling Telework

Technology

The technologies to enable the remote and/or distributed team worker have evolved dramatically in the past decade. While the state-of-the-art work-at-home experience in the early to mid 1990's consisted of two phone lines – one for a dial-up modem – and a PC used to access e-mail and run productivity applications, today's remote worker has access to virtually all of the PC- and server-based tools they use in the office, and new technologies that encourage and facilitate collaboration at-a-distance.

To better understand what is required to support working remotely, the 18 interviewees whose organizations encourage or have policies for Telework prioritized the essential technologies as follows:

1. Secure, high-speed Internet access to their organization's information and key applications. There are three facets to this requirement: a) bandwidth to the Internet, usually in the form of a cable or higher-end DSL connection, b) data security, through the encryption algorithms found in applications (such as Microsoft Exchange 2007) or VPN connections, and c) the ability to give the remote worker transparent access to the same resources –such as email, file sharing, and workflow applications – that they use in their office facility.

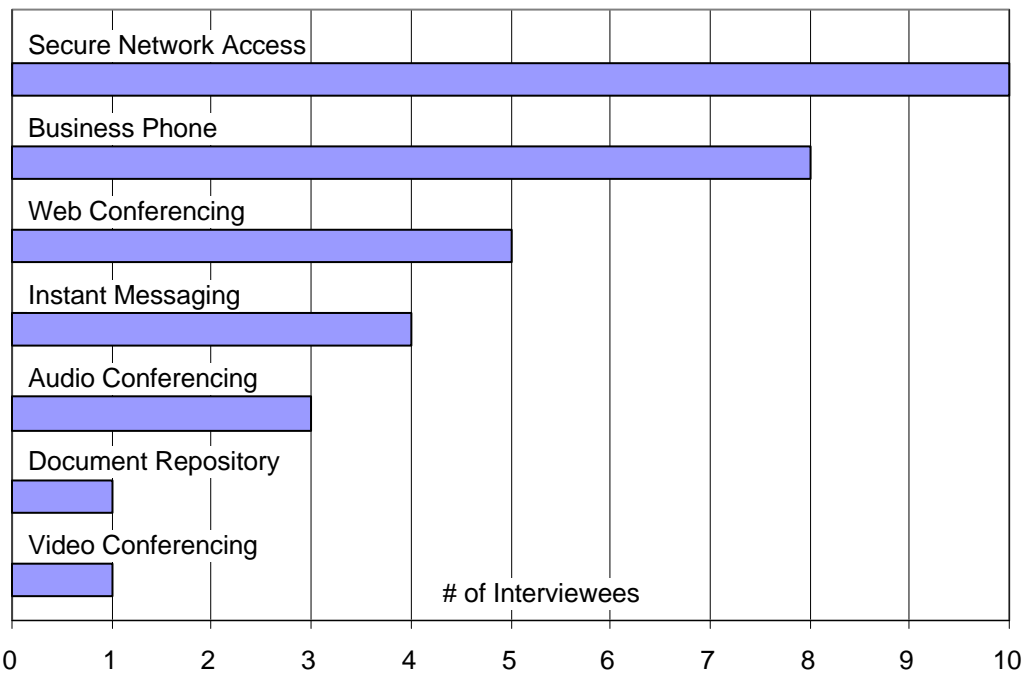


Figure 3 - Technologies to Support Telework

2. A business line phone, preferably with a logical connection to the organization's PBX so that it can operate transparently as the worker's office extension. We found it very interesting that the phone is *not* the #1 technology requirement; perhaps this is because there is no replacement for a secure data connection while the phone can be replaced by a cell phone or the home phone line if necessary. Some organizations use PC-based VoIP soft phones, which allow them to access their organization's phone system via a headset connected to their PC over an Internet

connection. This realizes a number of advantages: a) no need for the organization to pay for an additional phone line, b) phone conversations are encrypted via the application (or, if not, a VPN connection), and c) PC soft phones can be integrated with other PC-based communication tools.

