



Enterprise Systems Replacement Proposal

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Prepared at the request of the President's Cabinet

Executive Sponsor: Michele Norin

Planning Team: Hank Childers, Lead
Rick Hargis
Kymber Horn
Liz Taylor
Mike Torregrossa

Table of Contents

Executive Summary	3
Background	4
Scope	6
Business Case.....	8
Timeline	10
Costs	11
Organizational Impact.....	13



Executive Summary

In November 2007 the President's Cabinet requested that the Chief Information Officer assess what would be required to go forward with an enterprise systems replacement strategy, assuming PeopleSoft and Kualu. During December 2007 and January 2008 a team of business and technical leaders concentrated on the PeopleSoft component, drawing heavily on the experiences of ASU and other institutions. These findings were then integrated with the previously compiled Kualu findings and incorporated with companion findings, most notably the need and opportunity for greatly improved information.

ASU's recent experience with PeopleSoft provided a baseline, which they shared openly with us in a number of different ways, including comprehensive peer-to-peer visits and discussions. One of the most important strategies is that a very aggressive implementation schedule helps control costs and manage scope. This proposal adopts that strategy. Based directly on our peer-to-peer conversations, the UA proposed timeline, though slightly less compressed than ASU's, compared to other institutions it is very aggressive.

The scope includes Financials, Research Administration, Student Recruiting, Student Information, Human Resources/Payroll, Budget, and Business Intelligence. These will be addressed respectively by the Kualu Financial System (KFS), Kualu Research Administration (KRA), a Student Recruiting system not yet identified, PeopleSoft Campus Solutions, PeopleSoft Human Capital Management, a Budget modeling system to augment the Kualu Financial System, and a set of Business Intelligence databases and tools not yet finalized. There are some open questions, with costing assumptions included, but the pillars (Kualu and PeopleSoft) are clear.

The business case for moving forward is compelling. Our current suite of administrative systems is technologically very old. Our ability to operate and maintain these systems is at great risk. (Payroll is a good example.) Severe limitations in system capabilities expose us to negative audit findings with substantial consequences. (Sponsored Projects is a good example.) Lack of effective integration between systems hampers us and leads to extra work, audit recommendations and inconsistent information. (Matrix and SIS are good examples.) We are one of the few major universities that have not replaced our enterprise systems, and we are at a competitive disadvantage as a result. Finally, the quality and availability of information to operate the university and make effective decisions is both a threat and an opportunity. With the advent of recent business intelligence tools we are ironically in a great position to make a leap forward.

The core of the proposed implementation would occur over a three-year period with the bulk of the milestones occurring in the second year and early in the third year. The estimated incremental cost over a five-year period is \$80 million, excluding contingency. The last two years reflect an estimated \$9.6 million in increased annual ongoing costs.

We know from ASU's and others' experiences that enterprise replacement projects place a very great strain on the institution, and successful completion is heavily dependent on managing the organizational impact. With this knowledge we can successfully deal with these issues. If approval is granted and funding obtained, we are prepared to move forward and be successful.



Background

Without question The University of Arizona needs to address its core administrative systems. This has long been recognized. Outside of the Cosmos/Matrix project there has been very little investment over a period of 25 years or so. Instead we have “made do” to a great extent, and the achievements during that period are all the more remarkable for the considerable successes obtained, typically with little fanfare and with even smaller budgets. But this is not a sustainable approach, and the pressures to move forward are compelling. In the last year or so some key directions and notable competitive disadvantages have crystallized based on the UA’s early involvement with the Kualu initiative and with NAU’s and ASU’s deployment of PeopleSoft. Accordingly the President’s Cabinet requested in November 2007 that we assess what would be required to go forward with a replacement strategy for the U of A, assuming PeopleSoft and Kualu.

PeopleSoft Assessment

The effort over December 2007 and January 2008 was focused primarily on PeopleSoft (Human Resources/Payroll and Student) with considerations also for Student Recruitment, Budget, and Business Intelligence. The key participants were Directors and key staff of the directly affected central administrative units, along with the Council of Academic Business Officers (CABO) organization. Well over 1000 person-hours were spent in meetings and research.

