

**DOING MUCH MORE WITH LESS:
Implementing Operational Excellence at UC Berkeley**

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Andrew J. Szeri, Richard Lyons, Peggy Huston and John Wilton*
UC Berkeley

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ABSTRACT

Universities are undergoing historic change, from the sharp downward shift in government funding to widespread demands to document performance. At the University of California Berkeley, this led to an operational change effort unlike any the university had ever attempted, dubbed Operational Excellence. The authors describe their experiences designing and leading this change effort, with emphasis on practical advice for similar efforts at other universities.

Keywords: US Higher Education, Productivity, Organizational Restructuring, Campus Budgets, Personnel

Organizational change is always hard to accomplish. Change at universities is even more difficult: decision rights are less tightly defined; constituencies are more varied; organizational boundaries are more ambiguous. Research universities tend to be more decentralized, which makes a centrally driven change effort more difficult to lead. There is also often a culture that results in a high degree of risk aversion. At the University of California (UC) Berkeley, we, and hundreds of others on campus, have engaged for the last few years in an operational change effort unlike any our university had ever attempted. Our goal: to significantly reduce operating costs, while maintaining or improving support services, and protecting the core academic activities of our students and faculty. This has included centralizing services, restructuring and in some instances reducing administrative staff, and consolidating procurements, but also attempting to shift the organizational culture of Berkeley.

In the following, we describe the *Operational Excellence* (OE) program using a change management lens and as campus leaders in helping to develop and implement what we view as dramatic shifts in Berkeley administrative culture and operations. Our review starts with identifying the sources of urgency - the "burning platform," essentially a need for immediate administrative reforms in large part brought on by the budgetary challenges facing Berkeley. We then review specific OE program initiatives and provide observations on common errors identified in past studies of change that we attempted to avoid. Finally, we provide practical advice for similar efforts at other universities, much of which generalizes to other complex organizations. Our advice includes areas where, looking back, Berkeley could have done things better, or differently. While the jury is still out - we are on track but have not yet reached our goals - we have much to share about what we have learned.

A. THE BURNING PLATFORM

Lack of a shared sense of urgency is the number one reason change efforts fail, according to Kotter¹. Both financial stresses and a perception that UC Berkeley had to pursue better methods of serving members of our community provided our "burning platform."

* The authors had leading roles in the development and implementation of Operational Excellence at UC Berkeley. *Andrew J. Szeri is Dean of the Graduate Division, Professor of Mechanical Engineering, and Faculty Head of the Operational Excellence Program, UC Berkeley (UCB), Richard Lyons is Dean of the Haas School of Business and Professor of Business, UCB, Peggy Huston is Director of the Operational Excellence Program Office, UCB, John Wilton is Vice Chancellor of Administration and Finance, UCB. The authors thank George Breslauer, Ron Coley, Jeannine Raymond, Jennifer Chizuk, Katherine Mitchell, Stephanie Metz and Caryl Miller at Berkeley, and John Douglass (CSHE, Berkeley), Rowan Miranda (University of Michigan) and James Wilson (University of Virginia) for helpful comments and suggestions on the manuscript. Updated version posted on June 24, 2013.*

State appropriations to fund the University of California - the UC system - have been cut severely over the past decade. In Berkeley's case, State funding has declined about 58% in real terms since 2002/3. It now accounts for about 12% of total revenue, down from 35% over the same period. In addition, it has been impossible to predict the pace of change from one year to the next. Indeed, the campus has often had to react to significant alterations in funding and other key financial drivers mid-year due to decisions made off-campus at the UC system level and most often in reaction to large and sudden state budget cuts. The sense of urgency was distilled in a series of presentations about longer-term budget scenarios.

