

Chapter 9
The Organizational Challenge:
IT and Revolution in Higher Education

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Web Portals and Higher Education
Technologies to Make IT Personal

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A Publication of EDUCAUSE and NACUBO

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The Organizational Challenge

IT and Revolution in Higher Education

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Will we get it right the next time around? Will we actually migrate our revolutionary rhetoric toward useful and welcome new business processes that truly transform? Or will we temper our rhetoric? How can we business and technology leaders and managers systematically and continuously achieve better, measurable, and sustainable new administrative practices in colleges and universities? Or, what are we learning from our mistakes—and successes?

Lessons of the Nineties

Let's look at the recent track record of business process and information technology change initiatives. For me, "recency" begins with Hammer and Champy's *Reengineering the Corporation* (1993), or perhaps earlier, with Hammer's article "Reengineering Work: Don't Automate, Obliterate" (1990). The early nineties, infused with the fear of very real and extraordinary industrial competition from Japan, gave rise to volumes of papers and books in the management literature that make the case for rapid and disruptive change and offer new tools and techniques for organizational transformation. Business process mapping and design, workflow, technology-enhanced business transactions, e-commerce, the revival of "information is power" as "instant information is not fast enough," self-directed teams, empowered employees (no, knowledge workers!)—all these

ideas, new, old, or transmogrified, informed the new management order, and created a whole new genre of consulting capabilities and organizations.

Higher education in the early nineties was fertile ground for sowing these new seeds of change management. The national economy was in the tank, states were drastically reducing budget allocations to their namesake universities, federal research support was flagging, revised rules governing recovery of benefit and administrative “indirect” costs shifted research costs to other sources of revenue, financial aid budgets were falling short of meeting need as the economy sapped families’ ability to pay high private college and university tuition, and enrollments declined at many institutions across the country. The slogan “It’s the economy, stupid!” defined the winning campaign strategy for the 1992 presidential election. Colleges and universities were in big budget trouble.

Their presidents and chief financial and information officers came to believe that if American industry could transform itself into a more efficient and competitive mode, then so could—indeed, so should—colleges and universities, to achieve efficiencies consistent with a diminished and limited resource base. And they looked for guidance to the new management literature, written for and about for-profit businesses. In some institutions, becoming lean, modern, and mean, when seen in the context of a national competitiveness crisis, rose to the level of moral imperative.

Thus did concepts and buzzwords such as business process reengineering, technology-leveraged paperless transactions, e-commerce, consolidated purchasing partnerships, and technology-literate knowledge workers come to embody the guiding concepts for reducing budgets and improving efficiency and service. Teams were formed. Documents were produced. In my world of the University of California at the time, these included Young’s *Transforming Administration at UCLA* (1991), *Sustaining Excellence in the 21st Century* (1991), and *Developing a 21st-Century Workforce for California Government*

(1998). But kindred blueprints for radical change sprung up across the country without regard for state boundaries.

And then a third cosmic event aligned itself with the earlier two to create the perfect storm: Y2K. Lurking among thousands of lines of code, perhaps orders of magnitude more, in poorly documented, mostly homegrown software, were two-digit date placeholders that could not discern what century we were in when 99 turned to 00. Enterprise business applications had to be rewritten or replaced, and in a big hurry!

The logic of events was now this: we cannot ask governments for more money in a weak economy when our comrades in business have so boldly tackled their own transformation. We therefore have to reduce costs to live within our means and do so rationally; the cuts needed are too large to achieve across the board. Management scholars and consultants have shown us the tools, and businesses have shown the way. Because we have to rewrite or replace major enterprise business application software against an implacable deadline, we should further hew to the business model by installing off-the-shelf, industrial-standard systems (for example, SAP, Oracle, PeopleSoft, and Banner) and reengineer our processes around them (or vice versa)—all before December 31, 1999.

We assembled our business plans, showing large capital investments for hardware, software, network upgrades, and consultants, all repaid in relatively short order by sustained savings in administrative and purchasing costs. The benefits would live beyond the project's amortization period, providing improved services all the while. Governing boards blessed the plans. We formed project teams and donned project logo caps and tee shirts. We were off to the revolution. In the immortal words of one consultant, "the train is leaving, stragglers will be shot!"