3. Access to web conferencing to participate in meetings and collaborate on documents, presentations, and other visual ideas with colleagues as well as people outside of the organization. In only a few short years, web conferencing has proven to be effective as the virtual equivalent of going into someone's office and looking over their shoulder at their PC screen – with added capabilities including application sharing, white boarding, enhanced management tools, the ability to distribute meeting materials, the ability to record and playback sessions, and more.
4. Access to Instant Messaging to keep in tight contact with teams and colleagues. Having proven its value in the consumer space, Instant Messaging has quickly become adopted by business users who need to form teams that are independent of geographic locations. Presence, which is the ability to see if someone is online and available, has become the virtual equivalent of being in your office with the door open – and which has become an essential tool when working remotely. Presence also becomes invaluable as the work day adapts to a global economy – it actually becomes advantageous to not work a continuous 8-hour work day but instead have some hours early in the morning or at night that can coincide with team members in other continents. Presence is the vehicle that makes interaction when any two (or more) people are available possible.

The remaining enabling technologies identified in our interviews include audio conferencing, access to a document repository (such as Microsoft SharePoint server), and videoconferencing. Other technologies considered valuable and identified in the Harris Interactive Omnibus Study of Fortune 1000 executives conducted for Microsoft (but not specifically asked in our interviews) include voice mail (which may decline in volume over time) and faxes (which apparently will remain a highly used business tool for the foreseeable future).

An overriding concern in using these technologies to enable the Teleworker and distributed or mobile worker is security, which can be fairly easily monitored when the work day is spent in a physical facility ... or can it? An interesting paradox is that as the Internet age has come upon us, so has the security of physical facilities been challenged by attempts at unauthorized access to email, phone conversations, and server-based data. The reality is that security is only as good as the authentication systems, firewalls, and voice/data encryption that have been deployed along the entire information path. If these systems are implemented at the server level – and they should be – then working remotely should not significantly increase security risk. While VPN access is one option that can be used to encrypt voice and data traffic, encryption can be integrated into each remote application itself (email, VoIP, web conferencing, IM / Presence) as an easier-to-implement alternative that is effective without the added complexity of a VPN connection. Authentication – the assurance that the person who logs into a system is who they say they are – becomes a larger issue, but several capabilities work to mitigate the risk. A “single sign-on” system works to ensure uniform authentication across applications – including unlocking data on a laptop PC – and can log any unusual activity. Inexpensive biometric devices are becoming available that require a fingerprint to login. Even Presence can act as a safeguard if

People are happier, definitely. Employees can find info easily, have videoconferences or web conferences at any time. – IT Consultancy, Manufacturing

someone notes a colleague is online when they shouldn't be – and can determine if the person is who they say they are with a quick IM.

A standard set of tools, the core of which may well be comprised of the computing tools already issued to information workers, should be selected and deployed for teleworkers. Standardizing on tools encourages teams to be self supporting, and can reduce the need for 24x7 support staff – which, when needed, is available via IM. Successful Telework programs pay attention to the details – going beyond a standard home office deployment package (minimally consisting of laptop, a standard software distribution with all applications, phone or VoIP soft phone, and high-speed network access) to include whatever is deemed necessary to empower information workers. Other useful items include a USB headset, webcam, and in some cases, a high-quality USB speakerphone. One organization we encountered even issues high quality, ergonomic office chairs as part of its package.

Microsoft's Unified Communications Suite for Telework

Microsoft offers a full suite of software products complemented with conferencing services to enable geographically distributed teams, mobile workers and teleworkers to communicate and collaborate in the context they prefer. The suite is designed as an integrated offering that is designed to seamlessly augment Microsoft products that already may be deployed, and provide all of the unique needs required to work effectively from anywhere at anytime.

