From Vision to Innovation

For any institution, a strong relationship between the president and the chief information officer is crucial to that organization’s success. We would submit, however, that nowhere is that relationship more crucial than in the management and leadership of an institution of higher education.

Public universities have a reputation—unfortunately, well-earned in some cases—for being averse to change. In seeking funding for important capital investments, public colleges and universities are dependent on state legislatures, which these days are faced with unlimited demands, sharply curtailed resources, and uncertain future revenue streams, all combining to make immediate funding uncertain and long-range planning nearly impossible. Meanwhile, public colleges and universities are dealing with a customer base of students who invariably are among the earliest adopters of emerging technologies. As a result, institutions of higher education, and particularly public colleges and universities, must adopt a strategy to overcome institutional inertia and a shortage of readily available resources while keeping pace with students for whom the latest technology quickly becomes the minimal level of expectation when choosing a place to pursue a degree.

Navigating these cross-currents is difficult, even when the president and the CIO of the institution are on the same page. If they are not, however, the campus IT system can be set back decades, and the college/university operation can reach the point of breakdown. Instead of being a strategic asset, information technology becomes an afterthought.

The approach at Washington State University (WSU) can be addressed under four related headings: vision, strategy, execution, and innovation. The vision for the institution must come from the top, and the resultant IT vision must be a shared one. On assuming leadership of an institution, the president should work with the CIO to undertake an assessment of where the campus information technology stands and where it must go—and how quickly. Any such assessment must include a frank appraisal of the state of the IT infrastructure, tools, and services, along with long-range plans and a 360-degree scan of what resources might be available—in both the short and the medium term—to address perceived needs. It is also worthwhile to “take the temperature” of the institution, to get a sense of the faculty and staff willingness for and/or interest in embarking on the sometimes daunting task of overhauling the IT tools on which the institution’s operation depends.

However, even though a new president’s goals for information technology might be tempered somewhat by the resources that are available or the concerns expressed by colleagues around the institution, neither of those factors can be allowed to derail necessary planning and investment. The president and the CIO must be flexible and strong enough to navigate this terrain. There are never enough resources; there are never guarantees that overhauling an institution’s basic IT systems won’t cause some disruption.

At WSU, we are embarking on such an overhaul of the campus infrastructure. We are investing in the high-speed connectivity and high-performance computing that is essential for our researchers, moving appropriate services to the cloud, and upgrading our outdated student information systems—a project that has been at the top of our priority list since we both came to WSU in 2007. It may seem counterintuitive to invest resources at a time of economic uncertainty, but this is actually the best time, since we are finding companies eager for our business. If we wait for the economic upturn, we might well have to pay more for the same system while dealing even longer with the delays and uncertainty as we try to keep the old systems patched together.

The areas of strategy and execution are located farther down the continuum of presidential/CIO responsibility, where more and more of the responsibility is vested in the CIO. Strategy, of course, involves planning how the vision can be achieved. A good CIO must be able to provide useful input on the vision, shaping its direction and helping to set its priorities. Execution falls even more squarely on the CIO’s desk. The relationship between the president and the CIO evolves in its own way at each institution, but given the multiple demands on a president’s time, generally it is most useful for the CIO to take the president’s roadmap and determine the best route to the destination.

Of course, the roadmap analogy is hardly a perfect one when talking about information technology. When we chart a
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course in information technology, we are dealing with routes that are constantly changing. Last year’s superhighway looks like a dirt road today, and something that not long ago seemed to be an uncharted path through an impassable wilderness can suddenly become the most efficient and logical route to a destination. It is the CIO’s responsibility to know the best practices in the field and to maintain a web of colleagues, at various institutions, who can provide feedback on what has worked and what hasn’t. The CIO also has the responsibility to develop and retain a staff that further extends her/his reach, people who can explore current problems and seek the latest solutions.

For the fourth area—innovation—responsibility cannot rest solely with either the president or the CIO, or even with both in concert. The discussion and promotion of innovation must be institution-wide. Whereas we have already pointed out that many students are early adopters of the latest technology, we should not forget that some staff and faculty members are also extremely knowledgeable about and interested in the latest advances in information technology. For some of them, innovation is a central part of their job. For others, it is a consuming interest even though it might not be directly related to their day-to-day work activities. Either way, when trying to see beyond the current situation to the next advance and the next, institutional leaders may find it worthwhile to cast a wider net and involve the entire campus community in a larger discussion. That process can both turn up some excellent ideas and promote more complete buy-in concerning the future course.

Every day, information technology becomes more central to the research, education, and service missions of higher education institutions and especially of public colleges and universities. The scope of an institution’s IT vision, and the planning needed to achieve it, must be every bit as broad as the impact of the technology. As the pace of change becomes more rapid, those who move too deliberately or too timidly will be certain to fall even farther behind.

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