

What makes your IT special?

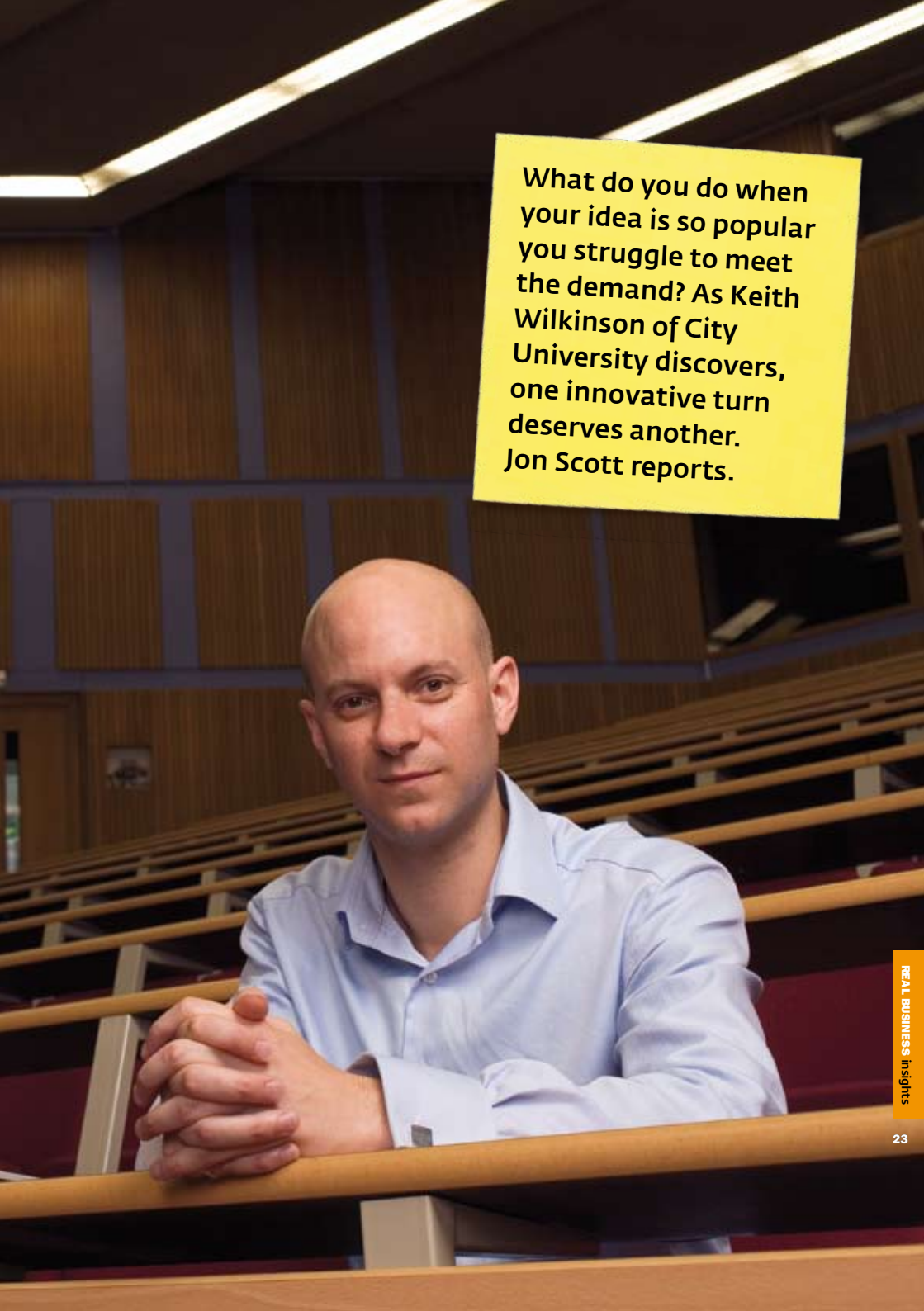
It was a nice problem to have. Three years after introducing CitySpace in 2003, a virtual learning environment for students, London's City University found itself deluged by demand. Logins were running at more than 100,000 every month, courtesy of 7,500 students, and the number of trackable events in the system every month would routinely top a million.

The success was perhaps not surprising given the more than 20,000 students registered with the university from over 160 countries, and the 400-odd modules for courses and degrees made accessible through CitySpace after it was zeal-

ously embraced by staff. Instant access to course materials and activities within a real-time interactive environment proved too alluring.

Inevitably, all this exerted a great strain on the interface between CitySpace itself and the University's student record system. In the short term, the only way round the problem was a heavy reliance of staff input, and degree of patience among users. But by 2005 it was clear this was not a sustainable model, and a proper solution would have to be found. Keith Wilkinson, a project leader within City University's Information Services, was still

PHOTOGRAPHY: MICHAEL CLEMENT

A photograph of Keith Wilkinson, a man with a shaved head wearing a light blue button-down shirt, sitting in a lecture hall. He is leaning forward with his hands clasped on the wooden railing of his seat. The background shows rows of empty wooden seats and a wood-paneled wall with recessed lighting.