The approach was to first learn about PeopleSoft from the Oracle Corporation and from the Higher Education User Group (HEUG), a very large group of similar institutions using PeopleSoft and other Oracle products, but independent of Oracle. The next step was to take maximum advantage of the recent experience of ASU. We contracted with Max Davis-Johnson, the ASU Project Director, to consult with us in this effort. Further, we made a number of visits to ASU to speak directly with functional counterparts, including college business officers, to learn what we could from their experience. This involved over 50 individuals from the UA and over 40 from ASU. Our ASU counterparts were extremely helpful and open, and we have incorporated most of what we learned. Following the ASU discussions we worked with Max Davis-Johnson to develop project timelines and project staffing estimates. Similarly, we contracted with Barry Brummond, a key consultant on the ASU project, to advise us on our approach to Business Intelligence. In addition a two-day technical overview was provided by Oracle to over 50 IT staff. Finally, over 40 UA business and technical staff are scheduled to attend the March HEUG conference to learn more about PeopleSoft through the experiences of other aspirational and peer institutions.

Kualu Assessment

In March 2005 the Arizona Board of Regents approved the UA request to join the Kualu project to collaborate with five other universities to convert Indiana University’s well established Financial Information System (FIS) to new technology. A year and a half later they approved a partnership with three other universities in the Kualu Research development project, which will be converting and building on MIT’s COEUS system.

The UA has participated in the various module subcommittee meetings to refine scope for developers and to test the developed product. Prior to development, the UA community participated in an initial assessment of Indiana’s FIS system. As development progressed, the UA community was kept involved with hands on sessions to familiarize campus with the new software and to gather feedback.

It has become clear that Indiana’s leadership and the collaborative involvement of the other partners are leading to success, demonstrated by two releases. Additionally, careful thought has



been given to sustainability, which will be coordinated by a non profit foundation and by commercial affiliates who will provide implementation and hosting services.

Findings

PeopleSoft is a viable and practical approach for The University of Arizona. There are some issues that we will need to address. We will have to do some limited customization to the base product, but at roughly the same level as ASU and will continue the concept of “Regents Vanilla.” In many cases we will be able to use the customizations that ASU and other PeopleSoft schools have developed. There are, of course, differences between our institutions, in some cases due to different starting points, and in some cases due to different policies/practices. Based on our examination, these issues are manageable.

The PeopleSoft time and cost estimates take explicit advantage of the recent experience of ASU. Compared to the time spent and costs borne by other institutions for similar endeavors, our timeline and costs are extremely aggressive. But all participants believe them to be realistic. Clearly we are taking advantage of ASU’s experience, the experiences of other institutions, and the maturity of the PeopleSoft offering.

The PeopleSoft components represent a proven direction, and we will be able to take advantage in the future by being part of this very large installed base of institutions. We will become competitive in these areas. Among our peer institutions 9 of 15 have selected PeopleSoft for Student, and 10 of 15 for Human Resources/Payroll. Only one other peer institution continues to operate legacy systems for both Student and HR/Payroll.

Kuali Financials and Research is the best solution for the UA. Kuali is being developed by higher education for higher education. Because our best practices have been built into the system, we will be able to successfully implement Kuali with little modification. Additionally, some of our partner schools are also using PeopleSoft HR/Payroll and Student, and we will be able to collaborate with them on interfaces and integrations, further reducing our costs and risks.

The Kuali components focus especially on the areas of Finance and Research in a way that addresses the needs of large research institutions. While there is not yet an installed base, the software is based on proven foundations at Indiana University and MIT. Partners include:

Kuali Financials

Cornell University
Indiana University
Michigan State University
University of California (Davis, Irvine, Santa Barbara)
University of Hawaii
NACUBO Prof. Assoc.

Kuali Research

Cornell University
Indiana University
Michigan State University
MIT

There is nothing comparable to the Kuali suite in the marketplace at this time.

With respect to Business Intelligence we are in a great position to take advantage of products that have emerged over the last few years.



