

Tough Times, Big Choices: Getting Value Out of Technology

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The current financial crisis in higher education demands aggressive leadership, thoughtful strategies, and new sets of solutions. To achieve these ends, institutions must utilize technology effectively, even transformatively. Trustees, institutional presidents, and campus leadership teams must all acquire and demonstrate new perspectives and capabilities to deal with these new times. A key competency will be getting full value from investment in and deployment of information technology.

Responding to A New Wave of Challenges and Opportunities

Higher education has been hit, all at once, by an unusual combination of new challenges and opportunities:

- Declining economic conditions that affect public and personal finances,
- A flood of red ink that drives cutbacks and tough decisions,
- Increasing enrollments and demands for new services for students,
- Demands for greater accountability and use of technology to expand access and reduce costs, and
- New opportunities, new markets, and new competitors.

Institutional leaders are finding that traditional, piecemeal solutions are inadequate to the magnitude of today's challenges. Successful, new strategies and solutions have not yet emerged. The problem is as much developmental as strategic and programmatic. Even if the right solutions were more obvious than they are, they would prove difficult to implement, give the experience and capacity of today's institutional leadership.

Leadership development is needed at all levels. Institutional trustees need to grasp the magnitude and complexity of the challenges and opportunities and motivate and guide institutional presidents. Presidents need to be involved in more than fund raising and external stakeholder engagement. Moreover, campus leadership and management teams need to develop capacities to craft new solutions and to engage grassroots leadership in winning support for substantial change, both on and off campus.

Greater effort is also needed at the campus level in understanding how information technology can be used not just to achieve greater productivity, but to reinvent academic and administrative processes, enable new levels of collaboration and innovation, and support new levels of leadership. This sort of reinvention is uniquely enabled by the new generation of information and communications technology (ICT)

Tough Times, Big Choices. Put simply, leadership in higher education needs to discover how to respond to tough times with not just tough choices, but *big* choices that will:

- Comprehend and articulate the need for decisive action;
- Develop the capacity of institutional leadership to mobilize support behind comprehensive, transformative initiatives that leverage institutional assets;
- Overcome traditional barriers to dramatic change, both internal and external;
- Recalibrate current revenue streams and discover new ones;
- Reinvent programs, services, offerings, processes and relationships; and
- Use technology to reduce costs, reach new markets, and enhance relationships.

These big choices take most of today's generation of trustees, presidents, and campus leadership teams into uncharted and unfamiliar territory. To succeed, they need motivation, guidance and development.

Motivating, Guiding and Developing Leadership. Different leadership challenges are faced by trustees, presidents, and campus leadership teams. Each requires different interventions and development.

Trustees. The capacity of trustees varies dramatically from institution to institution. Some public university boards are highly politicized. Some trustees have personal agendas. Many are not interested in rocking the boat. But most institutional boards have a core cadre of trustees who are diligent stewards of their institutions and frustrated by the inability and inexperience of campus leadership in dealing with today's new challenges and opportunities. These trustees need guidance in how to change the agenda for presidents and motivate and enable institutional leadership in getting from today to tomorrow's vision. And in how to convert institutional inertia and lethargy into aggressive change.

Presidents. Presidents are consumed by fund-raising activities and the need to engage with the college or universities many stakeholders and constituencies. The presidential skill set that was successful in the 1990s needs to be replaced with one more appropriate to the challenges of today and tomorrow. The leaders of successful enterprises in changing times need to play prominent roles in telling the saga of the emerging future and developing the capacity of the campus leadership team to engage in discovering that future.

Other Campus Leaders. Campus leadership teams are witnessing the development of the potential for an array of new practices: reinvention of campus programs, services, and processes and the replacement of organizational silos with new organizational and process structures and relationships. Academic and administrative functions are being fused, portalized, and personalized at leading-edge institutions. The demands for rapid change exceed the comfort zone of traditional campus processes.

New patterns and cadences of engagement, interactivity, and decision making are needed to meet the challenges of the new era.

