The Myth about Controlling IT

“The CIO Is in Control of IT.”

Many in higher education assume that the Chief Information Officer (CIO) controls IT at his or her college or university—from operational issues to future directions. After all, the rationale for having a CIO is to consolidate responsibility for IT in one place.

But assumptions and reality may be quite different. Consider infrastructure. Although it would seem that the CIO controls the infrastructure—purchasing massive amounts of hardware and software, managing the network, and monitoring compliance with standards—there are other control points as well. For example, when a faculty member receives a grant with equipment dollars, odds are that the control of those dollars rests with the faculty member rather than the CIO. Or when the development office decides to acquire a new software package to track potential donors, the CIO may have little say in and no control over which package is chosen. Of course, the largest segment of any campus population is the students. And control is not likely to be the term a CIO would use when discussing student computers, the installed software, or the kind of security settings used. The reality is that the CIO is not in control of the IT infrastructure.

Beyond the physical infrastructure, there is an IT organization of support and technical staff. Even though many “IT staff” do ultimately report to the CIO, many more do not. With IT today forming a part of every unit on campus, IT staff are often found in admissions and registration, libraries, academic departments, facilities, public safety, student life, and more areas. Control is an illusion when so many staff are distributed among campus units.

Control is also elusive when it comes to planning for the future. IT innovations—in hardware, software, networks—are not particularly predictable. CIOs cannot control the creation of new technologies, nor can they control the emergence of new needs among users.

This “lack of control” in no way devalues the critical role of the CIO to the institution. Control is simply an incorrect term—particularly for an environment undergoing constant change. Rather, the role of the CIO is more about managing expectations and shaping the evolution of IT. Rosabeth Moss Kanter describes a set of innovation and change skills that have great relevance to the IT environment. A look at how a CIO actually spends his or her time reveals activities such as building coalitions, nurturing teams, communicating with administrators, faculty, and students, and monitoring the environment.

Managing IT in colleges and universities cannot be approached as an individual, controlled activity; it requires influence, which often depends on building coalitions. For example, if an institution wants to improve teaching and learning through technology, IT is only one group involved in a coalition that puts IT in service to learning. Other critical groups include faculty, students, and the library. In addition, influencing a decision within a coalition involves selling an idea and making compromises. For instance, to improve administrative efficiency through the use of IT, the IT shop may advocate a standard implementation of an ERP system. However, the off-the-shelf configuration will likely need to be adapted to meet the needs of administrative staff; consultation and compromise are required. Finally, the partnerships that are central to these coalitions often involve internal as well as external stakeholders. Internal groups obviously include faculty and staff; external partners may include the corporate community, trustees, state procurement offices, and other institutions. Managing IT is thus much less about control than it is about influence—and coalitions allow interested parties to influence each other, resulting in the best possible outcomes.

Just as coalitions are required in IT, so are teams. Anyone who wants to change an institution using IT must become skilled at nurturing teams. This goes well beyond selecting those team members with the skills necessary to accomplish the task. Increasingly it means helping the team develop a shared sense of purpose and trust in one another. Nurturing a team and instilling a sense of purpose and vision might just as easily be done by the provost or president as the CIO. The involvement of IT in a project does not mean that the project team, or its leadership, will come only from the IT shop.

Building coalitions and nurturing teams require good communication skills. CIOs manage change and expectations by communicating with administrators, faculty, and students. For example, the CIO must be able to communicate to the president the power of analytics—along with realistic
expectations for implementation and adoption—without the technical details of data warehousing, data mining, data cleansing, logistic regression, and so on. The CIO must be able to communicate to faculty the need to adopt security procedures to ensure that their academic freedom is protected. The CIO must be able to communicate to students the risks of putting too much information online through Facebook. Although individuals with technical or engineering skills are not always assumed to be strong communicators, communication is a skill that CIOs—and others in IT—must develop.

In an environment of rapid change, one of the best methods for “control” is constantly monitoring the environment. Institutions must stay in touch not only with technical changes but also with changes in users’ expectations. Students and faculty, for example, have higher expectations for support than in previous years. And one of the best ways to prepare for cyberinfrastructure is to stay abreast of the changes in how cyberinfrastructure is applied to research and teaching, requirements for data storage, metadata, and so on. When institutions are unaware of the changes on the horizon, they cannot prepare for them. Monitoring changes includes scanning for those issues that involve IT directly as well as those in which IT is only one part of the solution.

In thinking about fostering institutional innovation and change through IT, rather than “controlling” IT, the CIO and other members of the executive team should ask themselves the following strategic questions:

1. Do we think about IT as something that can be controlled, or are we trying to manage its evolution to suit institutional goals? Although it might seem desirable to control IT—costs, platforms, software, security, and so on—control is likely to be elusive. A better strategy is to manage the change so as to suit the institution’s needs, capitalizing on new technologies, management strategies, and organizational structures where possible.

2. Does the executive team work as a team or coalition, modeling good practice for other units? If IT is used in service to the institution’s goals, IT will always be partnered with other organizations. Do IT and administration, or IT and academic affairs, or IT and finance work together? Do the groups work side by side to craft solutions, or are problems handed off to IT? If the executive team does not model such teamwork, can other units be expected to behave any differently?

3. Are we monitoring the internal and external environment to ensure that we are using IT to the best advantage? Although the institution may not be able to control a rapidly changing environment, it cannot simply ignore that environment. What mechanisms does the institution have in place to constantly monitor higher education issues, the application of IT, users’ expectations, or novel solutions? Beyond being aware of changes, does the executive team have the capacity to make a decision to change—and then to act on that decision?

4. Are we remembering that making decisions about IT may be less about IT and more about good decision-making? It is easy to assume that making decisions about IT means deciding on technology. Executive teams must remember that IT decision-making is all about problem solving: identifying the problem, looking for solutions, allocating resources, communicating, managing expectations, and assessing the outcomes. Problem-solving involves teams. Problem-solving involves creativity. And problem-solving involves prioritization—knowing which problems are most important to solve.

It is indeed a myth that anyone can control IT at a college or university. Rather, in an environment where participation, collaboration, and rapid change are the norm, the ultimate goal should be to influence the evolution and manage the expectations of IT.

Note

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