- *Secure access to email* – Microsoft Outlook 2007 and Microsoft Exchange Server 2007 provide end-to-end encryption – server to client – thus eliminating the hassle and expense of supporting and configuring a VPN. To guard against data loss, Exchange can maintain a complete copy of each user's email messages on the server, and automatically manage the synchronization of email between different PCs (office, laptop, home, etc). For reading email on-the-go, Exchange includes Outlook Web Access for secure access to email via any PC with a web browser and Internet connection.
- *Business-quality VoIP telephony with integrated IM and Presence* – Microsoft Office Communication Server (OCS) provides two key capabilities for the remote worker. Using Voice over IP technology, OCS effectively replaces and/or extends the worker's office phone through the use of a headset connected to the PC and a software-based phone application. All voice traffic is encrypted and securely sent via the same Internet connection used for data access. The operation of the phone, including sending and receiving phone calls, is exactly the same as if in the office. OCS additionally provides Instant Messaging and Presence, which is the lifeline of the remote worker. Presence, which is pervasive across all Microsoft applications, indicates when the worker is available to collaborate with colleagues; Instant Messaging not only includes text-based chat, but can be escalated with a click of the mouse to add voice, video, and desktop sharing.
- *Web and videoconferencing* – Microsoft Office Live Meeting enables collaboration with colleagues, customers, and partners in real time, between either individuals or large groups. Dedicated features are specifically designed for giving presentations, collaborating on a whiteboard, and editing documents. Videoconferencing with a conference room of colleagues using Live Meeting and Microsoft Roundtable allows Teleworkers to see everyone a 360° view of in the room – adding a richer context for communicating and exchanging ideas.
- *Team Workspace and Document Repository* – Microsoft Office SharePoint Server manages an organization's content and enables team collaboration. Documents can be securely accessed by any team

member for remote editing, and document-based workflow applications can be designed to increase organizational efficiency.

A key aspect to Microsoft's UC Suite is integration, which provides benefits on many levels. For example, the remote worker can see the Presence availability of the author of the document they are reviewing while working in Microsoft Office and can start a collaboration session directly from within the application. IT administrators benefit from the single sign-on provided by Microsoft Windows Server Active Directory, which authenticates users across all applications and which includes the ability to automatically create Microsoft Office Live Meeting accounts. The integration between Microsoft UC components delivers to many organizations benefits that are greater than the sum of the parts.

Policy and Programs

Telework is a change – a big change – in the workplace. To be successful, it requires a conscious mindset change by both the employer and the worker. While the worker may dream about new unmonitored freedoms, the reality is work is work and must be completed no matter where it occurs. Thus a pact between worker and employer needs to be formed.

The true Teleworker must be able to be trusted to get work done. This includes maintaining a full work day (though hours can be flexible), and the discipline to be productive during those times. The worker should establish a quiet workspace – preferably a dedicated home office – and equip the room accordingly. The family must respect work hours as if the worker is not at home. When the worker travels to a company facility, he or she should expect that they may no longer own a physical workspace of their own – but instead enjoy a space that has been re-designed and optimized for the task at hand: group interaction, meetings, or casual conversations.

We have a robust performance management system. We measure how well are people doing their jobs, performing, on different flexible work arrangements. We measure activities agreed upon by employee/manager. We also do employee surveys on work/life effectiveness. We ask how much is this used, how effective are the tools; it really starts with how much are they getting work done.

– HR Director of
Organizational Effectiveness,
Manufacturer

The employer needs to accept that management by objectives is no longer an optional program, it is essential because demonstrated worker output replaces hours punched in on a time clock. Presence technologies, however, help to demonstrate that a worker is spending time engaged in their work and maintaining working hours such that they are available for interaction. The organization's culture *must* embrace Telework, and regard virtual meetings with the same level of acceptance as physical meetings across all levels of the organization, including upper management. Some employers we interviewed create informal agreements between manager and knowledge worker.

Telework should not be considered as the exclusive way to work. Face time and physical meetings remain tremendously important in building relationships and culture. To that end, Human Resources groups in organizations that embrace Telework must make a special effort to foster occasional group meetings and activities that keep workers engaged as employees, consider requiring a set number of days that workers must visit a facility, or require their attendance at regularly scheduled virtual meetings

(web, audio and video conference) to keep them connected and feeling part of a community) and perhaps encourage social events as well. At the end of the day, keeping the Teleworker engaged in the social connections provided by the organizational culture – whether they are experienced in the office or virtually through the use of advanced technologies – can become a key element in keeping the employee happy, engaged, and able to implement strong boundaries between workday at home, and personal life.