This backdrop made it apparent to all our stakeholders (faculty, staff, students, alumni, donors, etc.) that the status quo was not sustainable. If we were to protect and enhance our academic activities as much as possible, we had to become more efficient and reduce administrative expenditures. While it is clear that an equal effort should be made to cultivate existing and new sources of revenue (and we are doing so), the returns to these investments often take a long time materialize. This suggested taking a more focused and strategic approach to enhancing our administrative efficiency. While the great majority of our costs that had to be reduced arise from the salaries and benefits of employees, the new approach that we took, via Operational Excellence, opened up a broader menu of options and began to focus on the underlying structural problems that had been left unaddressed for some time.

The other key factor in building the case for change was a candid recognition - well supported by employee survey data - that some of our key systems and processes for administrative work were inefficient and antiquated. This is the result of many factors. At the broadest level some of our administrative systems were designed for a world that had become increasingly irrelevant. For example, our budget process and the associated decision-making were largely organized around the flow of resources related to State funding, mediated through the Office of the President of the UC system (UCOP).

Put simply, budgetary planning focused on a steadily diminishing subset of financial flows, omitting other growing financial drivers. Indeed, while the State contribution to the budget has declined, this has been more than compensated by increased inflows through sponsored research, tuition, philanthropy and other sources of revenue. At the same time, this inflow of other funds poses new challenges by decreasing the proportion of less restricted state funds versus new funds that are more restricted in terms of what they can fund. Moreover, our legacy budgetary system tended to focus on incremental changes only on some forms of revenue and thus managers could not get the information they required to make informed decisions. There was no 'all funds' or comprehensive view of their financial situation.

At a more micro level, schools and colleges, departments and administrative units at Berkeley have exercised significant autonomy, in some cases because the center was providing inadequate solutions. This has resulted in a plethora of administrative systems of varying vintages, sophistication, interoperability and reliability. This lowered productivity, channeled human resources into low value-added work such as maintaining patches through manual processing, with increased error rates and subsequent rework. This suggested that work was needed to make the campus more operationally effective.

Finally, it can be argued that a difference between universities and corporations relates to the porosity of the organizational boundaries. Deriving from the field-centered, but cross-institution, organization of academic research, a place like Berkeley has come to possess an organizational culture that reflected these porous boundaries. Traditionally, we thought little about what lay within the university and without, and so contracted for this service or that, and bought whatever we liked (within the rules) from whomever we liked. Corporations do not do this; they tend to be much more strategic about what they do outside or inside the boundary of the organization. (It is ironic that Berkeley is the home of Nobel-prize winning work by Oliver Williamson⁴ on why organization boundaries look as they do.)

The autonomy exercised by schools and colleges, departments and centers led to a complex patchwork of duplication in basic services. The center had also not been proactive enough in encouraging standardization or insisting on relevant performance standards where appropriate. This suggested the need for greater strategic thinking in our approach to operations.

These factors worked together like a 'perfect storm' to provide a strong motivation to act. In concert with his senior leadership team, Chancellor Robert Birgeneau recognized and addressed the challenge.

B. THE LEAP

Operational Excellence is organized into phases: diagnostic, design and implementation.

Diagnostic Phase

We began with a candid assessment by an external consultancy, Bain & Company, of the status quo with the objective of identifying the most opportune areas for improvement. The program was established with a clear, overarching goal: that at least

a dollar of annual savings would be generated per one-time dollar invested in the reform. The word annual is important: \$50 million in annual administrative savings equates to about \$1 billion in additional endowment. In addition, the OE Program outcomes would provide a higher quality of services and a standard for measuring on an ongoing basis the efficiency and effectiveness of administrative services. The scope was set to address problems that lay within reach of our own efforts on campus, and did not require reform of UC Systemwide policies or practices, State law, or other aspects beyond our control. The scope was also restricted to administrative infrastructure, processes, and personnel; academic restructuring was not considered.

The consultants helped the campus identify the areas for greatest improvement and long-term savings in administrative operations. Based on their report⁵, the campus identified two foundational areas: *Finance, High Performance Culture* - where improvements must be made to enable and sustain any other operational improvements - and five areas of savings: *Procurement, Organizational Simplification/Campus Shared Services, Information Technology, Student Services, and Energy Management*. While the work of the consultants was valuable in highlighting areas for focus, their role did not include development or implementation of specific plans to secure those savings and operational improvements. For that work, in the Design Phase, we undertook intensive engagement with the campus—including staff, faculty and students.

