



Telework—The Windfall Hidden in Plain Sight

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Teleworking

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Greg Baker
Chief Financial
Officer,
Logicalis

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While the economy continues to dawdle on the on-ramp to real recovery, CEOs are looking to their CFOs to find ways to do more with less. CFOs, in turn, are looking to their CIOs for ways to get more productivity out of the workforce... without spending any more money.

Innovative CIOs, meanwhile, are looking out their windows and realizing that one source of significant savings and increased productivity is hidden in plain sight in the employee parking lot: all the employees driving to work who could be teleworking instead.

The term “telecommuting” has been around long enough to sound dated. But whether you call it “telecommuting,” “virtual workers” or the emerging standard “telework,” the advantage of having your employees stay home and/or work outside the office—at least some of the time—is winning over even chronically reluctant managers who once preferred to have their workers where they could see them work.

The convergence of economic realities and technical capabilities make telework a necessity instead of a nicety for organizations today. Those organizations that don’t use technology to enable and expand their own virtual workforce are leaving a windfall unclaimed.

For example: A survey by Cisco of its own workforce showed that a policy of encouraging

its employees to telework generated an estimated annual savings of \$277 million in productivity in one year. The average Cisco employee teleworks an average of two days a week. Among those employees, 69 percent cited higher productivity when working remotely, and 75 percent said the timeliness of their work improved. Notably, more than 91 percent of respondents said telework is important to their overall satisfaction.

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TechCast, a virtual think tank based at George Washington University, forecasts that 30 percent of the industrial world’s workforce will telework two to three days a week by 2019 and estimates the market for related products and services at \$400 billion a year.

The argument for telework is so convincing that even the U.S. House and Senate were able to agree on the Telework Enhancement Act of 2010 which President Barack Obama signed in December. The Act gave federal agencies 180 days to establish policies, determine eligibility and notify all workers who are able to telework.

The authority to tell select segments of an organization’s workforce to stay home



is obviously outside the purview of the IT department. A well-coordinated telework initiative that is supported by senior management and enabled by IT, however, can generate returns that rival the returns on high-ratio server consolidation. A hidden bonus in a telework initiative is the insight into worker productivity that an organization gains by thinking of its workers in terms of their ability to communicate with each other and produce results instead of their ability to show up somewhere on time.

Won Over

Logicalis' own telework experience provides a case in point. Logicalis CFO Greg Baker came to Logicalis from an organization where everyone worked under one roof. He admits to being somewhat skeptical about the idea of virtual workers at first. Baker says he was quickly won over by the benefits of telework that he found already in place at Logicalis and he is now a strong advocate of expanding the capability.

"My goal is to have flexibility in the cost base that can trend with sales and basically shift expenses from capex to opex. To the extent that I can eliminate fixed-cost leases for offices, telecommuting provides me a lot more flexibility." Baker notes, "Logicalis has grown

Real Returns from Virtual Workers*

Telework Research Network estimates employers could save \$10,000 a year per employee by implementing telework.

- IBM's 80,000 teleworkers save the company \$700 million a year in real estate costs.
- Best Buy's average productivity increased 35 percent through its flexible work program.
- American Express teleworkers handled 26 percent more calls and produced 43 percent more business than their office-based counterparts.
- The U.S. Patent & Trademark Office avoided \$11 million in new real estate expenses through telework. Over 80 percent of eligible staff telework (4,000 employees, 70 percent of all staff).

**Compiled by TeleWork Research Network*

organically and by acquisition in the years since I joined, and yet the number of physical offices has actually declined. I don't have to pay rent or buy office equipment and desks. And I don't have to worry about how much space I'm going to need for the next five years."

Baker says almost 25 percent of Logicalis employees are officially and completely virtual and another 45 percent telework at some point.

"The most important benefit companies are realizing from telecommuting is the ability to expand their talent pool," Baker says. "If you are trying to make your business model more variable, employing just the people you truly need to run effectively, you'll find it's way too hard to locate the people you need in or around one town or city. You need to be able to broaden your horizons, and that means you are going to have to embrace teleworking."