Scope

The U of A proposes to replace all four of its major administrative systems: Financials, Research Administration, Student, and Human Resources/Payroll. This will affect many support and peripheral systems as well. We will replace the Student and Human Resources/Payroll components with PeopleSoft Version 9.0. The Financials and Research Administration modules will be replaced with the Quali suites. Budgeting functionality will be integrated with PeopleSoft and Quali, and supplemented by a Budget Modeling application.

Along with replacing the core administrative systems, a substantial investment will be made in Business Intelligence both to adapt to changing administrative systems and to greatly expand the availability of business information to managers and executives.

Relative to ASU's recent Oasis (PeopleSoft) project, the effect of this proposal will be a larger project and budget over a slightly longer period of time.

A map of the detail on these changes follows.

Business Functions	Current	Proposed
<u>General Financials</u> – General Ledger, Financial Transactions Processing, Accounts Payable, Accounts Receivable, Capital Assets, Endowments, Pre-Disbursement Processing, Labor Distribution, Purchasing <u>Research Financials</u> – Grants & Contracts Post Award, Effort Reporting, Cost Sharing	<ul style="list-style-type: none"> • Financial Records System (FRS) • Payroll Expense Transfer System (PETS) • POLSEC • Underwater Endowment • webJE, eRFAA, eDDF • eForms • Various Departmental Systems 	<ul style="list-style-type: none"> • Quali Financial System (KFS)
<u>Research Administration</u> – Proposal Construction, Animal Care, Awards, Bio-Safety, Chemical Tracking, Conflict of Interest, Export Controls, Human Participants, Subcontracts	<ul style="list-style-type: none"> • Sponsored Projects Information System (SPINS) • Adjunct Systems (eSirius, eVisual Compliance, et al)¹ 	<ul style="list-style-type: none"> • Quali Research Administration (KRA)
<u>Student Recruitment</u>	<ul style="list-style-type: none"> • Matrix 	<ul style="list-style-type: none"> • Student Recruitment TBD²
<u>Student</u> – Admissions, Registrar (Student Records, Course Approval, Degree Audit, Room & Course Scheduling, Transfer Articulation), Curriculum, Financial Aid, Student Financials, Student Self-Service	<ul style="list-style-type: none"> • Matrix • Degree Audit Reporting System (DARS) • Transfer Articulation (DARS) • Student Information System (SIS) • Student Link • Advisor Link 	<ul style="list-style-type: none"> • PeopleSoft Campus Solutions • Degree Audit TBD³ • Transfer Articulation TBD³ • Advisor Link TBD⁴
<u>Human Resources/Payroll</u> – Recruitment, Hiring, Benefits, Employee Records, Time Capture, Payroll, Position Control, Employee Self-Service, Department Self-Service	<ul style="list-style-type: none"> • CareerTrack • Personal Services Operating System (PSOS) • Employee Link • Adjunct Systems (e.g., COTI, Benefits History)⁶ • POPR/Payroll Adjustments • Multiple Time Capture Systems 	<ul style="list-style-type: none"> • Employee Recruitment TBD⁵ • PeopleSoft Human Capital Management • Consolidated Time Capture Systems



Budget – Budget Construction, Planning, Monitoring, Reporting	<ul style="list-style-type: none"> • Personal Services Operating System (PSOS) • Financial Reporting System (FRS) 	<ul style="list-style-type: none"> • Kuali Financial System (KFS) • TBD⁷
Business Intelligence – Operational Reporting, External Reporting, Decision Support	<ul style="list-style-type: none"> • University Information System (UIS) • Integrated Information Warehouse (IIW) • Information Services Web (ISW) • Various Departmental Systems 	<ul style="list-style-type: none"> • TBD⁸

¹ Some of the adjunct systems for Research Administration may be fully or partially replaced by KRA, but that has not yet been determined.

² UA Enrollment Management is currently evaluating CRM (Customer Relationship Management) and other product offerings. CRM assumed for budgeting purposes. ASU implemented Oracle’s CRM product, which is separate from PeopleSoft.

