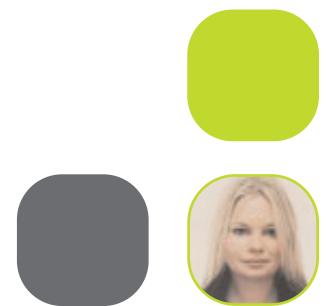




Cut the Cord

Cell phones, PDAs and laptop computers are everywhere. Technology adoption rates are at an all time high and within the last year, a plethora of new technologies have been added to the market. But many people are wondering what the impact of all this communication will have on work process and the workplace.



[Michelle van Vuuren](#) is Business Director at UNWIRED. She is responsible for events and training, and publishing all guides, reports, and the monthly newsletter. The core of the UNWIRED vision is to build a bridge between technology, facilities management, property, architecture and design, so as to create innovative workplaces.

Cut the Cord, continued

Information and Communication Technology is central to people's working life, and recent advances have had a major impact on workplace design and how people communicate. Leading-edge designers now consider technological advancements when designing new office spaces, allowing the creation of more enabled environments that can morph to the changing needs of the occupiers. The way we work has changed, and especially for solitary work—people are often as effective on the move (in an airport lounge, coffee shop or from home) as they are in the office.

Offices have become more flexible and workstyles become less predictable, making managing a facility increasingly difficult. However, over the next couple of years a range of new standards will allow property and facilities professionals the ability to innovate and reduce costs.

Zigbee (or IEEE802.15.4), for example, is a new global standard that will enable wireless building management system, purposefully designed for wireless switches, monitors, sensors and controls. A wireless building system eliminates the need for extensive cabling to every light switch, fire alarm or air conditioning unit by simply connecting them to a central system wirelessly. This technology alone will have a dramatic impact on the facilities management profession, especially in areas of people moves and department changes.

For those professionals interested in cost-savings, the most interesting technology development in recent times has been IP Telephony (IPT). Wave goodbye to your old PBX system, as this technology allows voice calls to be carried over the data Local Area Network as part of a "converged network". In other

words, the same network that carries all your data, can now also be used to carry all your phone calls. For a truly clear desk, why not throw away your telephone altogether? "Softphone" is a piece of software on a personal computer, laptop or PDA which allows calls to be made from either Outlook or



Cut the Cord, continued

Notes, allowing you to toss that clunky plastic dial-piece on your desk. But, the real impact of IP Telephony will be on the bottom line—smaller patch rooms, with less cooling and no need for re-configuration or re-patching and only one cable to the desk. This means less real estate, lower costs and a healthy return on investment.

In the past, space planners and office designers have had to accommodate handsets, large personal computers, and massive monitors. The paraphernalia of accessories that sit in and on the desktop had the potential to pollute an otherwise ergonomic environment and create distress among those tasked with reigning in the chaos. But now, whole ranges of slimmer, smarter and more mobile devices are being used for work. In fact, according to Display Search Market Research and Consulting Group, LCD monitor and LCD PC shipments have the potential to surpass desktop monitors and CRT sales. Interestingly, as users opt for smaller, more powerful devices, the need to understand how these growing arrays of gadgets connect, recharge and dock back at the desk increases. As trends continue and we move towards an “always-on and connected” world, everything changes and this will be especially true for buildings and the furniture that articulates these spaces. This integration of buildings, furniture and technology must take the high ground and provide more sophisticated solutions for housing, operating and

maintaining the devices of a more nomadic and mobile workforce.

While people debate adoption rates and market forecasts, most laptop manufactures are now shipping equipment with either WiFi or Bluetooth on board (or both), and PDA manufactures have followed this lead. As old equipment becomes obsolete and wireless

artifacts become more and more prevalent, employees will find themselves demanding an infrastructure in their buildings that enables connectivity. These technologies put a new emphasis on the built environment as a collection of disparate settings can be used for connectivity when needed.



Cut the Cord, continued

Fortunately, most progressive workplaces have gradually increased the amount of public space provided to their people, introducing cafes, social areas and break-out zones. While these spaces by themselves encourage face-to-face conversation and team meetings, wireless technology in these areas allows for even greater productivity and effectiveness. "For many, the correct implementation of technology can address the issues that CEO's focus on—control of core costs, output and input, and quality of service. British Telecommunications experience is that appropriate technologies, when applied correctly, deliver an enhanced service while improving staff productivity and retention," says Chris Webber, Head of Agility, British Telecommunications Workstyle Consultants.

We believe the workplace will change as people are enabled by technology that is not place-dependent. Internet Service Providers (ISP) will be the switchboard and the browser your desktop, through which most information and knowledge will be accessible at any time and from any place. Rather than bricks and mortar representing a geographic location through postal address, telephone and fax, locations can become virtual as electronic mail and "unified messaging" make the physical invisible.

"Digital living will include less and less dependence upon being in a specific place at a specific time," explains Nicholas Negroponte in

"Being Digital". "If instead of going to work by driving my atoms into town, I log into my office and do my work electronically, exactly where is my workplace?"

A good question indeed. Digital transmission does not distinguish between "voice" and "data"; whether we are speaking, viewing or sending makes no difference in a digital world. This indifference will spread to work and the workplace where the boundaries between "office based activities," work on the move, even retail and leisure will begin to blur.

It is clear that within buildings, planning and design, furniture and facilities management will all under go significant changes as technology breaks down the barriers between time and place. Many organizations will need to reconsider their information and communication technology infrastructure to enable staff the greater flexibility to work from touchdown

areas and even wider areas such as from home, cafes or client sites. A Borough in London, England did just that and they now plan to reduce the number of workstations from 2,800 to below 2,000 through workstation sharing and headcount reduction through to outsourcing. They estimate that they will make £10 million (\$18,185,000) from building sales for investment in frontline services and predict a running cost savings of up to £1 million (\$1,818,500) per year.

There are many benefits to an efficient work environment, and a persuasive return on investment can be demonstrated when technology is effectively used to enable people to work effectively and efficiently. Above all, the workplace should enable, inspire and support the people within the organization, and technology is now one of the key enablers of change for most organizations wanting to move onwards and upwards.



Jargon Buster

Bluetooth

A wireless technology used to link laptop computers, personal digital assistants (PDAs) and mobile phones for short-range transmission of voice and data without the need for cables, within a range of 30 feet.

IP (Internet Protocol)

A set of rules used to send and receive messages at the Internet address level.

IP Telephony

Technology that supports voice, data and video transmission via IP-based LANs, WANs, and the Internet.

PDA

Personal Digital Assistant. A hand-held "intelligent" notebook computers that have the potential to integrate telephone, fax and computer into one single pocket sized unit.

Wi-Fi (Wireless Fidelity)

An interoperability certification for wireless local area network (LAN) products based on the Institute of Electrical and Electronics Engineers (IEEE) 802.11 standard.

WLAN

Also referred to as LAN. A type of local-area network that uses high-frequency radio waves rather than wires to communicate between nodes.

Zigbee

Global standard for reliable, cost-effective, low power wireless applications