Design Phase

Seven Initiative Design Teams were then formed from staff, faculty and students and chartered to develop proposals for projects in these seven work-streams that would achieve the OE objectives. Each of the Teams was co-sponsored by an Academic Leader and an Administrative Leader, and managed by a senior staff member from an appropriate functional area. The work was organized by a new Operational Excellence Program Office (OEPO), with a small full-time staff of people with an in-depth knowledge of the university, and of project and change management.

The OEPO developed a transparent process whereby proposals had to compete for funding, with broad stakeholder review and decision by a small Operational Excellence Executive Committee (OEEC), comprising the Chancellor (Robert Birgeneau), Executive Vice Chancellor and Provost (George Breslauer), Vice Chancellor of Administration and Finance (John Wilton) and OE Program Faculty Head (Andrew Szeri). The OEPO was empowered to monitor the implementation of each project using a standardized approach—focusing on return on investment, strategic change management, and transparency in reporting. While the OEPO did not plan and execute the details of the projects, it had a strong role in identifying project sponsors and managers and holding them accountable for well-defined outcomes that were monitored closely. Through the OEPO, the projects were thus held to account by the leaders of the campus, who in turn provided strong support deriving from their interest in achieving success.

We were fortunate to have access to a low-cost source of financing to pay for the upfront costs of reform; this was provided through a carefully considered no-interest line of credit (up to \$50 million) provided by UC Office of the President with a matching campus contribution of \$25 million. The target annual reduction in costs was set at \$75 million or more, once the projects were fully implemented. This high rate of return would allow us to repay the loan and reinvest the savings in the core mission of the university within a short time frame. The target of \$75 million in annual savings was developed based on the savings opportunities identified by Bain & Company, in conjunction with what the leadership felt was achievable on a reasonable timeframe and without overburdening the campus.

The OEEC approved 25 proposals in total.⁶ The Initiative Design Teams submitted the majority of these proposals. Some of the proposals were the result of additional foundational needs identified once projects were underway and were critical to enable the success of the program. As an example, the *Application Support Center* was created to provide training and other assistance to employees on new applications. A second example is *Transformation Support Services*, which works with unit leaders to integrate the impact of the OE projects within the unit so as to enable the unit to realize the full benefits of project outcomes.

We note that hundreds of campus members participated in this phase with very little outside expertise. The high level of campus participation proved to be beneficial in educating the campus on the case for change and building momentum to improve administrative operations.

Implementation Phase

Lessons learned from the design phase influenced the management structure and methodology for the implementation phase. For example, in the design phase, most participants were doing the OE work in addition to their full time job. This could work for a short time but not for the long term. Also, team members were selected based on their functional expertise but not necessarily for skills that would be required to manage a project. For the successful implementation of each of the OE projects, a team of dedicated resources was identified that were skilled in project management, change management, communications, and

business analysis. All project leads attended a 1-day orientation that provided information on the campus culture, the objectives of the OE Program, and the methodology that we use to manage projects and deliver results on the UC Berkeley campus.

The OE Program has multiple projects in progress simultaneously. There are numerous dependencies between OE projects and with other events that are occurring outside of the OE program. The OEPO has a key role to integrate the projects and to manage the impact across campus. All project managers have a reporting line into the Director of the OEPO and provide monthly status updates. The OEPO brings all project leads (project managers, change managers, communications) together on a regular basis to discuss design and implementation plans, risks, and issues, and to participate in the integration across the projects.

UC Berkeley is now two years into the implementation phase of OE and we have already many accomplishments to recognize; see Box 1. We discuss plenty of challenges we faced later in sections C and D. One of the most important elements of our approach is its iterative process. We are learning a new way of doing our work and along the way we are learning how to manage change in a more efficient and effective manner. To be successful, we must allow ourselves to leverage new knowledge and make course corrections. We must also be more willing to take risks and tolerate failure. We are learning that we cannot know exactly how every facet of a project will work before we start.