³ DARS is initially preferred by the UA Registrar for degree audit and transfer articulation, and is assumed for costing purposes. ASU continues to utilize DARS, rather than PeopleSoft’s delivered function. However, ASU is split on whether that was the best decision or not, so this item remains open.

⁴ UA has Advisor Link for use by Academic Advisors. It has not yet been determined whether Advisor Link will be replaced or retained.

⁵ UA has CareerTrack, a contracted service, in place, and this is initially preferred by UA Human Resources. CareerTrack assumed for budgeting purposes. ASU implemented the PeopleSoft Talent Acquisition product, but did not previously have an online employee recruitment system in place.

⁶ Adjunct systems will be evaluated to determine if necessary and, if so, how to integrate with PeopleSoft.

⁷ Current UA budgeting capability is provided by FRS and PSOS. KFS and PeopleSoft will be evaluated to determine what adaptations or additions will be necessary. A rough time and cost estimate has been made for budgeting purposes.

⁸ The UA Information Warehouse Office is evaluating PeopleSoft’s Enterprise Performance Management (EPM) product and other Oracle-provided companion products. EPM and companion products assumed for budgeting purposes. ASU implemented EPM. They were the first to use this new product and have had some difficulties.



Business Case

Business Drivers

The forces urging us forward are particularly strong at this time. These are the primary business drivers:

- Risk of non-compliance
- Risk of system failure
- Improved integration and system capabilities
- Need/opportunity for vastly improved business intelligence
- Opportunity for collaboration

These business drivers push us forward from a risk and compliance standpoint, and/or pull us forward from an opportunity standpoint. While the administrative systems generally do not deal directly with the strategic initiatives of the University, they play key supporting roles in fulfilling our mission. Our goal is to provide a fundamentally sound and flexible administrative infrastructure with minimum risk, at a reasonable cost, and a positioning to provide the information wanted and needed to effectively guide and operate the institution.

Risk of Non-Compliance

Our current systems hinder us in complying with regulations and expose us to audit findings and explicit recommendations. The NSF audit currently in process could find us in non-compliance from an effort reporting standpoint, with potential financial impacts estimated in the millions of dollars. The lack of a robust electronic workflow process jeopardizes our ability to exercise adequate internal controls in our financial systems and in meeting complex regulatory requirements for grants and contracts. In general, our systems are characterized by relatively weak internal controls, and we are thus vulnerable.

Risk of System Failure

This is difficult to discuss without sounding either shrill (“the sky is falling”) or preternaturally calm. But we are at significant risk with our current systems, with risks worsening over time. Sponsored Projects Information System (SPINS) could fail due to its fragile, obsolete technology and skill set requirements, resulting in a major disruption to the accounting, administrative service charge, and indirect cost recovery functions which are vital to the UA. The current 30-year old PSOS and Payroll systems are unique to the UA and supported by only two or three technical staff members, some nearing retirement. In general the availability of qualified staff to support our administrative systems is extremely limited. There is no vendor support available for our application software.

Failure scenarios are hard to predict, but the most likely one is an increasing number of situations where processing is late or incorrect. We are already seeing signs of this. As it worsens we will have cases that are visible and potentially expensive. The good news is that we have certainly gotten our money’s worth out of our existing systems.



Improved Integration and System Capabilities

Historically we have worked around a great many limitations in our current systems, but we are hamstrung in our ability to do much more without addressing the fundamental underlying systems. For example, we are currently unable to meet some federal government requirements for electronic proposal submission, reducing our ability to compete for grants and contracts. Another example is the difficulty we experience in adapting our financial systems for effort reporting, flexible chart of accounts, and tracking cost share commitments. The integration of SIS and Matrix is partially successful, but remains problematic. With our Student systems we are not in a position to react quickly to market needs and pressures. On the other hand there is a tremendous opportunity to improve the capabilities of our systems. With PeopleSoft we will be able to take advantage of the expanded system capabilities that arise from collective needs of the large installed base for Student and HR/Payroll. With Quali we have participated very actively in the design and specification for both Quali Financials and Quali Research—we will be well positioned for the future.