"The benefit that teleworking provides, right behind recruiting the right employees, is improving employee morale and retention," Baker adds. "The costs to hire someone, get them up to speed, and then lose them are enormous. Teleworking allows us to hire very highly skilled, highly desired employees who don't leave, because we provide them the tools



and environment that suit what they need to do for our customers and their lifestyles.”

Tools of the Teleworker

The tools that teleworkers need to do their jobs effectively today are readily available.

“The quintessential technology for the home office worker,” says Logicalis Director of the Cisco Practice Jim Dossias, “is high-bandwidth Internet connectivity. I’m not talking about twisted-pair copper. You want cable or fiber.” Dossias has high-speed cable at his home office with a download rate of 31.8 mbps, and an upload rate of 9 mbps. You can compare your own connection at www.speedtest.net.

The next critical piece is at the data center where you need a virtual private network (VPN) aggregation point that allows users to be authenticated and establish a secure connection to the office network. “Once that is accomplished,” Dossias says, “the user receives an IP address on the network, just like everyone else, and can access files, get email, and register a softphone. As far as his or her computer and phone are concerned, the user might as well be just down the hall at headquarters.” In some ways, the home office user actually has more bandwidth than his office counterpart because of split tunneling that enables his computer to access the Internet directly from his home office without going through the VPN connection.

The technology for this kind of a secure remote connection has been around for years. What’s been rapidly evolving during those years is the diverse range of collaboration features that can turn a conventional network infrastructure into a dynamic, interactive environment for productive communications wherever your workers work.

Collaboration features available to teleworkers at Logicalis, for example, currently include:

- Single number reach, giving each employee a single phone number that can be answered by multiple devices.
- Message monitor that allows the user to see who’s calling and choose to monitor the voice

mail before deciding to pick up.

- Speech Connect that allows users to control their phone by voice.
- The ability to use a smartphone to place, receive, and manage calls over the corporate Wi-Fi network.
- The ability to select phone numbers to dial directly from Outlook.
- Videoconferencing through WebEx as well as TelePresence.

One of Baker’s personal favorite unified computing features is enterprise instant messaging with presence, which makes it possible for him to instantly see the availability of anyone at Logicalis—and how best to contact him or her. He relies on collaboration tools as well to support the impromptu conferences that instant messenger makes possible. “We’re all over WebEx and MeetingPlace,” he adds.

Logicalis also uses Logicalis Workspace, a Microsoft SharePoint solution that provides online collaboration sites where employees can upload documents, hold impromptu discussions, assign tasks, and perform other collaborative activities as if they were together in a room with a whiteboard; actually better because each collaborator can use instant messaging with presence to bring in other participants—from anywhere—whenever needed.

The same collaboration tools help make employees more productive whether they are at headquarters, at a customer site, at home, or somewhere in between. “This fact effectively distributes the cost of unified communications across the entire workforce,” Baker says.

“In many ways, providing the technology to enable telework is the easy part. The biggest barrier to telework is not technical,” says Logicalis IT Director Terry Strohecker. “It’s cultural.”

Telework works best where some variation of management-by-objectives, or results-based management, is applied and workers have a very clear understanding of expectations. From

Strohecker's observation, performance-based managers who respect their staff and look at them as skilled, motivated workers who are here to succeed and do what is asked of them benefit most from telework. Logicalis' background as a consultancy tends to lend itself to telework, but Logicalis leaves the telework decision up to its managers and not all of them choose it for their staff. It is also true that some back office and clerical tasks that require hands-on interactions don't lend themselves to telework.

Effective Communications

Enterprise staff, who may or may not be in an office, can use tools like unified communications to communicate with customers who may also be "on the job" instead of "at the office."

For example, Logicalis recently used unified communications tools to ensure effective communications between its professional services team and a national movie theater owner during a rollout of digital-theater capabilities for more than 650 movie theater locations with a total of 7,000 screens.

The project directly involved a team of more than 200 people at the theater company's headquarters and managers and staff at all of the individual theaters scattered all over the country.