Specifically, many of today's trustees and institutional leaders are not adequately prepared for the following new challenges and opportunities facing higher education:

- How do colleges and universities address the rapidly evolving commercial marketplace for educational services, content, and context, often provided by new competitors?
- What relationships and alliances are critical for colleges and universities in this rapidly changing environment of the e-knowledge Industry? How will they transform roles and responsibilities for existing players, and encourage new players to come to the table?
- Are universities and colleges truly prepared to meet the imperative for life-long, perpetual learning, and relationships with active learners that may span a lifetime? How can they cultivate and maintain such active, vibrant relationships?
- Can higher education effectively manage and leverage relationships with increasingly diversified stakeholders, making tough new demands that often conflict?
- Do universities have the knowledge, foresight and will to transform and utilize their technology infrastructures, learning paradigm, and knowledge culture? Can they reinvent academic and administrative processes and discover new sources of value and revenue?

Institutions cannot wait to act until their leadership fully develops these competencies. Development and action should proceed simultaneously. Perspective and capacity development can occur through actions that consciously reinvent institutional visions and strategies, and the supporting business models for revenues, services, programs, and relationships.

Launching Concurrent Actions and Capacity Development

For the past several months a team of consultants and seasoned ex-presidents and chief financial officers has been working to understand "Tough Times, Big Choices." We have been testing and refining our ideas with the leadership teams of institutions, both public and private, and with groups of trustees, presidents, and senior administrators. We have been working to understand how to:

- Raise the consciousness of leadership and the campus community about the need for transformative change and come to grips with the need for new leadership perspectives;
- Develop the capacity of institutional leadership and grassroots leadership to undertake comprehensive change and development;

- Reinvent the institution's revenue model, seeking the optimal mix of tuition/fees and privatized resources;
- Aggressively reduce costs in academic and administrative processes;
- Forge new partnerships with governments, communities, business and other enterprises; and reinventing/leveraging critical relationships (especially with alumni, business and government organizations) to create new and sustainable value;
- Build the strategic case for investment in technology that achieves both *return on investment (ROI)* and *value on investment (VOI)*; and use technology to extend the institution's reach into new markets and new sources of revenue;
- Use technology to enhance learning experiences at reduced costs and to create new blended learning experiences that will appeal to current and potential learners;
- Pursue aggressive process reinvention to change the dynamics of institutional processes, progressively reducing costs and reaching out to new opportunities;
- Institute greater accountability and measurement of outcomes;
- Change institutional rewards, processes, and attitudes;
- Identify barriers to transformative change (policies, attitudes, competencies, traditions) and targeting actions to overcome or finesse the barriers;
- Leverage existing assets in new ways for economic growth and increased competitiveness; and
- Identify new markets and new configurations of intellectual capital (for example new programs, services or products) to reach these markets in the face of active competition.

"Tough Times, Big " require immediate action that will launch long-term, developmental initiatives. Such efforts aim to propel institutions on a new trajectory toward success; this will require a level of genuine transformation in processes and practices. Trustees and institutional leadership should acquire new competencies and perspectives, if these ends are to be achieved.

Getting Full Value Out of Technology

Over the past several decades, colleges and universities have invested substantial resources in information technology. The level of investment has varied dramatically among institutions, but almost all institutions are spending a greater proportion of their budget on information technology than they were in the not-so-distant past. This investment has included new campus networks, both wired and wireless, new generations of personal computers and laptops, enterprise resource planning (ERP) systems, learning management systems, early-stage content and digital asset

management, portals, e-portfolios, library management systems, and a host of other advances. Recently, leading-edge institutions have used these infrastructures to fuse academic and administrative systems (through the combination of portal, ERP and LMS systems). These have created new experiences for learners, faculty, staff, alumni, and other stakeholders.

To date, most institutions have achieved a modest level of **return on investment** (ROI) on technology. They have been satisfied to enhance the productivity of individuals in particular processes, thus reducing costs. Or to attain some new marginal increases in revenues, rather than to dramatically expand and reinvent revenue streams. Most have been satisfied with competitive parity with other institutions, rather than competitive advantage. And most institutions have tinkered with the dynamics of organizational processes, enhancing efficiency/productivity but not fundamentally changing organizational dynamics through collaboration and innovation. We can identify no institutions that have achieved anything approaching the full, potential **value on investment** (VOI) from their technology assets and capacity. Yet we are encouraged by a number of leading-edge institutions whose efforts suggest how VOI can be substantially enhanced over the next few years.

