



CIOs Seek More Strategic Role on Campuses; Talk Importance of Data-based Decision Making

Huron Education gathered with 10 CIOs from major public universities to talk about some of the most pressing issues facing information technology leaders in higher education. Huron has one of the largest information-technology consulting practices in higher education. Huron also recently conducted a survey of college CIOs for The Chronicle of Higher Education, and used the results to initiate a discussion about the level of change that will likely take place at institutions. The Huron CIO roundtable – held in Orlando, Fla., on the eve of the annual meeting of EDUCAUSE – focused on two of the most important topics facing CIOs: How CIOs can play a more strategic role in running the university and how to implement analytics to support decision-making.

CIOs as Top Strategic Partners at Universities

The CIO is in charge of the backbone of the campus – its technology. The technology, arguably, is the one essential element on any campus that must run every day. When it runs well, it is taken for granted. When it doesn't run, IT is the #1 villain at the university. Given its central stake in campus affairs, the CIO should be a very powerful position on campus. However, on many campuses, the person in that role is seen as having primarily technical expertise.

In order for the CIO to have more impact, many CIOs think their role – or at least the perception of their role – needs to be transformed.

“The changing role of the CIO says we have to support efficiency and be innovative. I understand that. But you are also expected to know everything about all the technology employed on campus,” said Michael Hites, CIO and Senior Associate Vice President for Administrative IT Services for the University of Illinois System. “If you look at the other C-level executives, they don't seem to be facing this pressure.

Key Takeaways

- *Align IT initiatives with the university strategic plan*
 - *IT needs a strategic plan, too, that is flexible enough to adapt to changing priorities of the university*
 - *Approach problems from the user perspective*
 - *Simple solutions often work the best*
 - *IT people won't automatically be invited to the decision table – like it or not, they have to earn their way there*
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It's possible the C-level roles just aren't clear. The CEO, that's clear, is in charge of everything. The CFO handles all budget and finance issues at a macro level. That's pretty clear. But the CIO? The role is not so clear.”

Robert Solis, Vice President and CIO of the University of Massachusetts System, said, “If you would stack us up against any other administrative organization, I don't see any other functions – HR, finance or others – having to rationalize their existence to the level that IT does. But that is historically the way organizations have approached IT. Given the pervasive nature and current and growing dependence on technology to succeed at a professional and personal level we need to work together, executive administration and IT leadership, to overcome this marker and focus on the immense value that technology can add to our organizations and its constituents.”

Other CIOs said it is hard to have a cohesive message when the priorities set for them are so diverse.

“My institution’s priorities include increasing overall research dollars, and expanding our online degree programs to attract more students,” said Michele Norin, CIO at the University of Arizona. “They’re both great goals that will require a robust technological environment to ensure our success.”

Scott Hess, a Managing Director with Huron Education, who works with numerous universities, observed that the duties expected of a CIO seem to be never ending. “Today’s IT organization requires skills that range from deep technical skills to customer-facing and communication skills to project management and business analysis,” said Hess. “As a result, CIOs must balance their workforce with skills needed to sustain day-to-day operations and skills that are adaptable and flexible, which may be sourced internally or through external sources like cloud solutions and staff augmentation.”

Several CIOs offered advice on how to achieve a larger stake in central campus planning. Most have created strategic plans to complement those of the universities.

“We have a strategic plan – it has been in place for 14 years,” said Sam Segran, CIO and Associate Vice President for Information Technology at Texas Tech University. “The first goal is always about student growth. We also focus on quality faculty, increasing research, global engagement, online learning, and maximizing resources. We cover a lot. So the core is always there. Even when we have large scale administrative change, it doesn’t disrupt that. We always know where we are going.”

Solis said the university president took the system- and campus-based strategic plans and created a report card in order to measure how all university functions are doing across a number of areas. “That has brought us focus in a way nothing did previously,” he said.

Joy Walton, a Managing Director with Huron Education, said many universities historically have not recognized the strategic importance of CIOs, seeing them solely as technical experts, or as functional leaders rather than strategic ones.

“Today’s CIOs need to partner with academic and financial leaders to ensure that IT strategy aligns with the institutions’ long and short term strategy,” said Walton. “Technology is an integral part of every function of a university.”

