All too often, IT is touted as making an institution more competitive. A few institutions gained renown by being early adopters of laptop initiatives. Some were among the first to launch virtual universities. Others have drawn attention for the quality of their ERP systems. But does the short period of special attention, mention in the press, and discussion at conferences translate into competitive advantage?

IT initiatives usually do not change an institution's fundamental position in the marketplace, nor do they change its competitive stance with peers. Competitiveness is a highly complex phenomenon based on long-term perceptions, realities, and histories of quality; competitiveness is not likely to be greatly influenced by a sudden investment, whether in IT or any other area, in the short term. In a reputation-based industry—with a long memory—there are few quick fixes. However, the failure to adequately invest in IT can create a less competitive environment, one that is unattractive to potential students, faculty, and staff. Beyond reputation, they all want an IT environment that can support their study, research, and work needs.

When asked why they invest in IT, senior institutional officers typically say they do so to meet students' expectations. How do they learn of these expectations? Some were among the first to launch virtual universities. Others have drawn attention for the quality of their ERP systems. But does the short period of special attention, mention in the press, and discussion at conferences translate into competitive advantage?

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When asked why they invest in IT, senior institutional officers typically say they do so to meet students' expectations. How do they learn of these expectations? Sometimes the impetus for a technology investment emanates from feedback received when admission counselors hear questions asked, or desires expressed, by potential applicants (or their parents). These anecdotes do not, however, mean that if some IT solution is present, the student will definitely enroll. Parents and prospective students often do not know what questions they should ask, and thus they resort to queries such as “Are the dorms wired?” In an attempt to help students and parents ask more meaningful questions when selecting a college or university, EDUCAUSE, the American Association of Collegiate Registrars and Admission Officers (AACRAO), and the National Association for College Admission Counseling (NACAC) developed the Student Guide to Evaluating Information Technology on Campus. The brochure and Web site (http://www.educause.edu/studentguide/) help prospective students evaluate IT related to the academic climate, administrative environment, and student life, as well as the campus IT services and costs. The Web site allows for national comparisons, enabling better decision-making by students. In addition, the Student Guide can help a campus identify its own competitive strengths and weaknesses.

Students do have technology expectations of institutions. However, they are more likely to describe their expectation as an activity or service than as technology per se. For example, students are often “cashless”—they carry credit or debit cards, not cash or checks. They don't expect lines for “cash and checks only” in the cashier's office; they want to swipe a card. Students are constantly communicating electronically (whether by cell phone, text messaging, IM, or e-mail) and expect immediate responses. Submitting hard-copy forms and waiting days or weeks for a response is anathema to students. Raised in a customer service culture, they expect automation and autonomy, both of which are enabled by IT.

Another typical IT investment for institutions is in large administrative computing systems, or ERP (Enterprise Resource Planning) systems. Do ERP systems make an institution more competitive? The rationale for investing in ERP systems may be to replace legacy systems that can no longer be supported and/or to integrate data and thereby facilitate institutional decision-making. Integrated systems that combine admissions, registration, and other information allow the exploration of patterns and trends. These ERP systems and the associated redesign and personnel can become quite expensive, but ERPs can also become an invaluable decision support system. Thus, although the ERP system itself will not make the institution more competitive, well-informed decisions may.

Today's instructional and research environments are increasingly dependent on IT. And though institutions may seek to be on the leading edge in instruction or research, few can afford the costs or the risks of being on the leading edge in technology. Experimentation with new technologies is necessary, but an extraordinary investment in a specific technology is unlikely to fundamentally change the competitiveness of an institution. According to the president of one wealthy, technologically savvy institution, the
risks are too great for the campus to be on the leading edge in IT; the institution thus carefully selects IT innovations.

Although investing in specific applications may be risky, there is little doubt that a robust infrastructure encourages exploration, innovation, and in some cases, economic development. IT has changed how research is conducted, how scholars collaborate, and how economic advantage is created. Grid computing, collaboratories, and cyberinfrastructure will continue to transform our disciplines. Institutions with the requisite infrastructure make possible research and instructional opportunities that attract top-quality faculty, students, grants, and corporate/government partnerships. So important is this underlying cyberinfrastructure that many institutions and communities are investing in even higher speed networks as a means to foster innovation and attract new industries.

Competition among academic institutions is not new, but competing on the grounds of IT is a relatively recent notion. The CIO and the executive team would be well advised to thoroughly discuss and come to a consensus regarding the following questions:

1. **Who are our competitors, and on what basis are we “losing” to them?** The executive team needs to identify the institution's competitors. Nearly as important, the team needs to define the criteria behind the competition. Is the competition based on student SAT scores? Graduation rates? Grants received? The ability to retain top faculty? Or is there just a feeling that someone else is doing better? The nature of the competition needs to be more granular than “We compete on all issues, from athletics to zoology.” Once the criteria are identified, their importance to the institution's mission and strategy can be determined. Only with this specificity can the problems be understood and diagnosed and the determination made that IT investments will really increase competitiveness.

2. **How do we know, and how good is our data?** Is the institution's competitiveness quantified, or is it simply speculation? Before defining a strategy or committing resources, the institution needs to be sure there is a problem. That requires having tangible evidence of a pattern or trend. Neither hearsay nor suspicion is adequate. Evidence and meaningful metrics should be sought before investments are made. The EDUCAUSE Core Data Service can provide comparative data to support decisions.

3. **What are our options for improving competitiveness?** The options likely carry different implications for factors such as cost, personnel, or time-to-completion. As the options are weighed, the institution should think about the fit of a solution with the campus infrastructure, culture, and ability to tolerate risk. A failed solution will not make the institution more competitive. Competitiveness is not simple to turn around; both short- and long-range plans need to be defined.

4. **What is the role of IT in helping us close the gap?** Only after answering the previous questions should IT considerations enter the discussion. IT is not a panacea. Other factors—such as personnel—are often much more systemic and essential than IT. Also, the institution should consider the longevity of an IT investment. Technology can change rapidly. The long-term total costs of ownership of technological solutions need to be understood.

5. **What is the impact if we do not use IT for competitive advantage?** How will the lack of IT investment affect competitiveness? Will the failure to invest wisely and well create an environment that is so limiting that it damages campus competitiveness?

Will IT make an institution more competitive? That depends. IT supports an institution’s fundamental strategy; it is no substitute for a vision, mission, or action.

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