“Tough Times, Big Choices” will require that colleges and universities step up to this challenge and achieve the full VOI of the technology infrastructure. To do so, they must expand their efforts on the following three dimensions of VOI:

- **Scope of Initiatives.** Jump shift from tactical/incremental focus to strategic and transformative focus;
- **Organizational Impact.** Jump shift from individual performance to enterprise performance (competitive parity) to strategic direction (competitive advantage);
- **Dynamics.** Jump shift from productivity to collaboration and innovation.

To achieve their full VOI potential, institutions should use technology to achieve the following six elements of value on investment.

Support Business Process Reinvention. Over the next five to ten years, many institutions will need to reinvent academic and administrative processes to reduce costs and create better experiences for learners and other stakeholders. To date, some leading institutions have used the implementation of ERP systems to replace their processes with the best practices imbedded in the new systems. Others have followed up ERP implementation with further process reinvention and continuous improvement. Leaders like the University of Delaware have fused and reinvented enrollment services functions to create “one-stop shopping” for students and to create new kinds of highly skilled staff generalists. Leading-edge portal developers like the University of Minnesota have used the portal to reinvent back-office services and enable students and other portal users to self-solve problems and find information and other needed resources. The combination of portal, ERP, Learning Management Systems (LMS), Content Management Systems, and e-portfolios is enabling a number of early adaptor institutions to fuse academic and administrative processes in ways that have never before been possible. But such efforts have only scratched the surface of potential process reinvention.

This is only the beginning. To address “Tough Times, Big Choices” groups like the Project for the Future of Higher Education are exploring a pathfinding program of process reinvention of the undergraduate experience, aiming to make it more learner-centric and successful – and at significantly reduced costs. Other processes and experiences will receive comparable attention. Technology-supported process reinvention will be a primary instrument in the leadership toolkit, changing the dynamics of institutional processes to achieve VOI.

Formalize the Management and Leveraging of Knowledge and Intellectual Assets.

Most colleges and universities treat knowledge as a cottage industry. Explicit and tacit knowledge are embedded in individual faculty and scattered across the rolling hills and verdant valleys of the academic countryside. In recent years this is starting to change. The use of LMS has exposed institutions to the potential of capturing and sharing digital content and context. Digital asset management (DAM) is receiving attention from many institutions. Leading institutions are creating knowledge repositories and/or superarchives (Ohio State University, MIT Dspace, and the University of California System Scholarship Repository, for example). Cross-enterprise efforts are popping up all over the world (MERLOT, the Learning Object Network, the Australian [Le@rning](#) Federation, and eUniversity in the UK). Initiatives like the Open Knowledge Initiative (OKI) and the Open Courseware Initiative (OCW) are tapping into latent support for an open source approach to e-knowledge and e-learning. Taken together, these approaches herald the development of genuine marketplaces for e-content and context and the emergence of “e-knowledge commerce” to exchange e-knowledge, some for free and some for fee.

Driving down the cost of digital content, changing the way learners experience knowledge, and enabling colleges and universities to find new marketplaces for their digital assets will be one of the primary challenges to leadership during “Tough Times, Big Choices.” These developments promise to be a key element in institutions ratcheting up their efforts to deliver a higher VOI through technology.

Enable Collaboration Among People, Systems, and Institutions. Collaboration is essential to reinventing academic and administrative processes, building leadership capacity, and developing individual and institutional competencies. Indeed, we have come to understand that while *information* is understood at an individual level, *knowledge* is understood in context through interaction with others. So the creation of robust collaboration is a key ingredient in both process reinvention and leveraging knowledge assets. Yet few institutions have appreciated the power of collaborative relationships needed to thrive in “Tough Times, Big Choices.”

