

## *Transformation of Administrative Systems Infrastructure*

The need to invest in our human and systems infrastructure is one of the major strategic investments Yale will be making in the coming years, along with the West Campus and the expansion of Yale College. This past summer, our senior leadership team refined our understanding of the issues we face, drafted a plan for addressing those issues and developed a more refined estimate of the costs/benefits. The work of the summer affirmed our belief that the current administrative systems and processes are inadequate. Simply put, we must move beyond:

- ▶ Inefficient, complex, high cost processes
- ▶ Inconsistent quality and dissatisfaction with service
- ▶ Continued control and compliance risks
- ▶ Underutilized, insufficient and outdated technology

It is clear that we do not function as effectively as it needs to – we do not operate with the necessary level of certainty regarding internal controls and our current administrative support model will not scale to meet the growth challenges of the coming years (e.g. West Campus).

This transformation journey began two years ago when we launched the *100-day Plan* around research compliance. Since then we have worked with numerous faculty, department business offices and central support units to fully understand today's processes and where they fall short of effectively meeting the needs of the research enterprise. The Transformation of Sponsored Research Administration (TSRA) project was launched late last spring to redefine the end-to-end process for research administration and to identify a technical solution that would enable us to address these shortcomings and deliver better support for faculty. We must improve faculty researchers' ability to do what they do best, while ensuring complete and consistent compliance with standards and regulations. BearingPoint has been assisting with this high-level design effort.

Among its many findings, the TSRA effort clearly identified that inherent complexities, business process challenges and the manner in which we have implemented administrative systems confound our ability to support research effectively and efficiently. Particular challenges were identified in the core accounting areas of payroll, accounts payable and grant reporting. Based on these findings we launched a separate effort, assisted by Accenture, to evaluate our core back office processes and systems with a goal of moving Yale toward best practice approaches. This effort has been called the Improvement of Systems and Administrative Processes (ISAP) and is focused on HR, Finance/Accounting, Procurement and IT.

This summer, these two teams worked to build a high-level process and systems design, an overall integrated four-year project roadmap, and preliminary cost and benefits estimates. Here are some of the highlights from their work.

## Transformation of Sponsored Research

The solution for improving support to the research enterprise is to define a common set of business practices and build a set of tools which allow both faculty and faculty support to work in an integrated, collaborative way throughout the grant lifecycle – in pre-award phases: proposal development, compliance review and proposal submission; and in post-award phases: award set-up, award management and award close-out. We must do so with automated processes that eliminate manual transactions, shrink cycle times and provide data that is accurate, transparent, timely and easily accessible. The faculty who have helped shape this vision are very enthusiastic about the possibilities. This type of integrated solution does not yet exist in peer institutions and though it will require us to break new ground for Higher Ed, we can adapt similar capabilities that already exist in the corporate arena for our own use.

We will begin with the implementation of a packaged solution called *InfoEd*. This is the best software available to meet the requirements of the pre-award phases and we have concluded that it can be implemented at Yale, as it has been at many other research institutions, allowing us to complete the consolidation of the pre-award staffs and fully retire the two legacy solutions. We will build onto *InfoEd*, linking it to those compliance units responsible for reviewing conflicts of interest and various animal, human and hazardous material protocols, etc. This will provide faculty with critical status-tracking capability as proposals and protocols move through the internal review process. We will also streamline the processes and improve the tools in the compliance units so they can more efficiently manage their important work.

Addressing post-award management is a bit more complex. While we have made significant improvements already, further improvements will require us to fix the deficiencies in our core accounting capabilities, including the highly manual cost transfers that have been at the heart of the federal investigation. Once these core back office processes are in place, the accurate and timely grant reports Principal Investigators (PIs) were promised as part of the 1999 Oracle implementation will finally be a reality. We will build on that to provide budgeting tools that allow PIs and their support staff to actively manage their grant budgets.

Lastly, we will be able to deliver these grant reports and the collaborative tools for managing them directly to the faculty through *Faculty First Portal*. The portal will be one of the initial tools we roll out. The first set of information delivered through the portal will be in support of the faculty's academic/teaching role: course registration, course grading, student evaluations and class information including syllabi and course material. The portal will also be used to facilitate academic advising between faculty advisors and students and to track dissertation progress. The vision for the *Faculty First Portal* is that it will eventually include the entire portfolio of activities that comprise the

“administrative life” of a faculty member, including teaching, research, funds, operating budgets and staff management.