Improved system capabilities will not only allow us to address long-standing known shortcomings, but will also put us in a position to react to unforeseen emerging needs. Certainly we will at least be even with our competition.

Need/Opportunity for Vastly Improved Business Intelligence

Executive administration and the Arizona Board of Regents are requiring more information from us to guide the future of the institution. And our day-to-day operations are increasingly dependent on timely and accurate information as well. In part this is an issue of having the information, and in part it is an issue of making the information available and accessible. The changing of our core administrative systems forces us to adapt as our information sources change. But this forced change also presents an opportunity to rethink our approach for housing, accessing, and presenting information. This will incorporate newer web-based tools that facilitate direct access by managers and decision-makers, with greater use of graphics, and the ability to drill down into details. Our objective is to move aggressively with respect to information as we see the opportunity to make a leap forward. On the other hand, if we fail to do this we will fall behind in our ability to effectively manage and plan.

Opportunity for Collaboration

By going forward with PeopleSoft we will be using the same HR/Payroll and Student systems as our sister institutions ASU and NAU. This presents an opportunity to collaborate on efforts that are common among the ABOR institutions. This would include state-mandated or ABOR-mandated initiatives. Our ability to report consistent information to ABOR will be enhanced. And we may well find opportunities for collaboration based on common underlying technologies.

Costs

ENTERPRISE SYSTEMS REPLACEMENT PROJECT - ESTIMATED BUDGET								
Category	Initiative	Year 1	Year 2	Year 3	Year 4 - Ongoing	Year 5 - Ongoing	TOTALS	%
HARDWARE AND PERSONNEL SUPPORT	PEOPLESOFT	\$ 1,340,000	\$ 2,430,000	\$ 2,430,000	\$ 2,430,000	\$ 2,430,000		
SOFTWARE LICENSING	PEOPLESOFT	\$ 2,015,000	\$ 1,860,000	\$ 1,790,000	\$ 637,000	\$ 637,000		
TRAVEL AND TRAINING	PEOPLESOFT	\$ 156,000	\$ 56,000	\$ 56,000	\$ 40,000	\$ 40,000		
NEW TRAINING, BUSINESS ANALYSIS AND COMMUNICATIONS STAFF	PEOPLESOFT	\$ 782,000	\$ 1,302,000	\$ 1,302,000	\$ 1,302,000	\$ 1,302,000		
NEW TECHNICAL STAFFING	PEOPLESOFT	\$ 1,300,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000		
TEMPORARY BACK-FILL STAFFING FOR BUSINESS UNITS	PEOPLESOFT	\$ 2,000,000	\$ 2,000,000	\$ 500,000	-	-		
CONSULTING	PEOPLESOFT	\$ 4,832,000	\$ 7,181,000	\$ 2,408,000	-	-		
PEOPLESOFT TOTAL		\$ 12,425,000	\$16,329,000	\$ 9,986,000	\$5,909,000	\$5,909,000	\$50,558,000	63%
HARDWARE AND PERSONNEL SUPPORT	KUALI	\$ 495,000	\$ 175,000	\$ 175,000	\$ 175,000	\$ 175,000		
SOFTWARE LICENSING	KUALI	-	-	-	-	-		
TRAVEL AND TRAINING	KUALI	\$ 48,000	\$ 28,000	\$ 19,000	\$ 12,000	\$ 12,000		
NEW TRAINING, BUSINESS ANALYSIS AND COMMUNICATIONS STAFF	KUALI	\$ 98,000	\$ 136,000	\$ 136,000	\$ 136,000	\$ 136,000		
NEW TECHNICAL STAFFING	KUALI	\$ 580,000	\$ 580,000	\$ 580,000	\$ 580,000	\$ 580,000		
TEMPORARY BACK-FILL STAFFING FOR BUSINESS UNITS	KUALI	\$ 600,000	\$ 200,000	\$ 128,000	-	-		
CONSULTING	KUALI	\$ 500,000	\$ 500,000	\$ 250,000	-	-		
KUALI TOTAL		\$ 2,321,000	\$ 1,619,000	\$ 1,288,000	\$ 903,000	\$ 903,000	\$ 7,034,000	9%
HARDWARE AND PERSONNEL SUPPORT	BUDGET MODELING	\$ 75,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000		
SOFTWARE LICENSING	BUDGET MODELING	\$ 400,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000		
TRAVEL AND TRAINING	BUDGET MODELING	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000		
NEW TRAINING, BUSINESS ANALYSIS AND COMMUNICATIONS STAFF	BUDGET MODELING	-	-	-	-	-		
NEW TECHNICAL STAFFING	BUDGET MODELING	\$ 66,000	\$ 66,000	\$ 66,000	\$ 66,000	\$ 66,000		
TEMPORARY BACK-FILL STAFFING FOR BUSINESS UNITS	BUDGET MODELING	\$ 100,000	\$ 100,000	\$ 100,000	-	-		
CONSULTING	BUDGET MODELING	\$ 180,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000		
BUDGET MODELING TOTAL		\$ 826,000	\$ 246,000	\$ 246,000	\$ 146,000	\$ 146,000	\$ 1,610,000	2%