"We combined unified communications technologies like presence, mobility, chat, call routing, conferencing, and video," says Logicalis Vice President of Applications and Unified Communications Chris Rafter. "We wanted the customer to be able to reach us if they ever had any questions so we set up a dedicated 800 number and our call center was able to route their calls to the appropriate project manager 24/7. We also built a Web portal that is a complete, real-time multimedia experience of this project. An executive at the client's headquarters can log in from anywhere, punch in any theater ID number and monitor real-time status—complete with schedules, shipping manifests and tracking numbers. They can also see before-and-after photos of every installation. This project was literally scattered

The Telework Upside: \$650 Billion in One Year

According to Telework Research Network, less than 2 percent of U.S. employees currently work from home the majority of the time (not including the self-employed), but 40 percent hold jobs that are compatible with telecommuting. If those employees who could work from home did just half of the time, Telework Research projects that we as a nation would save more than \$650 billion in one year. For example, we would:

- Save over 280 million barrels of oil (37 percent of Persian Gulf oil imports) valued at over \$23 billion (based on \$80/barrel).
- Save consumers \$15 billion at the pumps (based on \$2.60/gallon).
- Reduce greenhouse gases by 53 million tons—the equivalent of taking almost 10 million cars off the road for a year—that's over 21 percent of the nation's goal for GHG reduction by 2020.
- Reduce wear and tear on our highways by over 115 billion miles a year, saving communities over \$1 billion in highway maintenance.
- Save almost 100,000 people from traffic-related injuries or death. Accident-related costs would be reduced by almost \$12 billion a year.
- Increase national productivity by 5.5 million man-years or \$235 billion worth of work.
- Save businesses over \$200 billion in real estate, electricity, absenteeism, and turnover—together with the value of the increased productivity, that's more than \$10,000 per employee and more than double the average first-year cost per teleworker.
- Save enough in office electricity to power more than 900,000 homes for a year.
- Save employees between \$1,800 and \$6,800 in transportation and work-related costs. In addition, some would also be able to cut daycare and eldercare costs. Many would also qualify for home office tax breaks.

The telework model also allows organizations to recruit staff without regard to their geography and dramatically improves retention in this typically high-turnover workforce.

all over North America, but the customer told us he had never seen such a high level of touch on any project.”

One-Sided Relationship

Logicalis Unified Computing Practice Director Mike Johnson, who works from a home office, described a solution for another customer that dramatizes the high level of security that is possible without even having access to the user’s computer. An organization that specializes in logistics needed to maintain a segment of its workforce onsite at several large retailer customers. The onsite users had to connect securely back to headquarters to access critical accounting, financial, and inventory control systems, and their retailer clients would only allow them to use desktop computers and notebooks that they provided. The logistics firm was not allowed to install any additional applications or utilities on the computers used by its staff. It was strictly a one-sided relationship: Secure access had to be accomplished solely from the logistics firms’ side of the connection.

Not a problem. Using Cisco Adaptive Security Appliance (ASA) technology, a secure sockets layer (SSL) VPN connection was established to enable browser-based access to the appropriate applications during the work day. At the end of the day, the browser’s cache was automatically cleared and the VPN torn down and wiped clean without leaving a trace on the client side.

Enabling telework does not have to add technical complexity, Johnson says. To help organizations provide remote workers secure access to their central network from wherever they are, Logicalis has developed a zero-touch deployment: Whenever a device is logged in to the Internet, it will dynamically build a VPN, establish policies and procedures, apply quality of service (QoS), and register the user’s phone on the environment. Within moments, the user

is able to work as if he or she were sitting at a desk at headquarters. As importantly, the IT department has access to the user’s device.

Following the Sun

Another customer turned to Logicalis to enable an aggressive telecommuting initiative to help it adapt to the increasingly international demographics of its customer base. Working a 9-to-5 day from headquarters didn’t cover the range of times this customer’s customers were at work. To align its workforce with its customer base, this organization wanted to have its employees work split shifts timed to follow the sun as markets in Asia, Europe and North America came online.

Driving back and forth to the office between shifts was obviously not possible. Instead, the telework model allowed employees to work from home and use the additional flexibility to create an acceptable and sustainable routine for themselves. Today, a large segment of this organization’s workforce works from 5 a.m. to 10 a.m. to catch the end of the day in Europe. They take a break before serving U.S. customers in the middle of the day, and then go back to work from 6 p.m. to 9 p.m. in the evening to be available when Asia is waking up.

