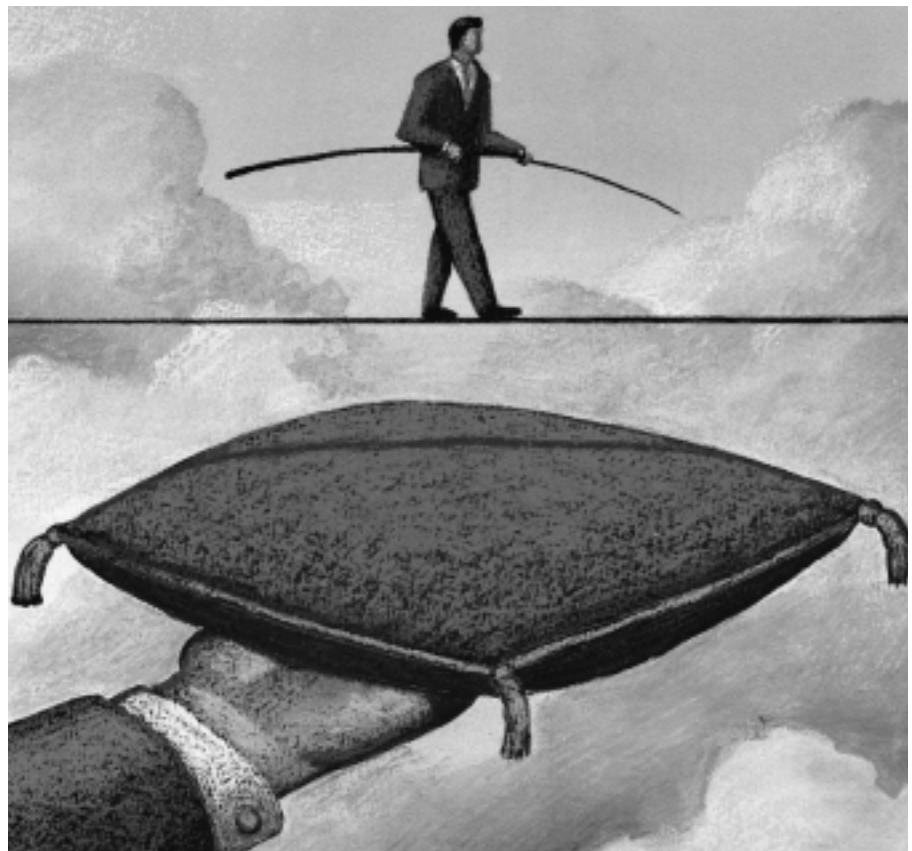# A Kinder and Gentler Transformation?

A focus on people and processes underlies successful transformation of the fundamental business practices supporting higher education

By **Richard N. Katz** and **Larry Goldstein** with **Gregory Dobbin**

In many ways the shine has worn off of the "dot-everything" penny over the past year. Yet at the same time, information technology has continued to demonstrate that it has the power to transform the way we do just about everything, including how we work, learn, shop, and communicate. The higher education community has experienced a corresponding shift in how it approaches and considers information technology. Fervor and excitement about technology have given way to a calmer vision of where and how information technologies must be deployed within the frameworks and goals of our institutions.

If 2000 was characterized by a rush to beat the clock with new technologies, such as ERP systems, and by exuberance over portals and other emerging technologies, 2001 is a year when the wounds of Y2K are beginning to heal and frenzied excitement over dot-com possibilities has abated. We find one another happily yielding to a consolidation of gains, and to a reflection on what has (and has not) been accomplished so far and what changes are necessary for success in the 21st century.

Emerging technologies and improved tools will continue to enhance the role and experience of information technology in higher education. Information technology, however, is no longer seen as a one-shot of time and resources added on to existing structures. True transformation is a long journey that will require long-term, sustained investment and change in many of the fundamental business practices that underlie the administration of higher education. As a community, information technologists are shifting the focus of their rhetoric and actions from technology to the people and processes that will support, develop, and maintain information technology as an integral component in higher education. As one scholar put it recently "change is changing."[1]

The Example

The emerging vision of the business enterprise at the University of California exemplifies this shift. UC expects to add 60,000 students and 7,000 faculty by 2010. Administrators understand that there will not be a corresponding increase in administrative support positions, nor an increase in administrative budgets, to accommodate the extra workload associated with these additional students and

faculty. The UC leadership recognized that the solution to this quandary had to be improved information technologies and streamlined business processes. They had to make changes that would allow the same people to perform more work, more efficiently.

To tackle this issue and develop a plan to address it, UC established a planning group headed by Steve Relyea, vice chancellor for business affairs at the University of California at San Diego. The group included several corporate partners and others. They worked for five months to identify the strategies needed to manage growth effectively, control costs, improve the overall work environment for UC employees, and implement best business practices to accommodate the increased activity that will accompany the growth.