ENTERPRISE SYSTEMS REPLACEMENT PROJECT - ESTIMATED BUDGET (Continued)

Category	Initiative	Year 1	Year 2	Year 3	Year 4 - Ongoing	Year 5 - Ongoing	TOTALS	%
HARDWARE AND PERSONNEL SUPPORT	STUDENT RECRUITMENT	\$ 14,000	\$ 29,000	\$ 29,000	\$ 29,000	\$ 29,000		
SOFTWARE LICENSING	STUDENT RECRUITMENT	\$ 346,000	\$ 62,000	\$ 62,000	\$ 62,000	\$ 62,000		
TRAVEL AND TRAINING	STUDENT RECRUITMENT	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000		
NEW TRAINING, BUSINESS ANALYSIS AND COMMUNICATIONS STAFF	STUDENT RECRUITMENT	-	-	-	-	-		
NEW TECHNICAL STAFFING	STUDENT RECRUITMENT	\$ 53,000	\$ 94,000	\$ 94,000	\$ 94,000	\$ 94,000		
TEMPORARY BACK-FILL STAFFING FOR BUSINESS UNITS	STUDENT RECRUITMENT	\$ 100,000	\$ 100,000	\$ 100,000	-	-		
CONSULTING	STUDENT RECRUITMENT	\$ 1,568,000	\$ 128,000	\$ 128,000	-	-		
STUDENT RECRUITMENT TOTAL		\$ 2,086,000	\$ 418,000	\$ 418,000	\$ 190,000	\$ 190,000	\$ 3,302,000	4%
HARDWARE AND PERSONNEL SUPPORT	BUSINESS INTELLIGENCE	\$ 332,000	\$ 442,000	\$ 442,000	\$ 442,000	\$ 442,000		
SOFTWARE LICENSING	BUSINESS INTELLIGENCE	\$ 403,000	\$ 372,000	\$ 358,000	\$ 127,000	\$ 127,000		
TRAVEL AND TRAINING	BUSINESS INTELLIGENCE	\$ 58,000	\$ 25,000	\$ 21,000	\$ 17,000	\$ 17,000		
NEW TRAINING, BUSINESS ANALYSIS AND COMMUNICATIONS STAFF	BUSINESS INTELLIGENCE	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000		
NEW TECHNICAL STAFFING	BUSINESS INTELLIGENCE	\$ 397,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000		
TEMPORARY BACK-FILL STAFFING FOR BUSINESS UNITS	BUSINESS INTELLIGENCE	-	-	-	-	-		
CONSULTING	BUSINESS INTELLIGENCE	\$ 1,067,000	\$ 1,536,000	\$ 481,000	-	-		
BUSINESS INTELLIGENCE TOTAL		\$ 2,607,000	\$ 3,225,000	\$ 2,152,000	\$ 1,436,000	\$ 1,436,000	\$ 10,856,000	14%
HARDWARE AND PERSONNEL SUPPORT	MIDDLEWARE	\$ 300,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000		
SOFTWARE LICENSING	MIDDLEWARE	\$ 781,000	\$ 156,000	\$ 156,000	\$ 156,000	\$ 156,000		
TRAVEL AND TRAINING	MIDDLEWARE	\$ 57,000	\$ 35,000	\$ 31,000	\$ 31,000	\$ 31,000		
NEW TRAINING, BUSINESS ANALYSIS AND COMMUNICATIONS STAFF	MIDDLEWARE	-	-	-	-	-		
NEW TECHNICAL STAFFING	MIDDLEWARE	\$ 490,000	\$ 765,000	\$ 765,000	\$ 765,000	\$ 765,000		
TEMPORARY BACK-FILL STAFFING FOR BUSINESS UNITS	MIDDLEWARE	-	-	-	-	-		
CONSULTING	MIDDLEWARE	\$ 250,000	\$ 250,000	-	-	-		
MIDDLEWARE/INTEGRATION TOTAL		\$ 1,878,000	\$ 1,281,000	\$ 1,027,000	\$ 1,027,000	\$ 1,027,000	\$ 6,240,000	8%
PROJECT SPACE	ENTERPRISE-WIDE	\$ 300,000	\$ 100,000	-	-	-		
PROJECT SPACE TOTAL		\$ 300,000	\$ 100,000	\$ -	\$ -	\$ -	\$ 400,000	1%
PROJECT FUNDING TOTALS		\$22,443,000	\$23,218,000	\$ 15,117,000	\$ 9,611,000	\$ 9,611,000	\$80,000,000	100%
CONTINGENCY (~15%)	ENTERPRISE-WIDE	\$ 3,335,000	\$ 3,500,000	\$ 2,300,000	-	-		
CONTINGENCY TOTALS		\$ 3,335,000	\$ 3,500,000	\$ 2,300,000	\$ -	\$ -	\$ 9,135,000	
GRAND TOTALS		\$25,778,000	\$26,718,000	\$17,417,000	\$ 9,611,000	\$ 9,611,000	\$ 89,135,000	