## Improvement of Systems and Administrative Processes

Over the course of the summer we examined our existing processes and systems and compared them to approaches and uses of technology in best practice organizations. We also completed a Hackett benchmarking study of our back-office transaction capabilities to find out how we compared to other organizations of similar scale in Hackett’s extensive comparative database. The findings validated our deep concerns and clearly demonstrated that compared to what is possible, Yale is not nearly as effective or efficient as it could be. The findings are summarized below:

- ▶ A high percentage of time is spent on largely paper-based transactional work versus more strategic, value-added work. Relative to what is possible, more money is spent and more employees are engaged in completing tasks with lower-quality results, as illustrated by error rates, re-work and cycle times.
- ▶ We can and should get more from our investment in technology and better leverage it to increase efficiency, effectiveness and capability.
- ▶ We are expensive. This is due in large part to the number of employees it takes to heroically produce results in a manual, complex and error-rich environment.
- ▶ In Finance, even a quick look at the number of bank accounts we maintain, the rate of payroll errors we commit, the amount of time we spend processing transactions and our struggles to generate accurate and timely reports tells us that we cannot continue business as usual. In HR, the same can be said for the length of time it takes to fill open positions, the tedious “process” of onboarding new employees and our transactional error rates. In Procurement, our processing error rates and the proliferation of non-standardized, manual solutions are untenable.
- ▶ While all of the above is true, it is also true that university accounting is highly complex compared to like-size corporations. The need to account for 2,700 grants and 9,300 funds is our reality, but we must streamline the processes wherever possible and use technology to more effectively and efficiently manage the complexity inherent to Higher Ed.

## Integrated Transformation Roadmap

Based on discussion and review of the Hackett results, the two projects have been merged into an integrated program roadmap. This reflects our belief that moving to more common administrative approaches and integrated technology platforms is not only something we can do, it is something we must do if we are to scale for today’s existing complexities as well as for tomorrow’s growth. Yale can achieve major improvements quickly, by leveraging proven approaches for delivering lower cost, higher quality service.

In the coming weeks, our senior leadership team will review the elements of the plan, illustrate how the pieces will come together over time and identify when we can expect to see results. In this context, we will examine the investment and effort required as well as the potential for generating real staff savings. As prelude to this review, we know that:

- ▶ Our situation can be fixed and we know the key components of the fix.
- ▶ We can move to best practice processes, such as the use of purchase orders and consolidated invoicing in the procurement and accounts payable area. This will improve transaction-processing ability and enable us to accurately distribute/allocate the charges across the many grants and funds we need to account for separately.
- ▶ Oracle will remain the basic systems platform. Our issue is not with the software; it is with the implementation which we will “repair” and optimize with the addition of advanced, integrated budgeting and reporting tools.
- ▶ We will build a layer for research support and grant management that can be quickly adapted and implemented for the management of restricted funds.
- ▶ We will explore the potential for improvement in low-risk, high-payoff areas such as payroll and benefits administration that not only generate savings, but provide us access to best practice technology.
- ▶ We will fully explore more efficient organizational models that utilize shared service transaction centers and customer contact centers.

## IT Capability Assessment Project (ICAP)

We recognize that the scale and integrated nature of this change is broad and much greater than Yale’s Information Technology Services (ITS) organization is equipped to handle. With that in mind, we asked Accenture to work with the ITS leadership team to assess its capabilities and recommend improvements that will be required to “turbo charge” our ability to deliver in the manner required for this effort to succeed. There are a series of commonly used approaches and technologies that significantly lift the capabilities of an IT organization. The roadmap includes the key elements of the recommendations along with a needed infusion of talent and leadership in Yale ITS.

## Where are we and Benefits

We received the Corporations approval to move forward with this transformation effort. We will be heavily reliant on our consulting partners, including their off-shore development teams, handling the bulk of the IT development work. Program ramp up, identification of core team members and implementation of strong project management disciplines will occur between now and the official launch in January 2009. The program is expected to take four and a half years to fully complete.

## Where are we in the transformation process?



Successful implementation of this strategy will yield the following benefits:

- ▶ Flexible, integrated and supportable administrative systems
- ▶ Effective and efficient administrative capability with consistent, streamlined and automated processes designed around end-to-end service vs. “siloes” departmental approaches
- ▶ Long-awaited improvement in data accuracy, timeliness and availability
- ▶ Significantly reduced risk of future compliance or control issues
- ▶ Focused, responsive, faculty-centric service organizations leading to improved “customer satisfaction”
- ▶ High touch faculty support teams for business critical operations
- ▶ Strengthened financial leadership talent

We will work to solidify this in the next phase along with processes to ensure we manage the benefits capture as tightly as we manage the program costs.

The scale of this transformation provides us new realms of opportunity, not the least of which is an opportunity to better understand, acknowledge and improve the talent and potential of the people who work at Yale. Those staff and managers who currently feel stifled in their ability to contribute will find they have an opportunity to contribute more, grow more and be recognized more. Mike Peel, in his new role, will be a vital partner in defining how HR can help Yale capitalize on this opportunity.

During this transformation, our most important message to you is that *faculty comes first*. This is true in the design of new processes and systems, as well as in the daily operations of administration while we make these changes. The scale of this effort and the change management challenge is large. While we are beginning to see more institutions develop similar strategies, we are out in front of them both in terms of the scope of our vision and the pace with which we hope to achieve it. As such, this is not a risk-free pursuit. Many have failed to deliver this type of large scale transformation. We need to ensure we have the means to manage this in a way that does not allow costs to escalate and achieves the full potential of benefits. This is no small challenge, but we are confident in our ability to be successful and look forward to the significant contribution we can make to the ongoing success of this great institution.