One leading-edge exception is the Boston Consortium, a group of 13 private institutions formed by the Chief Financial Offices of those institutions who serve as its Board of Directors. They have created a collaborative environment dedicated to the development of individual, team, and institutional capacities, using collaboration to create innovative solutions to a wide range of administrative and academic support services. The Consortium uses working groups to launch feasibility studies for hard-nosed initiatives that are designed to improve the quality of the academic/administrative experience and services for students, faculty, staff, and other stakeholders, all at a reduced cost. The Consortium has created many useful solutions, including a shared services approach to risk management, with internal audit and legal affairs solutions under development. Technology is a key element in the Boston Consortium’s solutions and in the efforts of

other exemplary consortia to share products and services. Examples of collaborative sharing include Kentucky Virtual University (academic tools and services), Ohio Learning Network (student Services), Southern Regional Electronic College (multi-state access to electronic courses), and NextEd (international marketing of learning offerings), to name a few. New approaches to collaboration are also reflected in the new generation of institutional business solutions that are utilizing not just *outsourcing* but *resourcing* of business solutions using a blend of internal and external expertise.

During “Tough Times, Big Choices,” we must achieve a new level of technology-supported collaboration in order to discover new solutions and strategies, develop the capacity of leadership, and share success stories. Over the next few years, institutions will forge new relationships with technology partners to *resource* the next generation of solutions, strategies, and competency development. The introduction of Web Services-enabled solutions will facilitate the seamless integration of highly specialized solutions and services into institutional technology platforms. Mark Olson and I have coined the term, the *Business Value Web* to describe the new environment of *shared*, *cosourced*, and *resourced* business solutions that will characterize our future.

Increase the Capacity to Learn and Develop Communities. Collaboration occurs through interactivity, and the epicenter of effective interactivity is residing in emerging communities of practice. Selected institutions have used communities of practice to address particular opportunities. For example, leading-edge institutions have used online communities to support the implementation of an ERP system, deploying LMS to enhance online and blended learning, choosing e-procurement to create a community of practice for individuals involved in purchasing, and linking adjunct faculty or tutors in an online community of practice to integrate them into the institutional learning community. The Boston Consortium is developing its working groups to become full-fledged communities of practice, a process that will take time – time to establish trust, to build competencies, and to forge a genuine area of practice values and a body of knowledge needed by the community of practitioners.

Outside the institution, professional societies and trade associations in higher education are awakening to the need to provide new resources and solutions for Tough Times, Big Choices. Recent publications and pronouncements by the National Governors Association, American Council for Education (ACE), American Association for Higher Education (AAHE), National Association of College and University Business Officers (NACUBO), EDUCAUSE, Western Cooperative for Educational Technology (WCET) and the Society for College and University Planning (SCUP) have focused on the magnitude of the current challenges facing American higher education and the imperative for decisive action to respond to tough times. Similar conversations are ongoing around the world.

A new generation of active, technology-supported communities of reflective practice will need to evolve to support the efforts of institutions as they respond to Tough Times, Big Choices. These communities will include active elements within each institution, but will cut through organizational boundaries, including the limits of existing professional and special interest groups. Many of the best ideas and solutions for coping with Tough Times, Big Choices will come from outside current leaders in American higher education (for example, the fusion of e-learning and knowledge management from Australasian universities, community of practice competencies from professional societies, and

process reinvention from other industries). In many settings, communities of practice may emerge as the defining organizational entity in our future.

Increase Individual and Organizational Competencies. Campus leadership, at the individual, team, and institution levels, needs to develop a new toolkit of competencies to address Tough Times, Big Choices. Where to start? The list is long and begins with enhancing e-learning and fusing it with knowledge management; discovering the business models and strategies that work for e-knowledge; leveraging knowledge and intellectual assets; introducing e-procurement, shared services, and other business process enhancements; creating new relationships with partners to resource blended solutions; and crafting new experiences for and leveraging relationships with learners, faculty, staff, alumni, and other stakeholders. These competencies will be developed and shared through technology-based collaborations, communities of reflective practice, and other mechanisms. It can safely be said that every college and university has a long way to go in developing these competencies

Enable New Levels and Forms of Leadership. From the start, it has been clear that aggressive, committed leadership will be needed for Tough Times, Big Choices. There are several ways in which information and communication technology (ICT) makes new kinds of leadership possible.

