CAUDIT Releases 2013 Top Ten Issues

The Council of University Directors of Information Technology (CAUDIT) has released the Top Ten list of issues concerning Information and Communication Technology (ICT) professionals for 2013.

Voted by members of CAUDIT at its Autumn Members Meeting held in Hobart, Tasmania, the list has identified that the number one issue of 2013, is supporting and enabling research followed closely by Learning and Teaching.

The support needs of researchers are different from those of more traditional corporate or business users, often requiring the use of bespoke systems and software. The narrative which accompanies the Top Ten list also highlights how trends like consumerisation of services via the cloud, and the explosion of mobile devices have become a pervasive element of the education experience for all students, whether on campus or remote.

In announcing the 2013 Top Ten Issues, Richard Northam, Chief Executive Officer of CAUDIT commented that Cloud Computing rose to prominence in 2010 and continues to be a significant issue and noted that ‘Whilst funding disappeared off the list in 2012, it has returned in 2013 at 5th place as a result of cuts to funding research in 2012 and more recent cuts to higher education. Recruiting and retaining IT staff as well as an increasing recognition that existing staff need to be reskilled for a different future also continue to be an important challenge for IT leaders.’ He said.

The 2013 Top Ten Issues list comprises:

1. Supporting and enabling research
2. Supporting and enabling Learning and Teaching
3. Positioning IT as a catalyst and using analytics to transform the business functions of the institution
4. Leveraging cloud services in a coordinated and strategic manner
5. Funding IT so that it can effectively support the strategic mission of the institution
6. Managing security and privacy effectively in a hybrid environment of multiple sourcing models
7. Attracting and retaining IT staff and preparing them for a very different (near) future
8. Developing a “Digital Strategy” for the future
9. Ensuring that University services are available anywhere, anytime
10. Creating effective governance structures that align IT with the strategic direction of the university

In a break from tradition of previous years, CAUDIT has undertaken an extensive review of the process and has this year provided a short narrative which accompanies each issue to provide some context and background. A copy of this is attached.

CAUDIT will be publishing a more detailed article that take the top ten, and poses a series of questions about what these issues mean for higher education, what their impact might be, and what IT Professionals throughout higher education should consider in order to address or mitigate them.

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The 2013 CAUDIT Top Ten

1. **Supporting and enabling research**

The support needs of researchers are different from those of more traditional corporate or business users, often requiring the use of bespoke systems and software. In addition research is becoming increasingly collaborative, and through federally funded programs like the National Collaborative Research Infrastructure Strategy researchers are requiring access to shared instruments and utilising shared services in support of their research. This shift towards shared instruments and services has exposed a need for a more integrated or joined up set of IT support services for researchers which by necessity involves traditional IT departments. At the same time, advances in technology that supports high performance computing, and visualisation are increasing at an unprecedented pace.

2. **Supporting and enabling Learning and Teaching**

Technology has become a pervasive element of the education experience for all students, whether on campus or remote. Traditionally universities have used technologies like Blackboard, Desire2Learn and Moodle, however as the recent hype around MOOCs has demonstrated, innovations in technology can have a disruptive influence and far ranging affects. Enabling Learning &Technology goes beyond LMS technologies however, and technology plays a key role in enabling effective learning spaces and the flipped classroom. IT has a key role to play as a partner to assist the Learning and Teaching community to implement technology and foster innovation.

3. **Positioning IT as a catalyst and using analytics to transform the business functions of the institution**

IT continues to play an important role in the implementation of business systems which underpin the core business processes of the institution, albeit largely in the role of a service provider. IT does however have significant potential to drive innovative methodologies to transform business processes and support learning and teaching, and research. Innovation and transformation come with inherent risks, and few IT leaders have a remit that encourages this. IT leaders need to develop trusted relationships with senior leaders, key business owners and the broader community within higher education such that they are viewed as a trusted partner and can act as a catalyst for transformation.

At the same time, institutions hold considerable corporate data about their operations and students which is largely untapped and underutilised. There is an increasing imperative to use data and business intelligence tools to support decision making within institutions. At an operational level, the collection and analysis of data can inform and guide the decisions of senior university leaders to not only improve efficiency, but measure and demonstrate value. In the demand driven funding model that recently commenced operating in Australia, there is now a much stronger focus on student retention and completion. The use of analytics can help institutions build predictive models which can highlight at risk students and enable earlier intervention.

4. **Leveraging cloud services in a coordinated and strategic manner**

High quality cloud-based services which consumers can access using their device of choice are now broadly available. Due to the scale of global commercial markets, some of these services now...
provide a level of convenience and functionality that exceeds anything which IT departments could sustainably deliver. Many university staff and academics have already moved into the cloud and utilise either free services or services which can be readily purchased for a nominal fee online using a university credit card in support of their work or research. At the same time, some cloud services present challenges for the institution that are not immediately visible to individual professional staff and academics, but exercise the mind of senior IT leaders. Data sovereignty, performance, university policies and privacy legislation are just a few examples where cloud services can present very real challenges for the senior leadership of the institution. IT leaders must manage hidden costs introduced by using services which do not reside on the Australian Research and Education Network or are not peered. Further, the purchase of individual services on a “per staff member” basis will ultimately result in higher costs for the institution. Universities will not be able to ignore cloud services, nor will they be able to effectively mandate that staff not use a particular service. IT leaders will need to develop strategic partnerships with cloud providers either individually or through aggregated arrangements to deliver relevant services, as well as educate and guide individual professional staff and academics.