Box 1: Some Operational Excellence accomplishments to date (4/30/13)²

Unit Restructuring: Each unit leader developed and implemented a plan to simplify their organizational chart and to meet a specific target on the average span (number of direct reports per manager). This has saved \$41 million thus far, and spans went from 5.1 to 7.1.

Procurement: The campus combined procurement operations with UC San Francisco to leverage buying power, and implemented a state-of-the-art online purchasing tool, BearBuy. This has saved \$18 million thus far for UC Berkeley alone.

Campus Shared Services: The first phase of a 2-year rollout of a single unified center for shareable work in HR, Finance, IT and Research Administration has been launched at a new location off the central campus.

IT Productivity Suite: Bulk software purchases, cloud storage, and out-sourcing of campuswide email and calendar systems has saved more than \$4.1 million thus far.

CalPlanning: This is a modernizing project, which has produced the first all-funds, all-units budget plan³ that comprehensively describes revenues and expenses in every control unit.

Energy Management: A new Energy Office is actively tracking electricity consumption in 81 buildings; compared to baselines a reduction of 7.3 million kWh in power consumption has been achieved over nine months through March 2013.

Food Service: The project to negotiate better contracts on dining food sourcing and cut food waste has saved \$562K to date.

Cal Student Central: The campus opened a new one-stop service office for student financial aid, fees and billing, payments, disbursements, registration and enrollment.

C. LESSONS LEARNED

To reflect on lessons learned, it is useful to think in terms of a 'change leadership lens'. The best known and most natural is the work of John Kotter.¹ He provides a helpful list of eight commonly made errors, to which we refer in addressing the lessons we have learned in what follows.

Urgency

One of Kotter's change errors is *allowing too much complacency*. Budgetary difficulties and a strong desire to deliver better administrative services more strategically provided powerful motives for change - and a sense of urgency. Framed properly, OE is really trying to align better our budgets and our priorities. The job of management is to establish a culture that can adapt and is willing to question the status quo; effective management must identify and articulate a sense of urgency to drive real change. Among the senior leadership of the campus, this sense of urgency was reinforced by the fact that nearly every meeting of the Chancellor's Cabinet over the last few years has included grappling with some aspect of OE.

Mission

Another of Kotter's change errors is *underestimating the power of vision*. We must remember always to keep the mission of the university front and center. It is the answer to the question "Why are we doing this?" There will be times when clarity on the mission helps to make a tough decision. For example, it helped us adjust the sequencing of our move to shared services, shifting

elements of research administration later given the direct mission (research) risk. The message stakeholders - especially faculty - need to hear is not just that the objective is reducing costs, but also making us more effective in mission-critical activity.

Change management

Like many other organizations, UC Berkeley has in the past experienced trying to deliver the technical component of a project without the change management component, by which we mean the supporting of changes in organizational design, including incentives, reporting lines, norms and communications. The result was an overall failure. From this experience before OE we learned that change management must be accounted for within every OE project. We have therefore incorporated it into our project management methodology. While the change management component of a project may be perceived to lengthen the timeline and increase the cost, we learned that it is the only way to deliver on our objectives of savings, efficient and effective services, and continuous improvement.

Failing to create a sufficiently powerful guiding coalition is another of Kotter's change errors. With OE our campus leadership spelled this out with careful attention to governance and roles of the OE Executive Committee, the decision making body, and the OE Coordinating Committee, an advisory body with representation of project sponsors, faculty, staff, and students. These groups charter the projects, including the ways in which they will address change management. It is these groups that introduce major operational changes to the campus and affirm the role of the project teams to implement those changes.