The victory parades have been long in coming. Somewhere along the tortured paths to new processes and technologies, we met the enemy. And it was us: the management, faculty, and staff of our

colleges and universities. Within every business process lurked personal territories, local traditions, someone's meaning of life, and bragging rights. For every new professional expectation envisioned by central administrators, there seemed to be a dissonant departmental service expectation defined by faculty members. With each newly touted capability of an enterprise system came defenses of locally grown shadow systems for their unique service to a unique clientele. Each new opportunity for shared information across organizational units or segments of a business process spawned concerns of confidentiality, or territorial disputes about data ownership and control. Consolidation of vendors to achieve better prices threatened friendships and unique service relationships. The "e" in e-commerce was easier promised than delivered because of incompatibilities across information technologies among vendors and universities.

Then, too, we underestimated how much complexity twenty years of accretion can burden a business process with, and we overestimated how suitable the off-the-shelf enterprise applications were to our innately complex institutions. We had to learn at very high hourly rates how little consultants understood us. All this conspired to bloat project budgets, wreck implementation schedules, and challenge our credibility! We often learned, too late, that senior leaders were not necessarily comrades in arms in the revolution. They were together when talk was cheap and apart when the going got tough and blame was in the air. We were in territory that the new tools were not designed to handle.

What We Are Learning Now

We were in *our* territory, however, and beginning to understand that the tools necessary for managing change might just lie somewhere in sociology, social psychology, cultural anthropology, economics, and organization theory. We were learning what Kurt Lewin (1999) said long ago: that you cannot understand an orga-

nization until you try to change it. We were learning an old lesson: it's the people, stupid!

I do not want to appear cynical here, especially since I have been in the midst of leaders, and often myself in leadership roles, in this attempted revolution—and proud of it! My goal in this chapter is the elucidation of a few maxims or tactics to guide our change initiatives in the future. To arrive at this point, we need only add a brief assessment of specific achievements and failures in our recent quest for revolutionary results.

Many colleges and universities have succeeded in their software implementations. By and large, this was a technological rather than organizational triumph, more a testimony to the skill and tenacity of programmers and information technology staff members than to the change management prowess of us leaders and managers. Many new business process designs still lie gathering dust in war room closets. The new software often re-reified old processes, or it gave shadow systems a new lease on life, or both. Some would say that the new systems paved the cow paths. Organizational obstacles to effecting new ways—decentralized authority, academic governance, unaligned leaders, fear and loathing—overwhelmed logic and institutional will. On the other hand, many obsolete systems are gone, and the new systems provide contemporary platforms for further development. That's a real accomplishment. But many of our original business goals remain elusive and our political capital has eroded.

We also convinced most major enterprise software application vendors to recognize, at least in part, unique research university requirements, such as grants management, labor distribution, and multiple sources of pay in their newer releases. Thus they are coming to recognize us as a key customer sector. That's a real accomplishment.

Many of us solved the information access problem—vendors really oversold their products' so-called report writers—by designing and investing in data warehouses. Although costly, warehouses enabled us to make good on the original reengineering promise of

information access on user terms. We are now filling the warehouses with data from older systems, thus glimpsing the potential for integrated data generated from our (still) many and unintegrated software applications. And user acceptance has reduced the number of reasons not to continue moving forward with other modules of our chosen enterprise applications by at least one: the rage over unrequited expectations for instant and easily accessible data. That's a real accomplishment.

E-commerce marches forward on our campuses, inexorably if incrementally, even as the recent dot-com implosion has let some air out of the portal hot air balloon, thereby vastly reducing numbers of potential vendor-catalog aggregators and thwarting our eternal quest for comprehensive comparison shopping. This is yet another accomplishment, still well short of our aspirations and dissonant with our original rhetoric.

