Between Idea and Reality

To highlight “views from the top”—both from the top of the institution and from the top of the IT organization—and to explore how the IT organization can best align with and support the institutional mission, this Leadership department column asks three questions of the president and three similar questions of the CIO.

Between the idea
And the reality . . .
Between the conception
And the creation . . .
Falls the Shadow.
—T. S. Eliot, The Hollow Men

C. David Naylor, President
What 3 things should any CIO know about leading an institution?
First, given the importance of information technology in an academic environment, any serious problems or limitations have wide ripple effects and are on the president’s desk very quickly. Conversely, smooth functioning of information technology is taken for granted, and improvements in information technology are rapidly assimilated as the “new normal.” The implication is obvious. Fellow administrators, among other constituencies, need to be reminded about IT successes, lest they come to see the IT portfolio only as a series of brushfires.

Second, in most colleges and universities, there will be ongoing tensions between central and divisional managers and between broad institutional policies and the creative energies of individuals and subgroups. Those of us with administrative scar tissue have learned to limit the actual rules to those few that are worth enforcing and to align incentives wherever possible so that institutional and individual or subgroup interests are mutually reinforcing. Incremental change through low-key application of the budgetary ratchet may be slower, but in the end it is almost always more successful than a sweeping policy edict.

Third, in the rare instances when major changes simply must be driven from the center, a period of difficult public negotiation is inevitable. Even with extensive consultation, most of the campus community will be disinterested until they are directly affected, whereupon a period of orchestrated outrage will ensue based on some perceived failure of the consultative process or the new dispensation. Amidst the din, the biggest mistake is to cover one’s ears and press forward. For the reason just given, the best suggestions for refining a new policy or process often arrive after a decision has been announced by the administration. At that juncture, nothing calms the troubled waters like a graceful series of compromises and an evident willingness to make further mid-course corrections. Gratifyingly, the changes actually implemented are almost always far superior to those in the “final” administrative plan!

What 2 things does a president need from the CIO?
First, a president needs information technology that functions like an autonomic nervous system for the college/university as an academic organism—that is, operating quietly in the background, with impeccable performance and excellent adaptability to changing circumstances.

Second, a president requires strategic alignment of information technology with the mission and priorities of the institution, so that any proposed changes to information technology resonate rapidly and widely with the institution’s leadership team and key constituencies.

What is the 1 thing you would change in your institution regarding information technology, if you could change only 1 thing?
Ideally, the IT budget and budgeting process would be changed. Globally, only Harvard University and the University of Tokyo publish more than the University of Toronto, but this outsized research performance is driven off a per-student operating budget that is less than half the level of most U.S. public research universities and about one-eighth the average level of U.S. private research universities. IT resources and staff are therefore stretched very thinly. That said, the budgeting process is also part of the problem. Substantial resources are misdirected into the construction and maintenance of electronic moats and silos for divisions and departments. Per usual, then, pleading poverty is no excuse; we also need to find a way to improve the allocation of existing resources.

Robert D. Cook, CIO
What 3 things should any president know about information technology?
First, the president should know that campus information technology is one part technology and nine parts change management. The job of the CIO is more about process reengineering and culture shift than technology. Like other institutions, to achieve efficiency and reduce risk associated with “rogue servers,” we have recently developed an institution-level virtualization, storage, and disaster-recovery service. Its uptake, however, is expected to have less to do with superior technology and cost saving than with our concurrent promotion of more robust information security guidelines and compliance...
standards that are slowly gathering support through conversation across the University of Toronto community. The solution will have been in place for some time before the community is ready to accept it.

Second, because information technology is increasingly woven into the fabric of academic work and its enabling administration, the IT Services department often has an ideal perspective to identify opportunity for institutional improvement beyond hardware and software. As a partner, not just a handmaid, information technology can support leadership at the institutional and divisional levels with not only tactical savings and efficiencies but also strategic innovation. The University of Toronto’s recent commitment to develop a suite of Next Generation Student Information Services (NGSIS) was spawned from technological necessity—that is, from the development limitations of our current student system. But through encouragement from IT Services, NGSIS has been successfully positioned as an institutionally strategic initiative to enhance students’ experience. Its promise has been embraced enthusiastically by campuses and divisions as well as by the central Student Life portfolio.

Third, as Geoffrey Moore advocates more generally for all business in Dealing with Darwin: How Great Companies Innovate at Every Phase of Their Evolution (2005), information technology is on the side to redirect resources toward activity that will help the college/university differentiate itself in accordance with its mission. This means constantly eliminating or reducing costs for commodity-type services, revising tools and processes for essential but non-differentiating activity, and repositioning IT staff and budgets to support even more effective teaching, research, and administration. At the University of Toronto, the CIO, in partnership with the Centre for Teaching Support and Innovation, has redirected resources to establish the new position of Institutional Academic Technology Strategist, to develop tactical and strategic initiatives in teaching, learning, and cyberinfrastructure. Infusions of new investment in information technology should be reserved for institutionally strategic goals.

What 2 things does a CIO need from the president?

First, a CIO needs regular access to institutional information and perspective. Even though the alignment of information technology with the institution’s long-term mission and priorities can be achieved through planning documents, awareness of and participation in the ebb and flow of issues demanding the president’s and vice-presidents’ attention provides both context and opportunity for the CIO’s tactical and strategic contribution. Recently, the advantage of maximizing provincial revenue at the University of Toronto by achieving enrollment within relatively narrowly corridors informed the redevelopment of more responsive student information reporting tools and procedures. And an urgent priority last fall to align the university’s H1N1 preparedness to provincial health requirements led to the rapid development and deployment of an absence self-reporting tool for students. Institutional alignment of information technology is a short-term, as well as a long-term, proposition—and is rooted in information facts and trends.

Second, explicit presidential support is critical whenever IT activity becomes strategic. As with NGSIS, the technical limitations of current offerings prompted a recent review of our student e-communications service for business continuity planning. The anticipated outsourced solution, however, will present a radical expansion of service functionality for students, as well as our first foray into a new way of delivering IT services. Similarly novel is the University of Toronto’s partnership with the University of California–Berkeley, Indiana University, and the University of British Columbia in the Kuali Ready project to offer an international, above-the-university service for business continuity planning.

What is the 1 thing you would change in your institution, if you could change only 1 thing?

A change in the university community’s sense of urgency around opportunity could enhance the positive impacts of technological change. Frustration at “how long it takes to get things done” ironically seems to be shared by all: how long it takes to hire new employees, how long it takes to change curriculum, how long it takes to implement new IT solutions. With the stability of higher education institutions counted in decades and centuries, there has been little experience and perhaps little incentive to accommodate nimble change. In higher education, information technology tries to balance the fast pace of high tech and the sometime languor of the academy. Given the economic “new normal,” it is time for colleges and universities to kick it up a notch.

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