The OEPO has played the central role in consolidating the power of the guiding coalition - and has done so under joint *faculty/administration* leadership. It is involved in tracking (or driving, when necessary) the generation of proposals, charters, budgets, savings schedules, investments, communication, change management, delivery of positive results, celebration of completion, transfer into operations. But also the OEPO plays a crucial role in surfacing misalignment among project staff, between project managers and sponsors, between one project and another, and between projects and the permanent campus functional owners. Finally, the OEPO has in addition played a strong role in stopping projects, and hiring and firing project staff. Somewhat muscular management external to the projects - at least relative to Berkeley campus norms - has been crucial to achieving results that harmonize among the many projects.

Kotter's change error *under-communicating the vision* is the part of change management we refer to as 'describing the beach' - shorthand for painting a picture of the desirable place where we are headed in a change effort, which helps to maintain momentum through difficult times. This must happen at the beginning, middle and end of the project, until it is well embedded into operations.

With a combination of clear motivation, a commitment to transparency and communication, and earnest engagement of the campus, it is possible to overcome skepticism or resistance to change. However, this does imply a fundamental tug of war: transparency along the way and the finite pace of planning and execution can engender a feeling of impatience. It is also important to acknowledge the risks inherent in this type of reform and that some degree of error is 'OK'. This is a different way of working than simply announcing a new program/initiative/system has been launched. We are in effect changing campus culture with respect to our expectations of the modality of progress - toward a culture of *continuous* improvement.

Another of Kotter's change errors is *permitting obstacles to block the new vision*. What is required is to have systematic ways to surface obstacles, such as by closely working with communities of practice on the campus. But from the start, this is where the real value of having worked with external consultants in the diagnostic phase lies. With their perspective and experience, they had a good vantage point to spot the obstacles that lay ahead. For example, we were well prepared for the 'valley of despair' in each difficult project implementation. The consultants can also supply analytical horsepower to help in the analysis of the status quo in the absence of ubiquitous modern recordkeeping. That said, external consultants are accorded little legitimacy if they are viewed as calling the shots. If they are engaged, they should be moved to the background as soon as practicable.

Staff members (also faculty and students) need to be engaged from the beginning - to some extent we did this on the steering committee for the diagnostic phase - but then much more heavily in the design phase and implementation phase. Things worked best when staff members were involved designing the way in which new processes and systems became integrated into the way we work. People needed to be involved so that they retain a sense of control when we drive modifications to how and when they go outside the university for products and services. In some respects, the engagement skipped a beat - resulting in staffing gaps between the diagnostic and design phases, for example. It would be better to overlap key personnel for continuity and ease of transition between phases.

Finance

Another of Kotter's change errors is *neglecting to anchor changes firmly in the corporate culture* lest the gains vanish when the pressure to change is reduced. An important realization for us was that managing financial resources more effectively as a university would require not just new tools such as *CalPlanning*, but a whole new mindset. Some unit heads had a strikingly narrow view of what their budget responsibility entailed. There are historical reasons that help explain this (e.g., reliance on funding for operations from one or two primary sources). In some cases managing a budget at Berkeley did not go much beyond budgeting support for the following year's teaching. There was no sense of an overarching or all-funds view of revenues and expenses.

Careful financial arrangements can help to cement change into the culture, for example by strategic design of the disposition of savings from projects. We made especially useful choices about savings and financial flows in the *Unit Restructuring*, *Procurement* and *Campus Shared Services* projects.

High Performance Culture

Culture – organizational norms and values – is squishy territory for most university employees, irrespective of traditional faculty/staff, executive/line, or other distinctions. To include a shift in operating culture as part of a university transformation, one needs to provide people a concrete statement of what is to be gained by doing so. We did this by an intensive development of *Operating Principles* (see Box 2) through crowd-sourcing and stakeholder engagement. This took many forms, including open forums with the community, more targeted focus groups, and structured input from people in key culture-setting roles, like deans.

Box 2: Berkeley Operating Principles

We include and excel, together

We imagine and innovate

We simplify

We are accountable to each other

We focus on service

Another aspect of achieving a high performance culture is performance management. It became helpful early on to distinguish sharply the performance evaluation of groups/units/teams from that of individuals. A lot of resistance to measuring outcomes stems from individuals feeling threatened. Initiatives that measure the performance of systems and groups, such as a shared service, without going into individual attribution can be hugely valuable to the university. The threat level was lowered further still via investments in training to help people adapt and by acknowledging that some degree of risk taking was acceptable.