Although perhaps not to such an extreme, any organization that serves a clientele across multiple time zones can take advantage of telework to accommodate split shifts, i.e., brokerages on the West Coast that need to be at work when the financial markets open up around the world.

An increasing number of call centers are enabling telework to provide flexibility for their staff and are finding that agents who work from home are consistently more productive than agents who work from cubicles at a call center. The telework model also allows organizations to recruit staff without regard to their geography



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Work/Life Balance

One set of users that has clearly benefited from the same technologies that enable telework is the IT staff. The IT work day is notoriously determined by need—and/or crisis—instead of the clock. Being able to work virtually from anywhere at any time provides a welcome amount of flexibility.

With the tools available today, Logicalis' Strohecker says a staff member can manage a server environment, add and remove users, or troubleshoot a network all from a Blackberry or an iPad riding as a passenger in a car going down the highway.

Strohecker says Logicalis' policy on telework is "evolving." Technology is changing so fast that new options become available almost monthly. The theme that is emerging in the rising tide of product announcements is that the access device is just a pretty interface and the actual intelligence—as well as the storage, backups

and management—are all in the data center. The ultimate expression of this option is the virtual desktop interface (VDI) which promises to replace the PC as the access device of choice. Cisco calls its approach to virtual desktops the "virtual experience interface" (VXI) to emphasize that the identity of the "desktop" is the variable "X." The Cisco Cius tablet is its own contender for "X."

The VDI story is, in fact, compelling: A thin-client device accesses your central data center from anywhere, takes on the image of the user's desktop, provides all the appropriate data and applications as needed on login, and then reverts instantly to the proverbial tabula rasa when shut down. Meanwhile, all data is stored, managed and safely backed up in the data center. It appears to be a win/win for IT departments and users.

VDI clearly has potential as a technology to enable telework, but, as with all technologies, especially emerging ones, it needs to be tried very selectively and the total cost of ownership needs to be carefully evaluated. (You can read



Further Reading

Visit
www.us.logicalis.com/VDI

Read
www.us.logicalis.com/pdf/VDI-Feature-Story.pdf

Greg Baker,
Logicalis

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the Logicalis feature “VDI Gets Real” at www.us.logicalis.com/vdi).

Face to Face

Another technology that is clearly in ascendance is video. The days of low-res images jerking their way uncertainly across a tiny little window are ending as network infrastructures improve. Cisco, for example, announced video enabling all endpoints with quality of service (QoS) at its Collaboration Summit 2010. According to Logicalis’ Dossias, the take-away from the summit is: “Video is the new voice. It’s becoming ubiquitous.”

Cisco’s research shows that about half of all Internet traffic currently is video-based and forecasts that number to jump to 90 percent by 2013. Today, it is possible to engage in a video conference across a range of technologies from smartphones and tablets on the low end, to video conferencing systems from Tandberg in the middle and TelePresence on the high end.

Quality video enriches the telework experience by literally putting co-workers and customers face to face. Cisco’s TelePresence technology, for example, allows you to literally sit across a conference table from fellow participants in studio-quality, life-size, living color regardless of

where they are in the world. You can see each other’s gestures, nods, smiles and frowns as if you were in the same room. You almost feel as if you could reach over and take a croissant off of the plate in front of the guy in the Paris office.

