

THOUGHT LEADERSHIP

The Connected Campus delivers Innovation



Technology leaders in academia are cutting complexity and embracing End User Computing combined with cloud computing to improve and secure teaching and research.

Today's students and researchers require a technology experience second-to-none. As a result, CIOs in the academic sector are looking to deliver a digital experience on campus that provides a great End User Computing experience, supports education through distance learning, virtual labs and research, as well as improve the workflow of the institution with interconnected systems that reduce tasks, simplify operational tasks and as a result reduce the cost overhead of running the institution.

"There has been a rise in the demand for high-quality education amongst students and their parents," Transparency Market Research said in a statement about its recent study of cloud computing in the higher education sector. Despite the pandemic and its negative impact on higher education, the 'Global Higher Education Solutions Market to Thrive on Growing Popularity of Cloud Computing and High Consumption of Digital Content' report finds that demand for higher education will continue to grow between 2020 and 2030 and will, in turn, create a greater demand for cloud, End User Computing, campus management, data security, compliance, content and collaboration solutions by institutions.

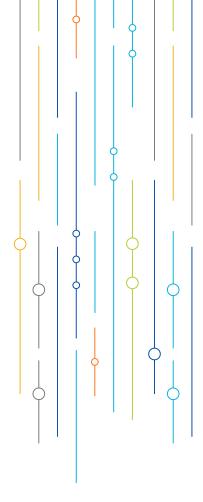


"There were 14 different systems, each with different log-in details and I was surprised at the number of systems that students had to use," the CIO of a major European university says. "That was the impetus for a single sign-on and single portal project that went live at the beginning of this academic year, and that has made things much simpler." As with any business technology leader looking to help an organisation improve its customer focus, the CIO has been implementing End User Computing solutions that improve understanding and reducing complexity in the organisation. "An application rationalisation ensured that students have fewer disconnected systems for timetables, learning resources, email and the library for example," she says.

Today, as academia becomes ever more competitive, technology leaders are looking to bring the benefits of enterprise-grade software and End User Computing solutions to their institutions. "When I arrived and looked at some of our problems, it seemed to me that a proper commercial CRM would be the answer to make sure that we understood the whole student life cycle," the CIO says. Adding that means the organisation has business dashboards to monitor students as it moves towards becoming a data-centric organisation. "The business really understands the need to take processes out of the box and run with what everyone else is doing rather than make things specific," she says of implementing an off the shelf CRM as the first stage in the development of a virtual campus. By understanding the student universities will be able to develop digital twins of the physical campus, an online campus with the same levels of learning, support and resources in a service-centric model that emulates what the student receives when on campus.

A CIO peer at a major Russell Group university agrees: "This means creating immersive digital services that create an environment around the student, they get everything they need in one click in the format that is highly personalised to that student.

"We don't use the word customer in higher education, but the student journey is entirely applicable. Can you recreate an Amazon online shopping experience for students who are submitting their work for marking? Can we design, so work goes through the plagiarism checker, it goes through online marking, the comments by the academics are in short videos or text, and it arrives back in the student's inbox at the right time, and the grades are instantly put into the analytics database, and it arrives on the student's smartphone in an App? That is the kind of customer journey we are talking about," he says. This transformation of the university experience and product is seeing university CIOs deploy technologies that manage the entire workflow of an education, institution and research project.



IT REVISION

With students, researchers, teachers and support staff expecting a highly digital backbone to their role or experience, CIOs and CTOs in academia are developing a completely new technology service and operating model, underpinned by the latest cloud and End User Computing platforms. "We need an IT operating model that is fit for the modern environment. So its design-led, service-centric and absolutely customer focussed," the Russell Group CIO says.

"We need to move ownership of the IT and digital services up and out of IT. We need to get people who understand education to own digital services," he adds of how technology, teaching and research teams collaborate on the selection and deployment of the best technologies for the tasks. Again, this is an example of academia learning from the world of industry, where the CIO and IT have developed a broker relationship that leads to the co-creation of a highly integrated service-centric technology landscape that suits the needs of each area of the organisation.

"The skills of the IT staff make the difference; they are the people who do the specialist programming to support the research into the atmosphere of exoplanets light-years away. So we are becoming a vital digital service," the Russell Group CIO says of the transformation of IT.

That broker relationship is vital not only to ensure academic departments have the right technology at hand, but also to protect the valuable data that universities create in their research and industry partnerships. "Data is more important than ever before.

"In a university, where is the data? Who has their hands on it? What is valuable? The University is big into bioscience and energy. Who is interested in our energy research? There are probably quite a few state actors that would be quite interested in our battery research, for example," the Russell Group ClO says of the security questions he must ask every day. This creates a need to provide a data and technology estate with high levels of security. "We are dealing with academics who are very single-minded, they are completely dedicated to their cause," he adds, thus it is important to deploy a cloud and End User Computing environment that the academics will adopt and use and in doing so, secure their valuable research data.

Universities are becoming service-centric, with technology being the platform to meet the demands of their students, researchers and partners. Technology is seen by forward-thinking institutions as the foundation for transforming research, campuses and educational outcomes.