Performance measurement at the individual level has a role too and we adopted several ways to ease the transition. For example, when measuring individual performance at Berkeley's Haas School of Business, and moving more toward a "360 degree" type system (evaluation by direct reports, peers, and supervisors in an integrated format), we found it valuable to transition by using the resulting data for the first year or two purely for developmental purposes, i.e., managers did not have access to the 360-degree feedback a person received. The only requirement was that personal development goals in that first year or two had to take the input into account.

It is also worth noting that every major project has included careful attention to staff development and training. This is oriented toward the new systems and processes involved. We are also providing more generalized training free of charge through our University Extension program. There is a senior leadership development program run in conjunction with the Haas School of Business. Finally, as there are staff reductions involved in some OE projects, we have taken great care to offer strong support for separations.

Portfolio identity of OE program

OE is presented publicly as a unified family of 20+ projects, which has pluses and minuses. For people on campus not directly involved in an OE project, virtually every non-OE initiative in the operating domain is now conflated with OE – a recent decentralization of benefits funding to the unit level is an example. That can be a negative because OE is tagged with unrelated initiatives that may prove problematic. However, we would argue that having a strong portfolio identity is a net positive. This is particularly so when later projects can derive some credibility or sense of confidence from earlier projects within the portfolio.

In our case, the rather wrenching beginning with *Unit Restructuring* was absolutely necessary financially, and actually highly successful: it illustrated that the changes applied to *all* on campus; it was objective and swiftly accomplished; there was a clearly defined role for local leaders and central approval; and finally the savings were real and distributed in an intelligent way between the local units and the center. Despite the wrenching aspect of the 125 layoffs (and many voluntary separations) by the target date of June 30, 2011, which cast an early shadow over all of OE, *Unit Restructuring* was also successful in reinforcing in the minds of campus that we really were (are) in a time of serious budgetary challenges. Having a span target (number of direct reports per manager) for *Unit Restructuring* was hugely galvanizing, particularly since all units shared similar targets, and this was based in organizational theory. It also served to shift the thinking of the deans and unit heads – never again will a Berkeley dean not know what a span is.

We started *Unit Restructuring* with far too much complexity in the organizational charts—which results in too many supervisors with few direct reports, because in the past this was a means of solving another problem, namely, that people were unable to achieve higher salaries under our compensation system unless they were managers. Needless to say, simplifying the organizational chart must at the same time be accompanied by work to address the root causes that would otherwise lead to backsliding over time. We now track measures of average managerial span to help protect against backsliding.

BearBuy went further to increase credibility in the portfolio, as it represents a real increase in the quality of service while earning considerable savings. There may be further restrictions on behavior needed to secure more of the potential for savings from procurement. But, given the results to date, these will be much easier to put in place. The fact that *BearBuy* savings accrue directly to departments as well as (30-40%) to research contracts and grants provides a direct illustration of the benefits of OE.

There are risks as well to a strong portfolio identity. We are still learning how much structure is appropriate to enable successful progress of individual projects without applying a level of oversight and requirements that slow our ability to roll out a solution on a reasonable timeline. Two examples are:

- 1) The appropriate level of auditing was not applied to the review of the first communication to employees regarding their assignment in our Campus Shared Services center. This resulted in a step backward for the campus in terms of readiness because it directly impacted the level of confidence in the project team and leadership, and had consequences - since addressed - for the portfolio as well.
- 2) We also fell short in applying an appropriate level of testing for a project to standardize and automate timekeeping for the campus. An implementation was successful for employees paid monthly; however, we did not appreciate the complexity of the task for hourly employees. While we are now on track for a much better outcome on the project, the failure to recognize problems on this project earlier resulted in a significant delay.