The group's work resulted in identification of six general strategies, as follows:

- Develop campus business portals that will integrate components of the new business architecture
- Apply new approaches to how the university recruits, retains, and develops the very best people
- Streamline UC's cumbersome policies and processes
- Leverage new technology to contain costs and improve services to UC's constituents
- Integrate campus financial systems and provide enhanced financial reporting through implementation of emerging technology standards
- Embed performance management systems in UC business processes and focus on the most important financial controls

The envisioned future is contained in a report, "UC 2010: A New Business Architecture for the University of California," available online at <http://uc2010.ucsd.edu>. The report outlines a new business architecture (NBA) strikingly different from the operating environment that exists today. The NBA describes a business model with new processes, tools, and operational principles for UC to meet the challenges it faces.

The EDUCAUSE and NACUBO Forums

In May 2001, EDUCAUSE and NACUBO cosponsored a second annual forum on e-business. From the forum in 2000 to this year's event, the change in focus of the theme and discussions parallels the move from topics of technology to evaluations and recommendations about people and business processes. This year's forum, "Doing Higher Education's Business in the 21st Century," represented thoughtful reflection in contrast with the anticipatory exuberance of last year's event. The 2001 event considered consolidated gains, assessed the current state of information technology and how it will likely evolve, and anticipated the changes in organization and policy that will be required to succeed in the new environment.

The two-day event began with presentations from John Curry, Executive Vice President of Massachusetts Institute of Technology, and from Steve Relyea. Curry's presentation covered his experiences with technology throughout a nearly 30-year career and included his assertion that at their root, successful business changes arise chiefly through the management of people. Curry urged technology leaders to develop close relationships with chief academic officers, bringing information technology to the president's table for inclusion at the highest levels. He also warned against overstating expectations. For information technology to succeed, it must offer an attractive business proposition, one aligned with the overall goals and mission of the institution, and it should deliver more than it promises.

Relyea's presentation covered the NBA and the process that led to its creation. Although the factors at UC that led to the necessity for the NBA are not shared by all of higher education, the construct may nonetheless serve as a useful model for others. The NBA provides a mechanism for effecting change in the fundamental business model for colleges and universities through the integration of information technology.

Participants at the forum split into three groups that met for separate discussions, using the NBA as the straw man for the breakout sessions. Each group was asked to examine the NBA and identify its key benefits, potential obstacles to implementing it, and possible strategies for overcoming those barriers. The groups also considered the applicability of the NBA beyond the University of California. From the discussions, a picture emerged of a new service delivery vision, a supporting set of strategies, and necessary policy, organizational, and technological changes.

The Framework

Any institution considering fundamental changes to its business processes and architecture should understand the specific rationale behind such a move, as well as the difficulties likely to arise. Mapping out a set of strategies can be vital for accomplishing the move.

Why should you adopt a new business architecture?

The primary goal of a new business architecture is to allow institutions to migrate to what some describe as information- or knowledge-based organizations.[2] Doing this will allow information technologies to fulfill their potential to transform higher education.

As mentioned earlier, one key to success is empowering people. Instituting a new architecture for a campus's business processes can put people at the center, not technology. People deliver services and support the technology. Giving people the right tools and appropriate responsibility enables them to provide better services to greater and greater numbers and types of constituents.

In a new framework, people become the decision makers. The users of information technology must generalize their skills and understanding in order to make appropriate decisions. Rather than specializing in a particular area without understanding how that piece fits into the institution's larger mission, campus staff will be encouraged to develop a broader understanding of the institution and will refocus their efforts on delivering service rather than on

enforcing rules. Despite possible initial reluctance, a staff more generally focused and capable will be better able to meet the needs of the institution and will be more satisfied with the added trust and responsibility.

Many current tools and processes were designed not by the users but by administrators. The encompassing architecture produced the required results, but through a bureaucratic structure that is far too slow and inefficient to meet the new demands on an institution's administrative services. The new model must incorporate tools that are designed and embraced by the people who will use them.

As a new generation of students and staff enter colleges and universities — one that has grown up with information technology — the standards of service must meet their expectations. Ubiquitous access, online services available at all times, and "always on" technologies and services are some of the features that must be available. Restructuring a campus's business architecture is a necessary step toward providing expected levels of speed and service.

A new business architecture focused on people and services rather than technology is more likely to be supported by senior executives. Aligning the framework with the core mission of the institution should gain support at the grassroots level and at the highest levels of administration.

A key component of developing a successful model is flexibility. Generalizing the structure to accommodate multiple departments and a variety of policy areas is of much greater value to the institution than one whose applicability is limited to IT. Moving to a new architecture that is vendor-neutral and allowing for the use of home-grown solutions yields an added level of flexibility.

What stands in the way?