Organizational Impact

The successful implementation of new core administrative systems will have an enormous impact on The University of Arizona. The period of implementation, including the first year or so after each “go live” event, will be both exciting and difficult. And afterwards, when things have settled down, we will note that our processes and organizational structures have changed and adapted around the maintenance and support of these new systems.

During Implementation

The size of these projects is daunting, and we do not have the experience of having done similar projects. On the other hand there is a wealth of experience from other institutions from which we can draw. This especially includes the very recent experience of ASU and, prior to that, NAU. We also have the experience of Indiana University to draw on, as they have implemented PeopleSoft and will be integrating it with Kuali. Also, Michigan State University is embarking on a course very similar to ours, and we will be able to benefit from their experiences.

The proposed approach is a “fast track” one compared to most institutions. We will leverage ASU’s experience and approach wherever possible and practical. Project organization will be very similar but with stronger UA technical staff participation due to prior experience with Oracle database and other key technologies and more planned training time. Our biggest constraint will be relatively lower staffing levels to start with. We will follow the same “regents vanilla” approach which is strongly biased toward using the software as provided.

Based on ASU’s experience, and that of other institutions, there is a set of critical success factors (ASU’s “sweet sixteen”) that will guide us in planning and executing the overall project. Some of these will challenge past practices and attitudes.

1. Executive management endorses and visibly supports the project.
2. It is not a technology project; it is a university project.
3. In the functional vs. technical balance, functional weighs more than technical—functional processes and needs are the core.
4. Significant attention is paid to the organization’s need and readiness to adapt.
5. The project management team is assigned full-time.
6. The project team composition represents all functional areas.
7. Core team members are assigned full-time on the project, and normal job responsibilities are reassigned.
8. The project team is empowered to make decisions. A process to elevate decisions is in place.
9. The ability to track and reallocate budget in a timely manner within the overall project budget is critical.
10. There is a separate dedicated work environment created specifically for the project team.
11. Actions are taken to reward, praise, and celebrate the success of all who contribute to the project success.
12. Milestones drive the implementation schedule.
13. Reengineering of business processes is strongly preferable to customizing the software.
14. Experienced consultants facilitate implementation efforts and provide knowledge transfer. Core functional teams have full-time consultant support for the duration of the initial implementation project.
15. Implementation information is continuously communicated to the campus community.
16. Data conversion and reporting are addressed early, not late, in the life cycle.