ICT Enhances Communication, Collaboration, and Community. First, ICT dramatically enhances the levels and types of communication that are possible. The most transformative piece of ICT is in the “C”, the communication piece. But “C” can also stand for collaboration and cooperation and community – all key elements of value on investment. Because knowledge is a socially constructed phenomenon, it can only be understood through interactivity and communication. Technology extends the reach and the richness of communication efforts. It also empowers leadership throughout the enterprise, not just at the top. Grassroots leadership can emerge virtually overnight, using the big “C” provided by ICT.

ICT Facilitates Process Reinvention. Second, ICT facilitates levels and types of process reinvention and change that would be impossible without integrated, interoperable systems and information flows, workflow management tools, and knowledge management tools. Reinvention and fusion of academic and administrative processes is made possible through these tools in ways that were simply not feasible a few years ago.

ICT Opens New Revenue Potentials. Third, ICT opens new revenue potentials through providing vehicles for leveraging knowledge assets. Technology extends both the “richness” and “reach” of our relationships with learners and other stakeholders. So we can reach new marketplaces for e-knowledge and e-learning and provide new experiences. But these new opportunities typically will not be fruitful unless we use technology to create new kinds of experiences, rather than simply digitizing existing practices. Dot com experiments in e-learning like Fathom and uNext and the British Open University in America failed because they digitized existing models of learning, did not achieve breakthroughs in the cost of digital content and learning, and created inflexible models rather than expeditionary models. Their failure was doubly disappointing because they did not reveal what new experiences learners really wanted, only what they didn’t want!! Fortunately, there are institutions and enterprises that are illuminating what learners do want, in an expeditionary manner – for example, the

University of Southern Queensland in Australia, University of Maryland University College and the American Society for Training and Development (ASTD) in the US, eUniversity in the UK.

One cannot escape the conclusion that “Tough Times, Big Choices” complicates and expands the job description for leaders at all levels. On balance, leaders have greater capacity for communication and more potent tools for organizational change and reinvention. The demands of leadership and the stakes for higher education have never been greater.

Conclusion

Experience suggests that most institutions of higher education will display a typical response to “Tough Times, Big Choices.” They will temporize, make short-term cuts, and wait for the good times to return. However, evidence suggests that response won’t be good enough this time around. The economic problems of higher education are structural and continuing, not just relating to a downturn in the business cycle. In state after state, colleges and universities are losing the battle for funding in competition with K-12, Medicaid, and prisons. Continuing the leadership patterns of the 1990s will not wash in the next few years – and probably for even longer.

The cultures of colleges and universities have proven exceptionally robust in their capacity to resist fundamental change and reinvention. The patterns and cadences of faculty governance and limitations in the perspectives and skill sets of administrative staff have not favored sweeping reform, structural reinvention, and thinking outside the box. However, this time may be different. Technology is providing new capabilities whose value we have only begun fully to realize. This is not for all institutions, but for those whose leadership rises to the challenge and the opportunities offered by “Tough Times, Big Choices.” Perhaps it’s time for leaders to break with conventional wisdom and discover new options.

“Wisdom can stultify innovation. The more experience you have, the more you understand why something cannot be done, or won’t work.”

John Seely Brown

Tough Times, Big Choices, New Options. Some will find this formulation to their liking and deploy leadership and technology to make it so. Getting value from technology will be essential to their success.

To find out more about e-knowledge and the new potentials to leverage knowledge assets, visit www.transformingeknowledge.info. Here you can find an html version of ***Transforming e-Knowledge: A Revolution in the Sharing of Knowledge***, the new book by Donald Norris, Jon Mason and Paul Lefere, plus other helpful resources. To find out more about the application of VOI concepts in higher education, check out the white paper ***Assuring Value from Your Technology Investment***, which can be found online at www.strategicinitiatives.com. If you want more information on institutional efforts to achieve VOI and to confront “Tough Times, Big Choices,” call Donald Norris at 703.450.5255.