The Future of the Teleworking Organization

Those interviewed by Wainhouse Research are clearly enthusiastic about the benefits of Telework, and the following three scenarios represent some of the most compelling discussions about Telework today and tomorrow. Each of these scenarios is based on a real-world example of Telework today, while offering additional perspective about its likely evolution within these and similar organizations in the future.

Scenario 1: Placing Brainpower Where it is Needed for the Global Manufacturer

Transitioning to global manufacturing requires more than just outsourced plants and careful supply chain management. In coming years, it will mean getting closer to customers, markets, suppliers – all while maintaining an incessant focus on productivity and remaining lean in good times and bad.

This means the vibrant enterprise is now always on, 24 x 7, with global teams conducting global interactions – bridging geographies, time zones, functional roles, and cultural norms. It also means enterprises will be challenged to “glue together” seamlessly their workforces – and one means to do so will not be the company picnic or sales kickoff, but through placing the tools for seamless communications between employees.

A typical manufacturer is process oriented, and thus might approach the technologies they need to enable Telework from a process perspective. So this manufacturer would seek to combine secure access to information with unified communications, and unified messaging. One company we interviewed has already begun to plan for blending telephony and voice mail with email and newer forms of real-time communications.

This manufacturer had been deploying a mixed group of tools from different manufacturers, often creating policy based on application, internal or external use, and other factors. It found this mixture extremely complicated and challenging to manage. Seeking a cohesively integrated and leveraged platform – and a consistent user experience globally – in 2007 the company deployed Live Meeting 2005 as its standard. It has now graduated to Microsoft’s OCS 2007 platform, offering its many distributed employees Office Communicator – a single client for engaging in (and escalating to the next level of communicating) all types of conversations: text, chat, voice, video, or data via Live Meeting. Employees will change communications modes based on the needs of the situation, while having their messaging also

Currently with Live Meeting, we get reporting of usage. We get detail of who attended which meeting, for how long. I am tracking month by month, adoption and usage levels. The number of users and hours of usage. This helps me a lot. People are getting value and adoption is continuing [steadily]. – Web Collaboration & Enterprise Content Management Manager, Global Manufacturer

integrated into Outlook Exchange 2007. One planned next phase is to combine email with voice mailboxes into one consolidated view, through Outlook.

This company has almost 10,000 employees worldwide, yet only about half of the organization is located at its headquarters in a very rural Midwestern state. Instead of adding headcount to headquarters, it will use its already robust Telework policy to formally drive growth by taking a completely open-handed approach to hiring: employees may work and live anywhere they wish, so long as they qualify based on value to the company and ability to manage responsibly. When it needs a vice president or superstar staffer in California, it will hire whom it needs, regardless of location.

Scenario 2: Healthcare Services using Telework to Retain Employees

The highly competitive, fast changing world of healthcare benefits requires scalability and flexibility far more than many other industries. From management of actual benefits – which prescriptions are paid for under which plans and for which clients – to records management (keeping track of voluminous amounts of data) – to sales and marketing of services, the typical healthcare benefits firm finds itself running at 110% capacity and constantly stretched to introduce new products and services while remaining competitive with other firms.

One such firm – the result of acquisitions of past firms – offers a management challenge: 30 far flung offices with two major Midwestern headquarters separated by 2,000 miles of prairie and pig farms, forests and fields. This firm has an engineering and IT team – responsible for back end systems, front end terminals and everything in between – that uses unified communications and SharePoint for service development. The company's large sales force uses UC for selling products, holding regular Live Meeting sessions with prospects and existing customers, and its HR group uses it for interviewing. *Everyone* has moved to Office Communicator in 2008. Even C-level executives, tired of commuting between the two major headquarter cities, use UC for regular staff meetings. And everyone uses UC to meet with new or existing clients – typically large enterprises and governmental agencies themselves – with whom knowledge transfer and the need to partner is unremitting.