5. Funding IT so that it can effectively support the strategic mission of the institution

In late 2012, Universities Australia reported that decisions by the Federal Government in 2012 had wiped almost AU$1B off forward estimates for research funding in higher education. A further 2% efficiency dividend was also announced in April 2013 in the lead up to the Federal budget which will shave another $900M off funding for Universities. Universities will be expected to reduce the costs by 2% in 2014 and 1.25% in 2015. At the same time analysis of CAUDIT benchmarking data revealed that across Australia and New Zealand, spending on IT had on average fallen by 4% between 2010 and 2011, mostly as a result of budget cuts, with many IT leaders reporting in 2012 that they were under continuing pressure to operate more efficiently and deliver savings. Whilst many will acknowledge that IT is a key enabler that now underpins administration, learning and teaching, and research, there remains a continuing perception of IT as a cost centre rather than a key strategic investment that is crucial to achieve the mission of the institution. IT leaders need to engage with the senior leadership of the institution to change these perceptions. In addition they need to deliver IT services that are clearly aligned with the core mission of the institution and have strong systems in place to clearly demonstrate the value and contribution IT makes.

6. Managing security and privacy effectively in a hybrid environment of multiple sourcing models

Cyber-attacks are increasingly sophisticated and motivated by a desire to access data held by universities which could be of commercial value. Further, universities are attractive targets that enable third party attacks via high speed research and education networks. At the same time the increasing use of personal devices, cloud services and alternative sourcing models leads to a more complex security and privacy environment. Universities are under increasing compliance, and the reputational damage that can result from breaches can be significant. In this environment, IT leaders need to ensure that adequate measures are in place, whilst at the same time not placing demands on staff and students that are too onerous.

7. Attracting and retaining IT staff and preparing them for a very different (near) future

Graduation rates of IT professionals in Australia and New Zealand have fallen dramatically over the last decade, and at the same time there is a significant cohort of IT professionals who are nearing
the end of their careers. In the December 2012 quarter, it was estimated that nationally a shortage of 4600 IT professionals existed across Australia. IT job market trends differ in each Australian state and in New Zealand, but broadly speaking universities are operating in an environment of increased competition for suitably qualified IT professionals at a time when IT budgets are tightening.

At the same time services that were traditionally a core offering within an IT department’s service catalogue are moving to third party vendors and cloud providers. Student and staff email is one such example, with almost every institution in Australia and New Zealand now leveraging email services in the cloud. This represents the beginning of what is likely to be an avalanche of attractive commoditised service offerings. IT leaders will need to implement new and innovative strategies to attract IT professionals. As well as a focus on retaining existing high quality staff, IT leaders will need to develop and implement practical workforce transformation strategies that recognise the changes needed in skill sets.

8. Developing a “Digital Strategy” for the future

The explosion of MOOCs into the higher education space has created considerable hype, but looking past the hype there is a trend for greater consumer choice in modes of education. As commercial entities that are unencumbered by traditional models enter the space, there will be increasing pressure on universities to react to these trends and compete in a global education marketplace. Many universities will need to consider what their digital strategy might be, including identifying key components and how they work together. IT leaders have a key role to play in partnership with the Learning and Teaching community to chart a digital strategy that enables the institution to remain relevant and competitive.

9. Ensuring that University services are available anywhere, anytime

IT forms part of the core infrastructure that supports the business of the institution. Increasing use of technology to deliver online education is just one of many examples of the important role that IT now plays. Increasingly, students and staff demand access to university resources at times outside of traditional operating hours. Further, the next cohort of students have grown up in an environment where 24x7 access to the internet and cloud based services has led to very high expectations and perceptions about what a university should provide as part of their university experience. At the same time, IT is operating under increasing pressure to cut costs and is often insufficiently funded to deliver on student expectations. IT leaders need to develop innovative strategies, including collaborative arrangements with partners, to ensure their services are available when students and staff need them.

10. Creating effective governance structures that align IT with the strategic direction of the university

Across Australia and New Zealand, IT represents a significant investment of 6-7% of total institutional revenue. Accordingly senior university leaders expect that IT governance structures and processes are in place to ensure that IT resourcing decisions are closely aligned with the strategic directions of the institution and that value for money is achieved. As IT underpins more and more of the university, having sound governance becomes even more important, particularly as the environment becomes more complex. IT leaders must create and operate effective governance structures that enable co-ordinated decision making regarding the acquisition and deployment of technology, software, and services.