



8 IT JOB CHANGES



The IT and facilities management functions keep crossing paths in many enterprises; so has the time come for them to properly get together?
By **Miya Knights**.

the urge
to converge

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JARGON BUSTER

Facilities management Interdisciplinary field devoted to the maintenance and care of commercial or institutional buildings. Duties may include the care of air-conditioning, electric power, plumbing and lighting systems; cleaning; decoration; groundskeeping; and physical security. FM has been increasingly drawn into technology management concerns.

Convergence Approach toward a definite value, a definite point, a common view or opinion, or toward a fixed or equilibrium state. Technological convergence is the tendency for different technological systems to evolve towards performing similar tasks.

CRC-Energy Efficiency Scheme The UK's mandatory climate change and energy saving scheme, launched in April 2010, and administered by the Environment Agency. It provides a financial incentive to reduce energy use by putting a price on carbon emissions from such use, and also provides the opportunity for participants to make savings on energy bills through improved energy efficiency. The scheme features an annual performance league table that ranks participants on energy efficiency performance. (Sources: Department of Energy and Climate Change, British Institute of Facilities Management, Wikipedia.)



ELECTRONICALLY, the way in which enterprises organise and structure is changing. Old divisions between departments within an organisation are often proving unsuited to the changing nature of business conduct, and also unsuited to the increasing requirements being placed on specific aspects of corporate governance. It is a dynamic that is causing unification between operations that until relatively recently seemed to have little in common; the coming together of IT and facilities management (FM) is a prime example of this trend.

To an extent, these changes are a matter of adapt to survive. Some departments that once seemed prerequisites to most companies, such as telephone switchboard, typing pool, and stationery supplies, were within a few years obsoleted by practice change rather than innovation or disruptive technologies.

In IT and computing, discrete disciplines have either died out or been consolidated into larger body politics, as technologies themselves have converged or (at least) become less differentiated. Twenty years ago the

divide between the enterprise voice and data technicians, or between PC-based and host systems, seemed impervious; now it is at most incidental.

CONVERGENCE

The convergence of data and telecommunications over Internet Protocol (IP) based networks paved the way for the ICT age, and brought the IT and FM functions more intertwined by the compelling force of innovation. Security provision encompasses prime examples of this.

For instance, many closed-circuit TV (CCTV) premises surveillance systems now relay their images over IP networks, rather than standalone video circuits. Point of entry security systems are another security feature that, as a result of coming under control of industry-standard networking protocols, have become part of the so-called 'IT estate' rather than a separate in-building technology 'owned' by FM.

There are two strategic areas where the IT and FM functions have already had to work more closely together, says

Bobby Collinson, managing director of energy management consultancy Power Efficiency: in buildings infrastructure management, and over the energy bill.

"IT has always had to talk to facilities management colleagues when it wants to provision a new server room or data centre," Collinson explains, "and IT can be responsible for a large proportion of the energy bill. IT server rooms have huge energy consumption needs, which includes heating, ventilation, and air-conditioning (HVAC)."

IT can also take-up a lot of space, Collinson points out, which creates the very real requirement for IT, FM, and power and electrical engineers to enter into a dialogue with each other, and ensure there is the power capacity to avoid over-taxing the power coming into the building – another increasingly contentious issue that calls upon all parties to co-operate in perpetuity. Many early enterprise carbon management programmes began in debates around power bill 'ownership'.

INFRASTRUCTURE PLANS

The task of deciding where to run pipes and cables, or place vents and access control points, usually lies with FM, just as management of the organisation's energy needs often do too. If for no other reason than FM is in possession of the building's blueprints and knows where the rest of a building's infrastructure is located. In the scenario highlighted by Collinson, however, IT may be called on to get involved in not only data centre projects, but also in the process of specifying buildings with new 'intelligent' ICT systems.

IT increasingly can help provisioning, routing and positioning of cabling and ducts for the IT network and its wired and wireless access points, as well as the in the data centre and around the property estate for access control systems. IT's involvement from the outset can then help mitigate the disruption and expense of retro-fitting technology infrastructure components in future and ease FM access to infrastructure systems for maintenance, ►



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'IT and FM functions have had to work more closely together in strategic areas'

Bobby Collinson, Power Efficiency



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case study

TEAMWORK SHRINKS CARBON COUNT



◀ reducing operational overheads by enabling more proactive control.

Such reductions in cost may not have previously been a board-level concern; the same goes for buildings and ICT maintenance, management, and reporting; but they are now very much front and centre of the minds of every cost-conscious senior executive.

If rising energy costs were starting to increase every organisation's utility bills before the global economic recession, operational expenditure has leapt up the corporate agenda further, as organisations have to look at keeping day-to-day expenditure under control.

One of the reasons energy costs have particularly come more under scrutiny is the fact that, in a volatile energy market, they can fluctuate by as much as 40 per cent a year, according to Power Efficiency findings.

Although both IT and FM departments rely on computer-based systems to meter their respective estates, systems used to measure and account for energy consumption are still more often the responsibility of FM, while intelligent buildings systems that include electronic and biometrics access and even intelligent lighting or desktop computer power controls are more the preserve of the IT function.