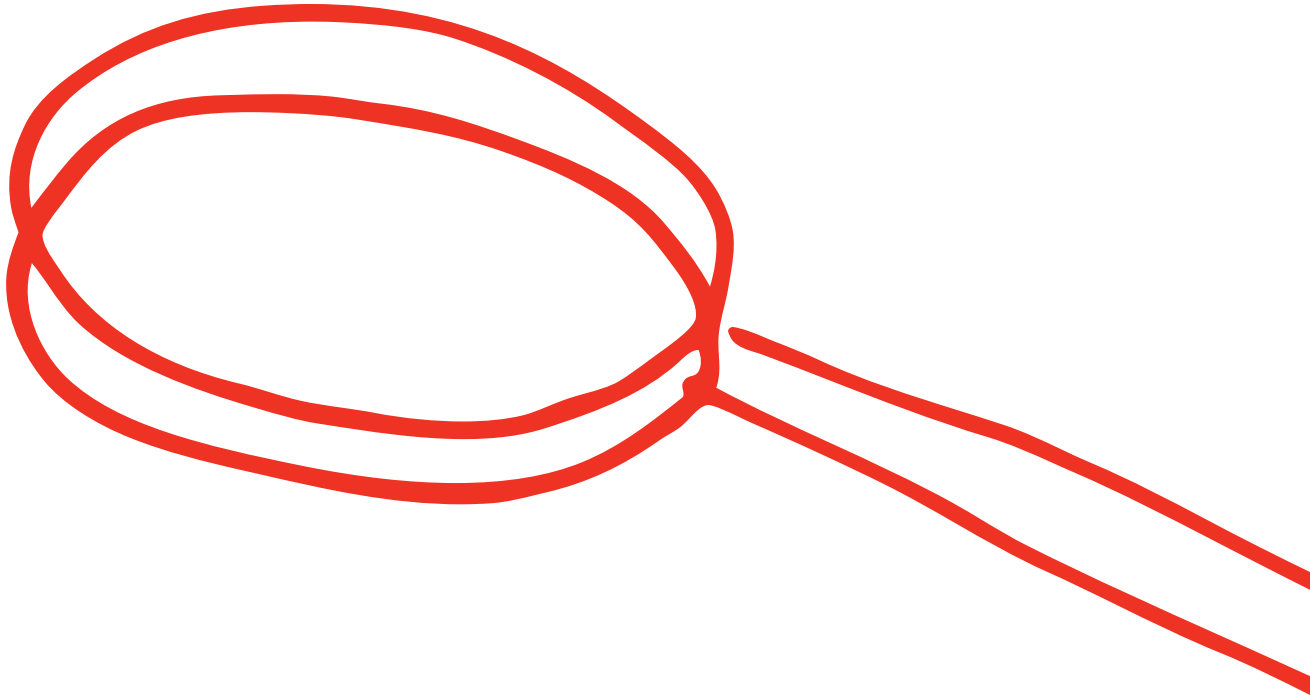
“The quality of the video is so good that the technology melts away and you cease to be aware of it,” Dossias says. “You just communicate naturally.”

The Borderless Workspace

In some ways, having a dizzying assortment of technologies to choose from to support telework only manages to add another level of complexity to the challenges of supporting an increasingly mobile workforce. The reality is, however, that most of the capabilities that an IT department makes available to home workers it would make available to everyone on staff anyway.

Progressive organizations have stopped treating teleworkers as an exception to the office-bound workforce and are developing policies that address them as an integral part of their workforce.

The teleworker may be at the leading edge of the trend toward the borderless workspace, but the rest of the workforce is inevitably going to



follow. A feedback loop is developing between the technology—like social networks—that people use at home and the systems they want available at work. The emergence of “enterprise” social networking tools is only one of many examples.

Technology is both enabling, causing and, in turn, being driven by changes in our relationship to work as we move further away from a centralized bricks-and-mortar orientation to a virtually distributed, borderless network environment where anyone can communicate effectively with everyone else anywhere, anytime, on any device. Where an individual works is becoming irrelevant.

“I think work is something you do, and not something you travel to,” says Baker philosophically. “If you can get people engaged and provide a good, flexible work environment, it’s a competitive advantage because you are going to have the best people for your customers, and that’s what is going to drive your sales.”

About Logicalis

Logicalis is an international provider of integrated information and communications technology (ICT) solutions and services founded on a superior breadth of knowledge and expertise in communications and collaboration; data center; and professional and managed services.

Logicalis Group employs over 1,900 people worldwide, including highly trained service specialists who design, specify, deploy and manage complex ICT infrastructures to meet the needs of over 5,000 corporate and public sector customers. To achieve this, Logicalis maintains strong partnerships with technology leaders such as Cisco, HP, IBM and Microsoft.

The Logicalis Group has annualized revenues of \$1 billion, from operations in the UK, US, Germany, South America and Asia Pacific, and is fast establishing itself as one of the leading IT and Communications solution integrators, specializing in the areas of advanced technologies and services.

The Logicalis Group is a division of Datatec Limited, listed on the Johannesburg and London AIM Stock Exchanges, with revenues in excess of \$4 billion.

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