Those of us who replaced aging legacy systems with off-the-shelf enterprise software, never wanting to experience such upheaval again, have convinced ourselves (and our institutions) to obviate obsolescence by systematically installing vendor upgrades. Thus we are using external pressures from our vendors and our peer vendor user groups to do the right internal things—a powerful tool for sustaining technological currency. Which is quite an accomplishment. Moreover, software upgrades, when pursued relentlessly, teach our organizations that change—especially in technology—is continuous rather than episodic. This is a lesson in the virtue of relentless incrementalism as a management maxim, about which more later.

Our recent accomplishments—indeed our daring to take on revolutionary goals—are very much a consequence of the times and of timing, with hard times being aggravated by an external competitive threat, as well as by the rarest of timing—the first millennial threat to the functioning of our enterprise software. I doubt that we would have attempted or accomplished as much in the absence of such a unique hostile environment. So we should never forget the utility of these words from William Shakespeare, arguably one of

the greatest organization theorists: “There is a tide in the affairs of men, which taken at the flood leads on to fortune.”

If we attribute our success to surfing the tides of the nineties and the expiration of a century, how do we account for our failures? Why did so many of our business process and organizational change efforts founder? Why did we not save the annual millions attaching to all those superfluous steps we eliminated between old and new business processes? A simple answer is this: we took too many of our cues from the abstractions of the business process and information technology and not enough from theories of organizational behavior. We thought of revolution and technology rather than incremental change and human behavior.

That people and subunits in organizations are not innate utility maximizers was argued cogently over thirty-five years ago by Herbert Simon (1965). Indeed, Simon introduced “administrative man,” who “satisfices” rather than maximizes, and whose rationality is “bounded” rather than comprehensive. Such notions were further explored and extended by Richard Cyert and James March, with the publication of *A Behavioral Theory of the Firm* (1963). Challenging the traditional *economic* theory of the firm, they studied and characterized actual decision processes. Incomplete information, conflicting organizational and subunit goals, conflict resolution through breaking down complex interrelated problems into smaller manageable unrelated ones, incremental decision making and organizational learning characterized by many traversals of the action-feedback-reaction loop, the importance of limited time and attention in the face of too many demands—these notions replace the economic model of subunits locally maximizing, which is consistent with the utility function of the firm.

Approximately a decade later, Michael Cohen and James March extended the lineage of behavioral theory into the realm of quintessential complexity, the modern university, in *Leadership and Ambiguity: The American College President* (1974). Universities did not just exhibit inconsistent goals and internal conflict, they were “organized

anarchies”—organizations that in a fundamental operational sense did not know what they were doing. Attempting to characterize decision making—getting things done—in such a world, Cohen and March developed the “garbage can model,” according to which, decisions emerge from the intermittent participation of people among changing issues (garbage in the can) over time, all in the context of nonoperational goals and scarcity of time, and hence individual attention. Among other things, they deduce from this model that sailing is the better leadership metaphor than power boating; that is, successful leadership lies in using the winds and currents to reach one’s destination rather than racing through them in a straight line. Does this sound familiar? Thus we discover why working as administrators in universities leaves us perplexed and delighted.

Karl Weick (1979) uses the phrase “loosely coupled worlds” to describe organizations like ours: loose confederations of academic departments loosely coupled with each other and with central administrative units. In such worlds, people learn and change through imitation of others and through testing or playing with new ideas at the margins to see what works and what is fun. To reduce the complexity inhering in their environment, people impose their worldviews on data, thus seeing what they believe. In his studies of organizational cultures, Edgar Schein (1999) observes a variation on this theme: people will not recognize you as a professional until they trust you as a person. They will not *see* what you have to offer until they *believe* in you. Schein further observes that change efforts fail if the individuals’ (and subunits’) survival and learning anxieties are raised too high, and that learning anxiety must be reduced by increasing individuals’ sense of “psychological safety.”

Lessons for Change Management

So much for simplistic synthesis of a rich and complex literature. Let me take the perilous next step of distilling all this into three easy lessons:

1. People learn and change incrementally, and so do organizations. Internalize this.
2. Universities are deeply decentralized, loosely coupled by nature. Don't fight it; get used to it. Don't lament departmental balkanization; find ways to use it.
3. Knowing people and their organizational cultures is a necessary condition for transformative change. Never forget.

And what change management maxims or tactics can we deduce from these lessons?