Instant messaging is the glue for this firm, and while the company started with a small premise-based IM client/server configuration, it graduated to Office Communicator, which has spread throughout the company like lightning. Using all of the other Office products, it was a natural progression to introduce Communicator, which led to its success.

Of the 16,000 strong workforce in this healthcare services company, 10,000 are highly distributed and in a position to be allowed to Telework, and IT and salespeople are most in position to work from home or on the road. The company uses a combination of VPN's and IP soft phones (VoIP) so that extensions can ring at home as well as the office. And the company is transitioning gradually over time to home-based call center agents. The goal: reduce costs and attrition while actually gaining scheduling flexibility.

Employee satisfaction will drive us to further encourage telecommuting in the future -- it will be our biggest driver. It costs so much to lose someone and train new people. We know we need to be flexible to keep good employees. – Manager, Network Services Support, Healthcare Services

This company recognizes the value of its people. Employee satisfaction was one of the biggest drivers to teleworking, and the company understands that it costs much to lose someone and train new people. Its goal is to be as flexible as possible to keep good, high contributing employees.

Scenario 3: Packaged Goods, Reduced Office Space, Worker Empowerment

A global packaged foods manufacturer has a worldwide workforce of 35,000 and 200 locations (and a very mobile knowledge worker workforce). About 16,000 staff are in manufacturing, necessary for on-site daily work, leaving about 19,000 staff eligible to Telework.

Telework is based on business unit behavior, and the company leaves much to individual business units. There is not a one-size-fits-all approach and much of the policy is at "line manager's discretion". This has led to certain opportunistic moments where the organization has seized the chance to introduce new policies. For instance, at one site in the UK the office has moved physical locations and they took the opportunity to implement a more flexible teleworking approach. Employees are allowed a maximum of 3 days per week teleworking – based on capacity in the office. As a result of the office move they have reduced the number of physical desks from 400 to 164. Out of this there are 35 hot desks out of 164.

Its employees use every aspect of unified communications: audio conferencing, Instant Messaging, unified messaging, web conferencing, and VoIP, depending on the contextual need. It provides a VPN client on a PC, broadband connection, and is trialing 3G cards for 1,000 European-based employees. The company profiles users based on which tools are most effective and appropriate to each employee type. Tools are delivered based not on status, but on employee role and need. Formal risk assessment is done for all home teleworkers to ensure that certain corporate mandates are met for home worker environments.

The components of unified communications are somewhat key to teleworking, e.g. audio conferencing, IM, unified messaging, and desktop sharing. Moving from those component parts to UC is a big step... External collaboration is the key; with audio conferencing via VoIP and web collaboration as the next benefit of unified communications.
– Global Commercial Manager, Manufacturer

Closing Thoughts

The combination of economic conditions, business priorities, and technology advancements is swiftly moving Telework to the mainstream. To implement Telework requires a core set of technologies, including high-speed Internet access, secure application access including e-mail and team workspaces, Instant Messaging (IM) and VoIP or business line phone (preferably with a connection to the organization's PBX), access to web conferencing, and rich media tools such as videoconferencing. Properly implemented, Telework can enter the organizational DNA and alter that DNA in many positive ways, leading to an improved bottom line, greater productivity, greater work/life balance for employees, and greater employee retention.

About the Authors

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About Wainhouse Research

Wainhouse Research, www.wainhouse.com, is an independent market research firm that focuses on critical issues in the Unified Communications and rich media conferencing fields. The company conducts multi-client and custom research studies, consults with end users on key implementation issues, publishes white papers and market statistics, and delivers public and private seminars as well as speaker presentations at industry group meetings. Wainhouse Research publishes a variety of reports that cover the all aspects of rich media conferencing, and the free newsletter, *The Wainhouse Research Bulletin*.

About the Harris Interactive Survey

The Executive Omnibus survey quoted in this paper was conducted online within the United States by Harris Interactive on behalf of Microsoft between 6th to April 29th 2008 among a panel of 153 IT decision makers. No estimates of theoretical sampling error can be calculated; a full methodology is available.

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