Larry Conrad, CIO and Associate Vice Chancellor for Information Technology of the University of California-Berkeley, said that IT leaders too often fall into a trap of waiting for others to recognize their expertise and asking for it.

“What I tell my administrative team is, ‘If you think you are in IT, you are not. You’re in Marketing. You’re in Sales. And the sooner you adopt that mindset, the more successful you are going to be,’” Conrad said. “You have to create those opportunities because they are not going to invite you in.”

A strategy for gaining notice and a seat at the table must be in keeping with the character of your institution, Conrad said.

“The secret to the success is the recognition that Berkeley is a very distributed organization,” he said. “Just because the university doesn’t have a strategic plan doesn’t mean the individual schools and colleges and individual deans don’t.”

Given the structure, he said, it seemed natural that the IT department should have a strategic plan, too.

IT departments are often too defensive of their technology because of all the work that has gone into securing it, implementing it, and supporting it. But clients on a college campus don’t think of it that way. They are looking for IT staff that can frame and solve business problems from a user perspective. And they want simplicity: they want a solution that is as easy to use as, say, Amazon.

A university IT shop that adopts that mindset and uses it to frame its approach to customer service would be a very different operation than what exists on most university campuses.

“Maybe the way to think about it is, ‘What would we do if all we could do is reallocate existing money, not seek new money?’” said Joel Reeves, CIO and Assistant Vice Chancellor of the University of Tennessee, Knoxville.

Data-based analytics and solutions

IT departments have used data to verify opportunities, identify priorities, and measure success for years, but the power of data to transform decision-making is still making waves at a number of campuses.

At the University of Washington, for example, data visualization dashboards from the software firm Tableau “have become the language of our campus.”

The greater use of data has created insights the university's leaders otherwise never would have had. "We think of ourselves as an arts and sciences campus, because traditionally we have been," said Kelli Trosvig, Vice President for IT at the University of Washington. "But especially the past couple of years, we're much more oriented toward sciences and engineering and have more of a profile of a polytechnic institute."

This kind of data, she said, "in the hands of deans, and senior administrators allows them to invest money where it is needed most. Before, it was hard to see the trends."

The university is now getting meaningful data around demand of classes and use of classroom capacity. That in turn allows the university to model such factors as the impact on enrollment if the hours of the proposed class are changed.

"We haven't done that in 50 years," said Trosvig. "It's been very eye-opening. We are going to become better at this over time. We are really just in the beginning of using data to make better decisions."

Larry Conrad, at the University of California, had a similar experience. "To have data made available via a dashboard was an absolutely transformative experience for Berkeley," he said. "They hadn't had this kind of information or experience before."

All the universities are building their data warehouses to try to satisfy the increasing demand for data to use in decision making.

Now that campuses are getting a taste for the possibilities of data informed decisions, the biggest challenge is keeping up with the thirst for that knowledge and delivering data in a standard format.

"We're almost a victim of our own success," said Michele Norin of the University of Arizona. "By reinventing our business intelligence environment and expanding our options for access to different types of data, people want more information at a much faster pace. Being positioned to respond to that demand is critical to making informed decisions. It's challenging because people don't always understand it takes years to build up these good troves of data. In the beginning, my campus constituents would say to me, 'We need one environment with

Key Takeaways

- *Universities are hungry for more data but data governance is important*
 - *Data-based decision making has the capability of changing culture on a campus.*
 - *Establish a common language*
 - *Manage expectations*
 - *Consider establishing a committee to guide policy governing data*
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a standard way of collecting and presenting data.' Now that we have it, it's all about growth and performance."

Scott Hess, the Huron Managing Director, concurred. "The CIO is often in the role of driving data analytics across campus because he or she is one of the few individuals that understands the disparate technologies that house the data, the information that users are trying to access and the complexities of pulling large data sets across multiple data sources," he said.

Deans and other academic leaders as well as the business leaders at a university need to define their questions in a common language so that the information technology professionals can help them frame answers.

In part to answer some of those concerns, Michael Hites, of the University of Illinois System, has formed a system-wide business intelligence committee in recent years to discuss and decide the future of the enterprise data warehouse and the visualization tools that support it.

In thinking through IT priorities, Hites said the university emphasizes IT leadership, IT strategic planning and IT governance. Decisions have to make sense for the long term. It is also important to manage expectations early since solving complex problems will take time. "You can't control progress, but you can coordinate it," Hites said.