A key lesson from ASU is that the project needs to be conducted in an open fashion. This is not just a matter of communication, but a matter of protecting the decision-making process, in which input is obtained, necessary information, ideas and concerns weighed, decisions made, and the rationale communicated and documented.

The formation of the project team, the execution of the project, the pressures on units to support existing systems while the new systems are implemented, the changes in business processes, the inevitability of problems, and the uncertainty of future roles for those affected by the implementation—all of these will create a great deal of individual stress within the larger context of organizational change. In fact there is a very predictable pattern, a “slough of despond” that must be traversed before reaching the solid ground on the other side. Notably, the “go live” date does not signal the end of the difficult time. Knowing all of this, we must view “change management” as a central theme of the project. According to the ECAR Research Bulletin Vol 2002, Issue 22 (Nov 12, 2002):

“Respondents were asked to rate the difficulty of installing ERP systems compared to other large technology projects. Although the technical difficulty was judged to be greater than other IT projects, managing process and organizational change were rated as more difficult than the technology.”

The greatest direct impact will be on the central administrative units aligned with the administrative systems. Staffing levels are already thin. Selected key staff will be asked to leave their regular responsibilities to become part of the project team. Functional staff “backfill” will be provided, but inevitably there will be a very significant impact on ongoing operations. In some cases we may find ourselves critically dependent on specific individuals to see us through.

There will also be a great impact on colleges/departments due to changes in business processes, including shifts in responsibility for data entry and the forms and formats of the information available. Based on ASU’s experience this is best addressed by overall project communications, appropriate involvement in the project, and in particular by adequate training provided by knowledgeable trainers.

After Implementation

The difficulties of these projects may cause us to say “tell me again why we’re doing this!” According to the ECAR Research Bulletin Vol 2002, Issue 22 (Nov 12, 2002):

“54 percent of the respondents said productivity declined immediately after the implementation, yet 70 percent believe that productivity is improved today.

“Workload and costs are widely perceived to have increased as a result of ERP implementations. While the costs of inputs rose, 87 percent of respondents reported significant benefits for staff. Seventy-eight percent reported that students received significant benefits.

“In fact, 85 percent indicated that implementing ERP was worth the effort expended.”

One characteristic of enterprise solutions, including PeopleSoft and Kuali, is the degree to which system administration responsibility migrates to the business units that “own” the systems. This will cause us to rethink our organizational responsibilities, with appropriate attention to separation of duties.

The profile of our technical staff will be notably different. Many of the technical skills necessary for maintenance of our legacy systems will no longer be required, and in their place different skills will



emerge as critical, including specialized skills related to PeopleSoft. These skills are highly-valued in the marketplace, and their availability in Tucson will be limited compared to Phoenix. This will have a great impact on our administrative IT units with respect to hiring, training, and compensation.

Vendors of enterprise products issue maintenance updates and releases of their software at various intervals. Maintenance updates occur very regularly, and we will generally need to install them. This will require an ongoing maintenance and support organization around each major product. In addition, we can expect major software releases every few years or so. Support for past releases diminishes and disappears over time, so we can anticipate the need to implement these major releases. These projects will not be as large as the initial implementation projects, but they will be significant, and will be treated as big projects when they occur.

Along with addressing the functional and technical limitations of our existing core administrative systems, the joint deployment of Business Intelligence capabilities will put better information more directly in the hands of people who can and will use that information to make operating and business decisions. Our attitude toward information and its availability will change. There will be more of it; it will be more accessible, frequent and timely; and its usage will greatly increase, along with the demand for still more.