What do you do when your idea is so popular you struggle to meet the demand? As Keith Wilkinson of City University discovers, one innovative turn deserves another. Jon Scott reports.



sizing up the task when he realised it made sense to start integrating City's other business systems at the same time. After all, CitySpace was just one of a number of the university's services relying on IT infrastructure.

"It's fair to say we were surprised by the demand for CitySpace, and obviously we needed to work out a way of meeting demand," says Wilkinson. "Yet, the more we looked into solutions, the more it made sense to take a longer-term, more strategic approach to help City's other services, such as our user database. Yes, we were getting by, exchanging data from system to system, but we weren't doing so robustly or in real time. Every time we connected two systems, we needed a bespoke bit of code."

Key to many IT projects' success is luring the senior management team on board, and so it proved in this case. Careful not to bamboozle the powers that be with talk of SOA-this and middleware that, Wilkinson instead emphasised the business benefits that new technology would bring. It helped that he knew his stuff. A relatively small project team, helped by external advice from Maven Associates, had identified the initial requirements, before passing them onto their in-house IT staff for approval. SMT on board, it was time to scour the marketplace.

"We cross-referenced what we wanted with what was on offer in the market and narrowed it down to four companies," says Wilkinson. With the strategic tack now greatly enlarging the scope, the team wisely included in the selection process all those colleagues who might be affected by the new software. That meant key Information Services staff, from the IT operations manager and UNIX team leader to the university's web developers and business system support teams.

"We did this not only out of fairness, but also because their input would prove valuable," says Wilkinson. The four finalists were scored against the agreed criteria, and the results circulated for feedback.

That helped narrow the candidates down to two, whom City University then approached with their requirements. The danger of too many cooks never materialised because in the end, says Wilkinson, the ultimate decision was easy.

"IBM was the clear winner, not just on grounds of cost, but also due to their greater commitment to open industry standards such as Eclipse, an open-source integrated development environment (IDE) which lets you build software much more easily. In other words, they promised a more integrated product, from the applications server right the way up."

The beauty of IBM's Service Oriented Architecture (SOA) was that it would allow City University to streamline the registration and enrolment of student business processes, while integrating key applications such as SAP, Management Learning Environment (MLE) and Single Sourcing of Programming Data (SSPD).

"This application integration was a great driver for us," continues Wilkinson. "But it's important to understand that none of this would be possible without it all being underpinned by the enterprise service bus (ESB) which, put very simply, translates the format of System A's output so System B can understand it.

"IT moves so quickly, so we wanted some guarantee of future-proofing. We shied away from proprietary technology belonging to a small firm, in case it got taken over by a bigger firm and its technology became obsolete. We wanted something that was generic and standard."

If IBM's size and history was reassuring, then the cost factor was compelling: "Obviously being part of the public service, we have to justify everything we spend and we need to know precisely what things cost before we buy. IBM gave us an exact quote from the start – the other vendors were more woolly."

With the system now in place, the temptation is to explore its full capabilities as soon as possible. Wilkinson, however, is determined to keep his feet on the ground – at least to begin with: "If you go for one or two smaller projects that use the technology early on, other departmental heads will understand quickly what it can do and get excited by the potential," he says. "The danger then is of running before you can walk. So at this early stage we need to prioritise. Only when a couple of projects have worked successfully will we be ready to move on."

The gestation of two such projects is almost complete. Debuting in December, City's Managed Learning Environment (MLE) will streamline the CitySpace registration and enrolment processes for staff and students. It will be followed early next year by the higher-profile Single Sourcing of Programming Data (SSPD), designed to improve the way the university manages, re-uses and shares information about its programmes.

Until they are up and running, Wilkinson prefers not to rest on his laurels. Even at this early stage, though, the experience has taught him lessons he's happy to share with anyone trying to get a big IT project off the ground: "Couch your pitch to senior management in business terms and keep the scope relatively small," he advises. "Any investment like this is not to make life easier for the technical people, but for your entire business. In the medium term, ours should help us respond to changes in the marketplace in a more agile fashion, and get new services up and running that much more rapidly. And let's face it, that's what it's really all about."



"If you go for one or two smaller projects that use the technology early on, other departmental heads will understand quickly what it can do and get excited by the potential. The danger then is of running before you can walk."

- Keith Wilkinson,
project leader,
City University
Information Services



where next?

For more information:

X: xxxxxx xxxxxxxxx
M: xxxxxxxxxxxxxxxxx
E: xxxxxxxx@xxxxxx.co.uk
W: www.xxxxxxxx.co.uk