Resistance to a new vision and supporting business architecture will come from a variety of sources. Because a characteristic of the new architecture is a shift away from local islands of authority and responsibility to a generalized view of operations, there will be a significant reaction against the perceived loss of local control. Entrenched organizational users and their technical support staff are likely to feel threatened by the new approach.

Similarly, content experts typically have strong investments in their current systems. The new structures being implemented have the potential to alienate these experts, who will have to be won over for the proposition to succeed. Lack of experienced leadership in this area, as well as a culture lacking in trust of IT staff, represent two other significant challenges to this endeavor.

Of course, funding is always an obstacle. Colleges and universities constantly struggle over appropriation of their financial resources, with all sectors of the organization asking for more. Complicating this for IT is a not-uncommon perception that technology requires a one-time outlay of funds. Convincing senior executives of the necessity of funding the ongoing maintenance of systems is a first step in dealing with budget concerns. Our smart and fortunate institutions have policies covering the life cycle of IT resources, anticipating the replacement and upgrade of hardware and software on regular cycles. Strategic planning of long-term budgets must account for continued expenditures on IT.

On top of these concerns are limitations of technology. To fully realize the kind of change needed requires a number of technological solutions. Some of them currently exist; others do not. Whether solutions are purchased from vendors or developed in-house, they are not cheap, putting further pressure on budgets.

This new approach carries policy implications beyond those in IT. The new business architecture is likely to affect data privacy, security, single sign-on for all services, and other IT issues. Campuses will also need to consider institutional policies regarding human resources and user training.

Adopting the new architecture will also probably require scrutiny of the campus policy, whether formalized or simply understood, toward risk tolerance.

What are the strategies?

No matter how good the new model is, it can fall flat without a set of strategies for implementing a new architecture radically different from the old. While they will not make the move trivial, good tactics can minimize some of the fallout that will result.

As mentioned earlier, developing a long-term financial model for IT is an important step in guaranteeing success. Where possible, measure return on investment and offer quantified results that demonstrate progress. For some aspects of IT, this can be difficult. A balanced scorecard method can be a particularly useful tool to identify targets and demonstrate progress toward them.

Due to the timeframes associated with large-scale IT projects, incremental milestones are quite valuable in keeping concerned parties updated about the progress taking place. Develop a set of steps at regular intervals, and make public announcements about those small steps toward the ultimate goal. This keeps people aware of the results of all the efforts, and it combats apathy that can result from the campus community wondering what's going on behind closed doors.

To facilitate adoption of the new processes and structures of the model, peer involvement can often work more effectively than top-down mandates. For many, seeing their peers accept a new program, and benefit from it, is the best incentive to take the plunge themselves. If the new program is developed well, the advantages of availing one's self of it will far outweigh continuing to do things with the old system.

Along these lines, another useful strategy is to recruit a nontechnologist to advocate for the new system. Because there is often a culture of distrust of IT and its practitioners, the blessing and support of an outsider will help the new architecture gain momentum.

New Landscapes

A changing landscape is affecting higher education's practices and future in significant ways. Transformational rhetoric is not hyperbolic. Traditional residential institutions will probably

continue to serve the needs of a growing population for postsecondary education, though competition will likely intensify. Competitive success will depend in part on a strategy of organizing around an increasingly segmented marketplace. New information technologies are making it possible to deliver the core college and university mission in new and exciting ways.

One exciting vision suggests the creation of an information-based college or university. The information-based institution simplifies the policy environment radically, making it possible to embed most complex rules in the information systems themselves. Then systems can be organized and integrated in ways that allow those who use institutional services to consume these services directly via the Web. Institutional processes and services are organized around a common vision for security, access, navigation, and Web functionality. Through the incorporation of standards, such a vision makes it possible to develop and deploy services in a confederated fashion, much as automobile manufacturers assemble cars using component parts created to conform to a set of industry standards.

The information-based organization and the infrastructure supporting it create the potential to liberate the members of the institutional community from the burden of bureaucratic institutional rules, processes, and administrivia. Such new freedom creates the potential for a renaissance in the institutions' primary roles of teaching, discovery, patient care, and service. Rising expectations combined with new technological capabilities and new competition will foster new forms of cooperation among traditional colleges and universities. These collaborations, too, carry with them both the potential to transform, and more importantly, the potential to enhance higher education's role and performance in an era that will demand greater education attainment and outcomes. Finally, the transition to an information-based organizational vision and to the new business architecture crafted by the University of California is rooted in the belief that change depends on people and that it occurs organically and (dare we say?) incrementally. The organic nature of higher education appears to be prevailing once again. Transformation is itself transformed. *e*

Endnotes
1. See "The HBR List: Breakthrough Ideas for Today's Business Agenda," *Harvard Business Review*, 79 (4), April 2001, 125.
2. K. E. Sveiby, *The New Organizational Wealth* (San Francisco: Berret-Keoehler, March 1997).

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