Another change error of Kotter is *failing to create short-term wins*. Within a portfolio of projects there will be some that go more quickly and some more slowly. In general the pace should be neither quick nor slow, but both. Some aspects need to go quickly, for example, because they are easier to implement, start with greater consensus, or can produce quick wins. In our case, the *IT Productivity Suite* project's bulk software purchases were a clean, early win that proved enormously popular for all on campus - once people overcame their mistrust of how it would be paid for, that is.

Other aspects, such as shared services, can be game ending if pursued before sufficient buy-in is achieved. A final change error of Kotter is *declaring victory too soon*. We found that with *Campus Shared Services*, campus acquiescence at the early stages of design and implementation can quickly turn to deep concern as the change becomes imminent and people really start paying attention. That is when the value of a disciplined approach to change management becomes especially apparent. For example, agitation with impending shared services was met with a pre-implementation review that helped adjust sequencing of elements. This allowed us to maintain our mission focus (teaching and research) and helped lower anxiety with more rapid publication of a foundational service-level agreement with hard standards of performance specified, as well as excellent early results of client satisfaction surveys.

D. What to do Better or Differently?

There are a number of areas where we would adjust our approach to do better, if we had it to do over again.

- 1) *Celebrate accomplishments*: This energizes the project teams, reinforces the sense of momentum, and alerts the campus to progress.
- 2) *Early contributors who helped drive the change*: Update and thank early-stage contributors on a more personalized basis.
- 3) *Savings communication*: Tie savings to benefits expressed in ways other than monetary terms.

- 4) *Outside consultants*: Consultants bring tools and expertise not readily available at a university. But, leadership has to be very clearly local.
- 5) *Language*: Directly communicate the need for change using plain language. Avoid consultant-speak.
- 6) *Personnel overlap*: Overlap key personnel (and therefore knowledge) in transitioning from design teams to implementation teams.
- 7) *The ends justify the means*: Continue in communications to emphasize the case for change rather than simply communicating project plans; this keeps a 'benefits lens' on the work.
- 8) *Start with the end in mind*: The project team, by its nature, is short-lived; the functional team should begin planning for the transfer to operations from the outset.
- 9) *Portfolio size and project sequencing*: Develop better ways to assess the organization's overall capacity for change in advance of designing the program. Spend time figuring out the most appropriate sequence, but realize you will never get it exactly right.
- 10) *Leadership team*: Work hard to ensure that the leadership team has a common vision and a collaborative working relationship across functional areas, particularly in the implementation phase.

E. Concluding Thoughts

The dramatic change program for operations at Berkeley arose from factors we share with many other colleges and universities. The campus owes a debt of gratitude to then-Vice Chancellor Frank Yeary for a compelling illustration of what is possible. An appreciation of the special opportunities represented by the challenges we face, combined with insight into the new tools available to help, can inform the planning for such a massive effort.

Leveraging the strengths of the organization - a strong culture, clear mission, imaginative and determined leadership, and committed workforce - can enable the desired behavioral changes. We are still on this journey and we know there will be more lessons to learn and corrections to make. This is still a work in progress, but the campus is well on its way to meeting the goals of operational improvements and savings of \$75 million per year by fiscal year 2016. We are keenly aware of the profound effort this has required by so many on campus.

Nevertheless we are optimistic that we have begun to build a structure, process and culture capable of responding to our future challenges. One thing we are certain of: the status quo was not sustainable. While we are respectful of the great challenges that still remain, we also have the firm resolve to emerge a stronger, better-run institution, with a more nimble, problem-solving culture. This will allow us to remain tightly focused on the places where we really add value: teaching, research and public service.

ENDNOTES

- [1] John P. Kotter, *Leading Change*. Boston, Massachusetts: Harvard Business School Press, 1996.
- [2] Financial updates at <http://oe.berkeley.edu>.
- [3] <http://cfo.berkeley.edu/sites/default/files/BerkeleyBudgetPlan2012-13.pdf>
- [4] Oliver E. Williamson, *Markets and Hierarchies: Analysis and Antitrust Implications*. New York: Free Press, 1973.
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