Tesco opened its first low-carbon blueprint store in January 2009 with a claim that the store's carbon footprint is 70 per cent less than an equivalent store built three years previously. "When we announced our plan to reduce our carbon footprint by 50 per cent across all of our global operations, we knew we were taking on a big task," admits Mike Yorwerth, IT director at Tesco. "A number of people across the business have been involved in measuring, documenting, and reporting on our emissions – a time-consuming, largely manual task."

Yorwerth adds: "We're overseeing hundreds of projects around the world designed to

reduce our carbon footprint, all of which need to be prioritised and measured." Yorwerth and his team are using CA Technologies' EcoSoftware solution to manage the changes. "FM could take a proactive role in looking at energy consumption and carbon emissions, to manage these down over time and inform on the liability around purchasing allowances, saving money and gaining better positions on league tables like the CRC Energy Efficiency Scheme's," says Sonny Masero, vice president of CA's EcoSoftware division, although he admits that the project to implement carbon management software at Tesco was led by IT initiatives.



there's more online

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So, while the division of responsibilities and corresponding skills, tools and capabilities between IT and FM may continue to be separated, the strategic requirement to manage their complimentary functional areas more efficiently and effectively is another area that invites further convergence.

REGULATORY COMPLIANCES

Beyond energy costs, the emerging pressures around environmental impact and compliance are another reason why it is paying for FM and IT to maintain a more productive dialogue.

The UK became the first country to lay the foundations of a cap-and-trade scheme for carbon with the government's Carbon Efficiency Commitment (CRC), which mandates that the largest energy users measure and report on their carbon consumption through the CRC Energy Efficiency Scheme, administered by the Environment Agency. This legislation requires accurate reporting of energy consumption, and this, in turn, is giving IT managers access to information about how much electricity their activities consume.

The way in which usage data is presented is an important issue. Although techies might be able to understand raw data sets, most executive colleagues at board level struggle to make sense of it all. "The facilities manager uses engineering-focused application for managing buildings, which are not as helpful for the CIO or CFO," says Simon Wheeldon, chief executive of software developer CloudApps.

"For instance, we provide a high-level business application that every business executive can use for managing carbon as an asset."

Wheeldon is sure that the drive towards carbon efficiency is "helping to bring departments that may not usually work directly together", including human resources (HR), IT, FM,

legal, and corporate social responsibility (CSR) teams. "All are now required to solve the business problem of reducing emissions – in some enterprises, FM is taking the lead because they are focused on the buildings side with energy management," Wheeldon adds, "but IT can get involved on the data centre and PC estate side, and CSR can look at other carbon-intensive areas like travel, waste, and water as well."

The incoming legislation places the onus of responsibility on the end-consumer of the energy, and not primarily on the account owner or the organisational entity named on the bill, as used to be the norm. So increased cost, capabilities, and responsibilities of the IT function are bringing it more and more into territory traditionally occupied by FM.

"Whether it is the acquisition of technologies for getting compliance, like AMR [automatic meter reading], or saving costs with data centre management software, this is definitely a trend we see happening," opines Jon Temple, president and chief executive of data centre management firm, Nlyte Software. "With IT taking up to 50 per cent of the power bill in some enterprises, I believe that we are even likely to see PUE [power usage effectiveness] key performance metrics for CIOs in coming years."

When you have the CIO paying their own power bills, they can afford self-funded initiatives for driving savings into other areas of the company.

"Every organisation is on the same trajectory. It just depends on the situation," Temple says. "The financial services industry is one of the ones leading the charge because of its massive reliance on IT and data centres, plus the fact that it is a very transient industry with a lot of mergers and acquisitions activity; but essentially it is the same issue everywhere: organisations are paying a boatload for power, and there is a massive push in the

UK with CRC/EES, to push for reductions in carbon footprints. Administrative departments like FM and IT are having to take the lead in reducing these costs, and getting more longevity out of existing assets."

Chris Smith, sales and marketing director for data centre specialist On365, describes his firm as 'IT-ility' engineers: "The first time I saw IT/FM convergence was when UPS [uninterruptible power supply] equipment came into the IT suite, as opposed to being out in the plant room," he recalls. Smith thinks that facilities personnel have had to get to grips with IP-based management systems alongside their traditional building management ones; but, he adds, "one

area facilities still heavily defends is its boilers". Boilers? "And that's only because they are not yet IP-based. But even installing a rack in a high-voltage circuit breaker still requires specialist skill, as it is quite dangerous. So I cannot quite believe that, ultimately, IT will swallow up facilities because power and electrical engineering expertise will always be needed – it will just be more IT integrated on the data centre side." If Smith is correct, then the old adage 'the network is the computer' (attributed to computer scientist John Gage) might well have to be retro-drafted to 'the data centre is the enterprise'. ■

■ Further information <http://bit.ly/eandt-weblinks>



Cable guys: the task of deciding where IT's cables and pipes can be run, or sockets and access control points positioned, usually lies with facilities management