- *Embrace relentless incrementalism as the change approach of choice.* Like compounding interest, organizational change will happen faster than you imagine, since incrementalism is a natural act. Measured increments also create structured opportunities to learn as you go and constantly refine strategies and realign leaders as you learn what works and where you are really headed. Incrementalism is tacking, the action-feedback-reaction loop is institutionalized. Revolutionary rhetoric, on the other hand, feeds survival anxiety and thus resistance to change. Suppress it.
- *Walk a mile in the shoes of those whose roles you would change.* Understand their worlds and learn what they need from you. Iterate between your expectations and their needs. Walk in many different shoes, and often. Teach each other. Become comrades.
- *Continuously build trust.* This is the most important and time-consuming responsibility we have. You can't make sustainable change without it. Communication, including the building of personal relationships, is the watchword.

- *Create “demand pull” for change rather than “supply push.”* This will be counterintuitive to the technology wonks in our IT centers.
- *Lead change from the business rather than the technology side of the house.* It is the way we do our business that needs changing. Make the business case compelling so that others will embrace the goals. Technology may be the means, but it is not the end. Think people first, process second, organization third, and technology fourth.
- *Create local change champions and make them part of project leadership.* All good people want to do better and know many of the changes that will improve their work lives. If you partner with them, you can jointly champion an agenda. And local administrators will listen to (and trust!) their peers more than they will you. After all, they have walked more than a mile in the same shoes! But don’t let the local champions forget their organizational roots. They need to keep the common touch as they “walk with kings” on behalf of the whole.
- *Use timing and the times to advance the pace of change.* Sometimes getting on bandwagons is the right thing to do. Choose bandwagons carefully. Look for moments of organizational instability—changes in leadership or budget crises, for example—to advance your change agenda as a preferred solution.
- *Create role models and pilot implementations; facilitate peer pressure for change.* Sometimes change is too overwhelming to contemplate in the abstract. Seeing others follow new ways and use new tools can reduce anxiety and motivate emulation. Design or join peer groups. As noted earlier, for example, membership in vendor-

specific user groups creates peer pressure to implement software upgrades (new release), thus forcing relentless incremental improvements in user functionality and sustaining technological currency. A related tactic is:

- *Be an exemplar: Do to yourself first what you would do to others.* Doing is more impressive than saying. You will create believers if you can exhibit, within your own span of authority, the virtues of the new ways you espouse.
- *Align central and local incentives for change.* If the economies of change do not naturally redound to the benefit of those local units necessary to achieving change, then we should find ways to share the proceeds. If, for example, large savings would accrue to a central purchasing office through a redesigned process, one can agree to share them with the departments willing to participate in the change. On the other hand, if process savings can only be harvested as fractions of full-time staff members across many organizational jurisdictions, then budget savings may not happen at all, short of massive reorganization. We should know when to forgo such savings joyously, acknowledging that good people will find other productive pursuits for their newly found time. This issue is at the heart of our failure to capture the budget savings promised through process redesign.
- *Underpromise and overdeliver.* Never overstate or mislead people's expectations. Be the first to announce new knowledge of project problems. Otherwise, you destroy trust, which is much harder to regain than lose.
- *Consistently learn from your successes and mistakes.* Create and sustain information feedback required to learn. Conduct post mortems at every project milestone.

- *Persist*. Remember that everyone's time is a scarce resource. If you can spend time when all about you are attending to other things, your agenda has a better chance.
- *Create locally adaptive business processes and technology solutions*. Remember that universities are different from those firms that economists or even Cyert and March (1963) described. We are organized anarchies, loosely coupled organizations. Different departments may need to do things differently. Knowing when to hold and when to fold—with respect to those uniform business processes we just know would yield massive economies of scale—is a learnable art. All implementation is local!

There you have it, a baker's dozen plus one of change management maxims and tactics. Readers can assess for themselves whether they are derivable from, or at least consistent with, the literature and the three easy lessons cited above. But if we are to meet the organizational challenge that we are just coming to understand from our change initiatives of the recent past, we must think organizationally. Processes and technology are not enough. People are preeminent.

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