New technologies are changing the workplace. Data is mobile. Employees can sync up without even coming into the office. Is a revolution in workplace culture and environment just around the corner? Will working virtually cut costs and promote productivity or just present new problems?

view:

Set your

You have the technology...

You're sitting in a meeting room in your office and want to share an email with your colleagues - so you pop open your ultra-mobile PC, connect it to the internet via wi-fi and launch Outlook.

Or you need to make a conference call so you arrange one on the fly via your VoIP client and that wi-fi connection.

Or you get a good idea while sipping a coffee in the trendy 'break out' area, so you IM your boss on your portable, connected system.

These are but three of the most basic examples of how technology can improve productivity in the workplace.

While most companies are aware of the theoretical benefits of a high-tech office, not enough are doing something about it - and investing in the proper infrastructure.

Even here at Silicon Towers, though we have a wi-fi network, it's often hard to get a signal in meeting rooms. And though most of us have laptops which would allow us to roam the office and work anywhere we like, few alternative workspaces are available and connectivity is spotty, so our portable systems end up tethered to our desks when we're in the office.

Research out this week bears this out. Business executives are aware of the major workplace types of tech - wi-fi, VoIP, ultra-mobile PCs - and they know technology can impact working styles. But taking advantage of them is not why they shell out cash on an office renovation - they're after better productivity and cost reductions.

This makes sense to a point. There's no use in pursuing technology for technology's sake. Rather smart businesses know it's about what IT can do for you.

But there seems to be a disconnect because it's those technologies which can bring about that increased productivity and lower costs. Hotdesking, or having fewer desks than employees, is one obvious example. Enabled by portable PCs and ubiquitous net connectivity, it saves on property costs. Meanwhile VoIP has long been known to reduce long-distance bills to next to nothing.

The tide is starting to turn - 91 percent of organizations allow employees to work at home occasionally, the research shows. And more than half of those who still rely on workers commuting in to the office think this will soon change.

But we're not there yet. What will it take to reach the mecca of the connected workplace? The technology is there so it must be our outdated ideas of how work gets done that need to be overcome.

*The editorial staff of **silicon.com**.*

review:

workers free?

"Changing attitudes, fundamental demographic trends and the inexorable grind of new technology are conspiring to create a totally new environment." While Dr. James Bellini was discussing changes in consumer attitudes in the 2005 Global Future Forum survey "Pulse," the same comment applies to changing employee and business attitudes.

I still feel nervous with an empty briefcase, one not stuffed with documents I might need on a trip. It seems only yesterday when paper was the norm. Then, for many, paper was replaced by a large, overweight laptop, entangled with yards of cables – power, telephone and so on. Today, the technically savvy slip a high capacity, universal hard disk (the size of a cassette) or a USB stick holding their office, into their pocket. Some carry nothing, instead using some of the clever, new, on-line applications and storage facilities to make the carrying of any data redundant. A mobile phone/pda and the use of any internet enabled PC, anywhere in the world, is their office. The fact that all of these changes have taken less than five years is testimony to the exponential rate of technological change.

The mobile worker is here to stay and his or her data has to be securely available wherever and whenever needed. In the future, as work itself becomes more mobile and working patterns continue to change, this mobility becomes both an enabler and a necessity.

But there are problems. A colleague of mine at the Global Future Forum (GFF) gave a talk to a group of chief executives. His question was "…has the technology engine that has powered business development for the last 50 years finally run out of steam?" The answer, of course is "No." The real question today is "has business run out of the ability to exploit new technology?" 76 percent of respondents to a recent GFF survey agreed that "…organizations are unable to effectively manage and deploy new technology due to rapid change and constant innovation."

In our move into a world of "always-on digital data" we must look to our children – tomorrow's employees and customers. Today's teenage population, the so-called "digital natives," are self-assured and highly literate when it comes to technology. They embrace it as an essential part of their daily lives, just as we used to use pen and paper. Music, video, pictures, chat, text and the mobile phone, not tools but part of the fabric of their lives. When they come to make their decisions on where to work and who to work for, they will expect business to be using the technologies they use for leisure.

However, the very advantages that the mobility of digital data pose have their downside – security. It was recently reported that the average business laptop held about $1 million of commercial data! As business is beginning to take advantage of data mobility in many different ways – outsourcing for example, the daily war against illegal access to data intensifies. We, as individuals, are becoming increasingly sensitive to the security of our personal data and reacting against its indiscriminate distribution and use. People will demand assurances that they will retain control over their data and how it will be used. While technically data becomes increasingly mobile, so will constraints on its use. Data protection is today in its infancy.

There are countless technologies today on the verge of commercial use, many based on, or using, mobile data. Some are already used in military and security environments. Readers of near term science fiction will be familiar with some of these. Some indeed might sound like science fiction – wearable computing, nanotech applications, city and region wide WiFi are some examples. Tomorrow, these technologies will be on the commercial market and ubiquitous. All will add to the mobility of data, making it ever easier to work and play on the move. How these (and other) technologies will come together to create commercial products is almost impossible to forecast. We know as well that there will be astounding new developments that today we cannot predict. It was Donald Rumsfeld who said "….and we don't know what we don't know"– very true. The key will be how we (and more importantly our children) embrace new technologies and how they change their lives. Business needs to be watching this space, carefully.

If it is to benefit, business will need to understand far more than the mechanics of new technologies. They will need to understand the way that people – their employees and customers, will use and interact with them.

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This article originally appeared in "Organisational Lives - inventing the future with mobile technology" a report produced by the Orange Future Enterprise Coalition. Copies of the full report can be found at http://www.orange.co.uk/business